CHEMICAL CATALOGUE

QRëC

Under the provisions of the Malaysia Trade Mark Act 1976 and Malaysia Trade Marks Regulation 1997, trade mark **" QREC "** has been registered by Brightchem Sdn Bhd as proprietor of the trade mark.

QREC brand offers a wide range of laboratory chemicals and reagents, including acids, salts, solvents, and more, suitable for various applications in research, quality control, and analytical chemistry. Products consistency is achieved and maintained by our ISO 9001 accreditation. All product range is produced under tight quality control procedure to ensure top quality standard.

As a chemical producer, we also prioritize our Environment,Health and Safety. We constantly comply with local legal requirement and also responsibilities to our employees and customers as well as public in terms of health and safety and environmental issues. In recognition to excel in this area, we have also certified ISO 14001 environmental management system.

Perbadanan Harta Intelek Malaysia
Intellectual Property Corporation of Malaysia

TRADE MARKS ACT 1976
TRADE MARKS REGULATIONS 1997

CERTIFICATE OF REGISTRATION
(Regulation 56)

QRëC

Trade mark no : **04011737**

To : **BRIGHTCHEM SDN. BHD.**

I HEREBY CERTIFY THAT under the provisions of the Trade Marks Act 1976 and the Trade Marks Regulations 1997, the above-numbered trade mark has been registered in your name as proprietor of the said trade mark in the Register for a period of ten (10) years from 12/08/2004 to 12/08/2014 in Class 1 in respect of the following goods:

CHEMICAL PRODUCTS FOR INDUSTRIAL AND SCIENTIFIC PURPOSES AND LABORATORY RESEARCH; CHEMICAL REAGENTS AND DIAGNOSTIC PREPARATIONS FOR SCIENTIFIC PURPOSES; ALL INCLUDED IN CLASS 1.

.....

(ABDUL AZIZ B. ISMAIL)
for REGISTRAR OF TRADE MARKS
MALAYSIA

DATE ISSUE: 30/11/2006

MALAYSIA

TRADE MARKS ACT 2019

TRADEMARKS REGULATIONS 2019

NOTICE OF REGISTRATION RENEWAL

(SECTION 39)

Trade Mark No. : **04011737**

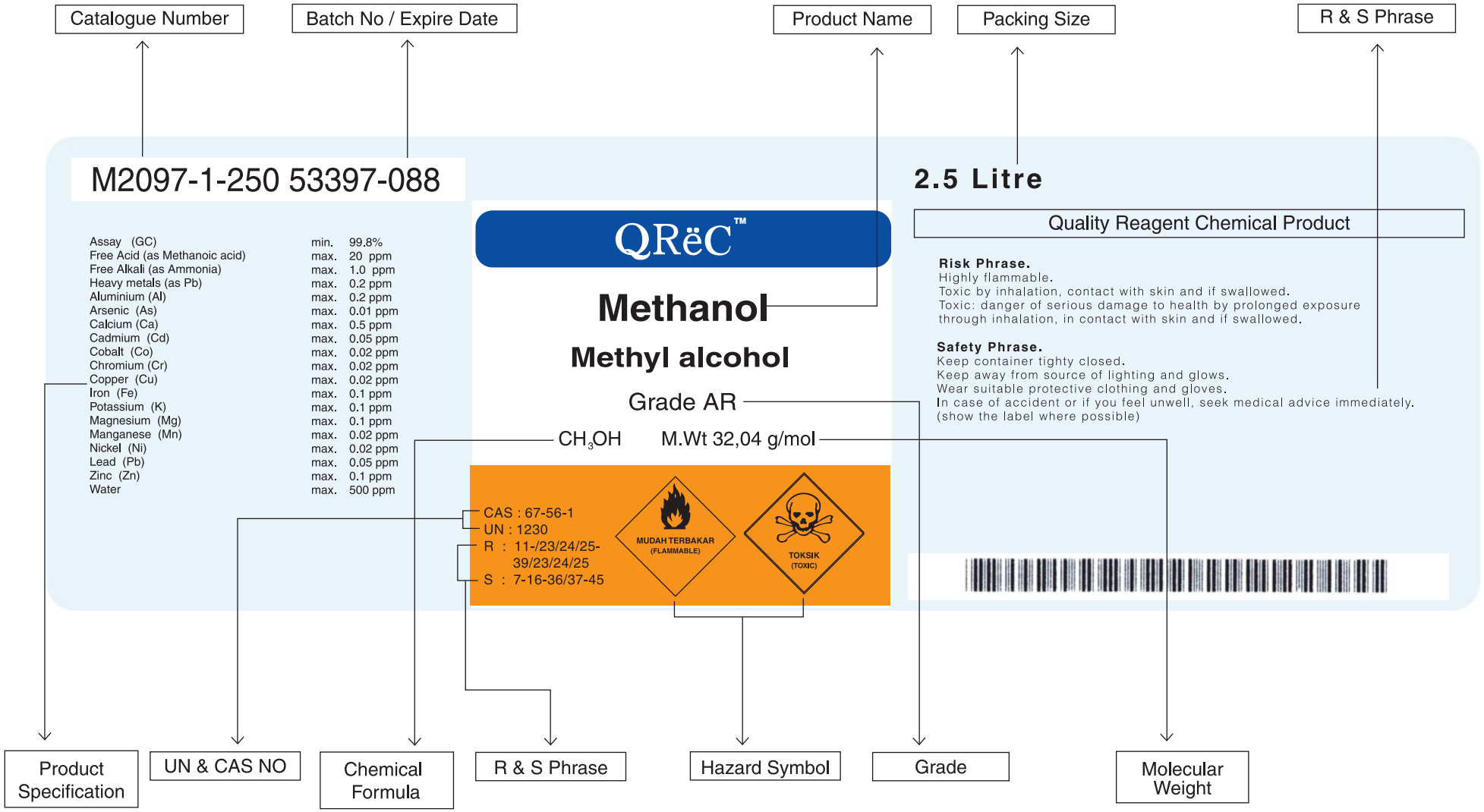
Class : **1**

I hereby certify that the above Trade Mark registration has been renewed for a period of 10 years until **12 AUGUST 2034**

Date of issue : 05 MARCH 2024

Registrar of Trademarks
MALAYSIA

Guide To Read QRëC Label



Packaging for Safety, Convenience and Product Quality

Amber Glass Bottles
Suitable for Photosensitive solvents and acids. We offer 1 litre, 2.5 litres.
1 litre : 6 bottles per box
2.5 litres : 4 bottles per box

Plastic Bottles
Plastic bottles are supplied wherever possible, where chemical properties are compatible, because they minimize the risk of breakage, and they are lighter in weight and easier and more economical to ship. We offer 500g, 1kg, 5kg, 2.5 litres, 4 litres, 5 litres. 4 bottles per box for liquid form. 6 bottles per box for powder form.

Drums for Bulk Quantity
We offer 20 litres, 25 litres HDPE jars, 200 litres HDPE drums and metal drums with PE inner lining.

Hazard Symbols

E: Explosive

Criteria: Chemicals and preparations which may react exothemically without atmospheric oxygen, thereby quickly generating gases, and which under defined test conditions detonate, quickly deflagrate or upon heating explode when partially confined.

Precaution: Avoid impact, knocks, friction, sparks, fire and heat.

T: Toxic

Creteria: Inhalation, swallowing, or absorption through the skin in small amounts can cause considerable damage to health, and may sometimes be lethal. In the event of serious evidence of severe, possibly irreversible damage to health by single, repeated or prolonged absorption, especially carcinogenic, mutagenic, and reproduction-toxic effects.

Precaution: All contact with the human body must be avoided. If you feel unwell, seek medical advice immediately. Particular attention is drawn to the carcinogenic, teratogenic or mutagenic risks associated with certain substance. Observe special regulations when handling there substances!

Xn: Harmful

Criteria: Inhalation, swallowing, or absorption through the skin can cause acute or chronic damage to health. In the event of evidence of severe, possibly irreversible damage to health by single, repeated, or prolonged absorption, especially in suspected carcinogenic, mutagenic and reproduction-toxic effects. Risk of sensitization by inhalation (classification with R 42).

Precaution: All contact with the human body must be avoided. Particular attention is drawn to substances which are suspected to have a carcinogenic, mutagenic or reproduction-toxic effect.

O: Oxdizing

Criteria: Organic peroxides which are combustible even if not in contact with combustible materials. Other chemicals and preparations which as a rule are not combustible themselves, but which in contact with combustible materials, mainly through oxygen evolution, considerably increase the fire hazard and the intensity of a fire.

Precaution: Avoid all contact with combustible substances. Risk of ignition! The substance promotes fires once started and impedes fire fighting.

T+: Very toxic

Criteria: Inhalation, swallowing, or absorption through the skin in very small amounts can cause considerable damage to health, and may sometimes be lethal. In the event of serious evidence of severe, possibly irreversible damage to health by single, repeated or prolonged absorption.

Precaution: All contact with the human body must be avoided. If you feel unwell, seek medical advice immediately!

Xi: Irritating

Criteria: Without being corrosive, immediate, prolonged, or repeated contact with skin or mucous membranes may cause inflammations. Risk of sensitization by skin contact (classification with R 43).

Precaution: Avoid contact with eyes and skin, do not inhale vapours.

F: Highly flammable

Criteria: Liquids with a flash point below 21 °C that are not extremely flammable. Solid substances and preparations which on brief exposure to a source of ignition may be easily inflamed and then continue to burn or smoulder.

Precaution: Keep away from naked flames, sparks and sources of heat.

C: Corrosive

Criteria: Total damage to living tissues or when this result can be predicted.

Precaution: Take special measures to protect eyes, skin and clothes. Do not inhale vapours! In case of accident or if you feel unwell, seek medical advice immediately.

N: Dangerous for the environment

Criteria: Liberation into aquatic and non-aquatic environments would present or may present immediate or delayed damage for one or more components of the environment.

Precaution: Depending on the risk potential do not allow to enter sewerage systems, soil or environment. Observe special disposal regulations!

F+: Extremely flammable

Criteria: Liquids with a flash point below 0 °C and a boiling point of max. 35 °C. Gases and gas mixtures which are flammable in air at normal pressure and average temperatures.

Precaution: Keep away from naked flames, sparks and sources of heat.

EXPLANATIONS

EXPLANATIONS : SECURITY : RISK AND SAFETY PHRASES

R:	RISK PHRASES
R 1	Explosive when dry.
R 2	Risk of explosion by shock, friction, fire or other sources of ignition.
R 3	Extreme risk of explosion by shock, friction, fire or other sources of ignition.
R 4	Forms very sensitive explosive metallic compounds.
R 5	Heating may cause an explosion.
R 6	Explosive with or without contact with air.
R 7	May cause fire.
R 8	Contact with combustible material may cause fire.
R 9	Explosive when mixed with combustible material.
R 10	Flammable.
R 11	Highly flammable.
R 12	Extremely flammable.
R 14	Reacts violently with water.
R 15	Contact with water liberates extremely flammable gases.
R 16	Explosive when mixed wtih oxidizing substances.
R 17	Spontaneously flammable in air.
R 18	In use, may form flammable/explosive vapour-air mixture.
R 19	May form explosive peroxides.
R 20	Harmful by inhalation.
R 21	Harmful in contact with skin.
R 22	Harmful if swallowed.
R 23	Toxic by inhalation.
R 24	Toxic in contact with skin.
R 25	Toxic if swallowed.
R 26	Very toxic by inhalation.
R 27	Very toxic in contact with skin.
R 28	Very toxic if swallowed.
R 29	Contact with water liberates toxic gas.
R 30	Can become highly flammable in use.
R 31	Contact with acids liberates toxic gas.
R 32	Contact with acids liberates very toxic gas.
R 33	Danger of cumulative effects.
R 34	Causes burns.
R 35	Causes severe burns.
R 36	Irritating to eyes.
R 37	Irritating to respiratory system.
R 38	Irritating to skin.
R 39	Danger of very serious irreversible effects.
R 40	Limited evidence of a carcinogenic effect.
R 41	Risk of serious damage to eyes.
R 42	May cause sensitization by inhalation.
R 43	May cause sensitization by skin contact.
R 44	Risk of explosion if heated under confinement.
R 45	May cause cancer.
R 46	May cause heritable genetic damage.
R 48	Danger of serious damage to health by prolonged exposure.
R 49	May cause cancer by inhalation.
R 50	Very toxic to aquatic organisms.
R 51	Toxic to aquatic organisms.
R 52	Harmful to aquatic organisms.
R 53	May cause long-term adverse effects in the aquatic environment.
R 54	Toxic to flora.
R 55	Toxic to fauna.
R 56	Toxic to soil organisms.
R 57	Toxic to bees.

R 58	May cause long-term adverse effects in the environment.
R 59	Dangerous for the ozone layer.
R 60	May impair fertility.
R 61	May cause harm to the unborn child.
R 62	Possible risk of impaired fertility.
R 63	Possible risk of harm to the unborn child.
R 64	May cause harm to breastfed babies.
R 65	Harmful: May cause lung damage if swallowed.
R 66	Repeated exposure may cause skin dryness or cracking.
R 67	Vapours may cause drowsiness and dizziness.
R 68	Possible risks of irreversible effects.

EXPLANATIONS

COMBINATION OF RISK PHRASES (R)

R14/15	Reacts violently with water, liberating extremely flammable gases.
R15/29	Contact with water liberates toxic, extremely flammable gas.
R20/21	Harmful by inhalation and in contact with skin.
R20/22	Harmful by inhalation and if swallowed.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R21/22	Harmful in contact with skin and if swallowed.
R23/24	Toxic by inhalation and in contact with skin.
R23/25	Toxic by inhalation and if swallowed.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R24/25	Toxic in contact with skin and if swallowed.
R26/27	Very toxic by inhalation and in contact with skin.
R26/28	Very toxic by inhalation and if swallowed.
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.
R27/28	Very toxic in contact with skin and if swallowed.
R36/37	Irritating to eyes and respiratory system.
R36/38	Irritating to eyes and skin.
R36/37/38	Irritating to eyes, respiratory system and skin.
R37/38	Irritating to respiratory system and skin.
R39/23	Toxic: Danger of very serious irreversible effects through inhalation.
R39/24	Toxic: Danger of very serious irreversible effects in contact with skin.
R39/25	Toxic: Danger of very serious irreversible effects if swallowed.
R39/23/24	Toxic: Danger of very serious irreversible effects through inhalation and in contact with skin.
R39/23/25	Toxic: Danger of very serious irreversible effects through inhalation and if swallowed.
R39/24/25	Toxic: Danger of very serious irreversible effects in contact with skin and if swallowed.
R39/23/24/25	Toxic: Danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R39/26	Very toxic: Danger of very serious irreversible effects through inhalation.
R39/27	Very toxic: Danger of very serious irreversible effects in contact with skin.
R39/28	Very toxic: Danger of very serious irreversible effects if swallowed.
R39/26/27	Very toxic: Danger of very serious irreversible effects through inhalation and in contact with skin.
R39/26/28	Very toxic: Danger of very serious irreversible effects through inhalation and if swallowed.
R39/27/28	Very toxic: Danger of very serious irreversible effects in contact with skin and if swallowed.
R39/26/27/28	Very toxic: Danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R40/20	Harmful: Possible risk of irreversible effects through inhalation.
R40/21	Harmful: Possible risk of irreversible effects in contact with skin.
R40/22	Harmful: Possible risk of irreversible effects if swallowed.
R40/20/21	Harmful: Possible risk of irreversible effects through inhalation and in contact wtih skin.
R40/20/22	Harmful: Possible risk of irreversible effects through inhalation and if swallowed.
R40/21/22	Harmful: Possible risk of irreversible effects in contact with skin and if swallowed.
R40/20/21/22	Harmful: Possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.
R42/43	May cause sensitization by inhalation and skin contact.
R48/20	Harmful: Danger of serious damage to health by prolonged exposure through inhalation.
R48/21	Harmful: Danger of serious damage to health by prolonged exposure in contact with skin.
R48/22	Harmful: Danger of serious damage to health by prolonged exposure if swallowed.

R48/20/21	Harmful: Danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.
R48/20/22	Harmful: Danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
R48/21/22	Harmful: Danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
R48/20/21/22	Harmful: Danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R48/23	Toxic: Danger of serious damage to health by prolonged exposure through inhalation.
R48/24	Toxic: Danger of serious damage to health by prolonged exposure in contact with skin.
R48/25	Toxic: Danger of serious damage to health by prolonged exposure if swallowed.
R48/23/24	Toxic: Danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.
R48/23/25	Toxic: Danger of serious damage to health by prolonged exposure througn inhalation and if swallowed.
R48/24/25	Toxic: Danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
R48/23/24/25	Toxic: Danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R68/20	Harmful: Possible risk of irreversible effects through inhalation.
R68/20/21	Harmful: Possible risk of irreversible effects through inhalation and in contact with skin.
R68/20/21/22	Harmful: Possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.
R68/20/22	Harmful: Possible risk of irreversible effects through inhalation and if swallowed.
R68/21	Harmful: Possible risk of irreversible effects in contact with skin.
R68/21/22	Harmful: Possible risk of irreversible effects in contact with skin and if swallowed.
R68/22	Harmful: Possible risk of irreversible effects if swallowed.

EXPLANATIONS

SAFETY PHRASES (S)

S 1	Keep locked up.
S 2	Keep out of the reach of children.
S 3	Keep in a cool place.
S 4	Keep away from living quarters.
S 5	Keep contents under... (appropriate liquid to be specified by the manufacturer).
S 6	Keep under ...(inert gas to be specified by the manufacturer).
S 7	Keep container tightly closed.
S 8	Keep container dry.
S 9	Keep container in a well-ventilated place.
S 12	Do not keep the container sealed.
S 13	Keep away from food, drink and animal feeding stuffs.
S 14	Keep away from ... (incompatible materials to be indicated by the manufacturer) compounds.
S 15	Keep away from heat.
S 16	Keep away from sources of ignition - No smoking.
S 17	Keep away from combustible material.
S 18	Handle and open container with care.
S 20	When using do not eat or drink.
S 21	When using do not smoke.
S 22	Do not breathe dust.
S 23	Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
S 24	Avoid contact with skin.
S 25	Avoid contact with eyes.
S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 27	Take off immediately all contaminated clothing.
S 28	After contact with skin, wash immediately with plenty of ...(to be specified by the manufacturer).
S 29	Do not empty into drains.
S 30	Never add water to this product.
S 33	Take precautionary measures against static discharges.
S 35	This material and its container must be disposed of in a safe way.
S 36	Wear suitable protective clothing.
S 37	Wear suitable gloves.
S 38	In case of insufficient ventilation, wear suitable respiratory equipment.

S 39 Wear eye/face protection.
S 40 To clean the floor and all objects contaminated by this material use... (to be specified by the manufacturer)
S 41 In case of fire and/or explosion do not breathe fumes.
S 42 During fumigation/spraying wear suitable respiratory equipment (appropriate wording to be specified by the manufacturer).
S 43 In case of fire , use ... (indicate the precise type of fire-fighthing equipment. If water increases risk, add - 'Never use water').
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 46 If swallowed, seek medical advice immediately and show this container or label.
S 47 Keep at temperature not exceeding ... °C (to be specified by the manufacturer).
S 48 Keep wet with ... (appropriate material to be specified by the manufacturer).
S 49 Keep only in the original container.
S 50 Do not mix with ... (to be specified by the manufacturer).
S 51 Use only in well-ventilated areas.
S 52 Not recommended for interior use on large surface areas.
S 53 Avoid exposure - obtain special instructions before use. Restricted to professional users.
S 56 Dispose of this material and its container at hazardous or special waste collection point.
S 57 Use appropriate container to avoid environmental contamination.
S 59 Refer to manufacturer/supplier for information on recovery/recycling.
S 60 This material and its container must be disposed of as hazardous waste.
S 61 Avoid release to the environment. Refer to special instructions / Safety data sheets.
S 62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
S 63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.
S 64 If swallowed, rinse mouth with water (only if the person is conscious).

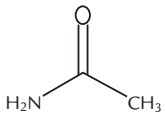
EXPLANATIONS

COMBINATION OF SAFETY PHRASES (S)

S 1/2	Keep locked up and out of reach of children.
S 3/7	Keep container tightly closed in a cool place.
S 3/9/14/49	Keep in a cool, well-ventilated place away from ...3/9
S3/9/14	Keep only in the original container in a cool, well-ventilated place away from ... (incompatible materials to be indicated by the manufacturer).
S3/9/49	Keep only the original container in a cool, well-ventilated place.
S3/14	Keep in a cool place away from ... (incompatible materials to be indicated by the manufacturer).
S7/8	Keep container tightly closed and dry.
S7/9	Keep container tightly closed and in a well-ventilated place.
S7/47	Keep container tightly closed and at a temperature not exceeding ... °C (to be specified by the manufacturer).
S20/21	When using do not eat, drink or smoke.
S24/25	Avoid contact with skin and eyes.
S27/28	After contact with skin, take off immediately all contaminated clothing, and wash immedietely with plenty of ... (to be specified by the manufacturer).
S29/35	Do not empty into drains; dispose of this material and its container in a safe way.
S29/56	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
S36/37	Wear suitable protective clothing and gloves.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S36/39	Wear suitable protective clothing and eye/face protection.
S37/39	Wear suitable gloves and eye/face protection.
S47/49	Keep only in the original container at a temperature not exceeding ... °C (to be specified by the manufacturer).

ACETAMIDE

Xn



Acetic acid amide

- C_2H_5NO
- M = 59.07 g/mol
- CAS [60-35-5]
- EC number: 200-473-5

Physical data:
- Solub. in water (20°C): soluble
- Melting point: 78 - 81°C
- Boiling point: (13 hPa) 105°C
- Vapour pressure: (65°C) 1,33 hPa
- pH (H_2O) 7

Toxicological data:
- LD 50 (oral, rat): 7000 mg/kg
- WGK: 1

Safety:
- EC Index no.: 616-022-00-4
- R: 40
- S: 36/37
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 9

A1003-3 **Acetamide**, extra pure

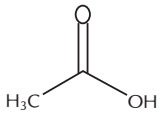
HS-No: 2924 19 00 90

Assay	min. 99 %	Copper (Cu)	max. 0.0005 %
Free acid (as CH_3COOH)	max. 0.5 %	Lead (Pb)	max. 0.0005 %
Insoluble in water	max. 0.005 %	Iron (Fe)	max. 0.0005 %
Insoluble in ethanol	passes test	Nickel (Ni)	max. 0.0005 %
Chlorides (C1)	max. 0.001 %	Calcination residue (as SO_4)	max. 0.01 %
Sulfates (SO_4)	max. 0.002 %	Water	max. 0.3 %

Code	Capacity
A1003-3-0500	500 g

ACETIC ACID GLACIAL

C



Methane carboxylic acid, Methylformic acid

- CH_3COOH
- M = 60.05 g/mol
- CAS [64-19-7]
- EC number: 200-580-7

Physical data:
- Density: 1,05 g/cm³
- Solub. in water (20°C): miscible
- Melting point: 17°C
- Boiling point: 117°C
- Flash point: 38°C
- Ignition temp: 485°C
- Vapour pressure: (20°C) 15,4 hPa
- Refraction index: (20°C) 1,37
- Expl. limit (upper): 19,9 Vol%
- Expl. limit (lower): 4 Vol%
- pH (50 g/l H_2O, 20°C) 2,5

Toxicological data:
- LD 50 (oral, rat): 3310 mg/kg
- MAK: 10 ml/m³, 25 mg/m³
- WGK: 1

Safety:
- EC Index no.: 607-002-00-6
- R: 10-35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 CF1 II UN 2789
- IMDG: 8 II UN 2789
- IATA/ICAO: 8 II UN 2789
- PAX: 809
- CAO: 813
- LGK: 3A
- Disposal: 4

A1020-1 **Acetic acid glacial**, reagent grade

HS-No: 2915 21 00 00

Assay (acidimetric)	min. 99.8 %	Gallium (Ga)	max. 0.05 ppm
Colour	max. 10 Hazen	Germanium (Ge)	max. 0.02 ppm
Acetaldehyde	max. 2 ppm	Indium (In)	max. 0.05 ppm
Acetic anhydride	max. 100 ppm	Potassium (K)	max. 0.1 ppm
Chloride (C1)	max. 0.4 ppm	Lithium (Li)	max. 0.01 ppm
Phosphate (PO_4)	max. 0.4 ppm	Magnesium (Mg)	max. 0.05 ppm
Sulphate (SO_4)	max. 0.4 ppm	Manganese (Mn)	max. 0.01 ppm
Arsenic and Antimony (as As)	max. 0.005 ppm	Molybdenum (Mo)	max. 0.01 ppm
Silver (Ag)	max. 0.005 ppm	Sodium (Na)	max. 0.2 ppm
Aluminium (A1)	max. 0.02 ppm	Nickel (Ni)	max. 0.02 ppm
Gold (Au)	max. 0.01 ppm	Lead (Pb)	max. 0.01 ppm
Boron (B)	max. 0.1 ppm	Platinum (Pt)	max. 0.1 ppm
Barium (Ba)	max. 0.01 ppm	Tin (Sn)	max. 0.05 ppm
Beryllium (Be)	max. 0.005 ppm	Strontium (Sr)	max. 0.01 ppm
Bismuth (Bi)	max. 0.05 ppm	Titanium (Ti)	max. 0.05 ppm
Calcium (Ca)	max. 0.1 ppm	Thallium (T1)	max. 0.02 ppm
Cadmium (Cd)	max. 0.02 ppm	Vanadium (V)	max. 0.01 ppm
Cobalt (Co)	max. 0.01 ppm	Zinc (Zn)	max. 0.03 ppm
Chromium (Cr)	max. 0.02 ppm	Zirconium (Zr)	max. 0.05 ppm
Copper (Cu)	max. 0.01 ppm	Non-volatile matter	max. 5 ppm
Iron (Fe)	max. 0.05 ppm	Substances reducing $KMnO_4$	max. 20 ppm

Code	Capacity
A1020-1-1000	1 L
A1020-1-2500	2.5 L
A1020-1-4000	4 L

A1020-3 **Acetic acid glacial**, extra pure

HS-No: 2915 21 00 00

Assay (acidimetric)	min. 99.8 %	Copper (Cu)	max. 0.0005 %
Insoluble in water	passes test	Iron (Fe)	max. 0.0005 %
Formic acid	max. 0.1 %	Mercury (Hg)	max. 0.0001 %
Chloride (C1)	max. 0.0002 %	Lead (Pb)	max. 0.00005 %
Sulphate (SO_4)	max. 0.0005 %	Zinc (Zn)	max. 0.0005 %
Arsenic and Antimony (as As)	max. 0.0001 %	Non-volatile matter	max. 0.001 %
Aluminium (A1)	max. 0.00005 %	$KMnO_4$ red. Matter (as O)	max. 0.005 %

Code	Capacity
A1020-3-2500	2.5 L
A1020-3-2501	2.5 L

A1020-7 Acetic acid glacial, EC-10

HS-No: 2915 21 00 00

Assay (acidimetric)	min. 99.7 %	Titration
Colour	max. 10 Hazen	Colorimetric
Chloride (Cl)	max. 1.0 ppm	Ion Chromatography
Phosphate (PO_4)	max. 0.5 ppm	Ion Chromatography
Sulphate (SO_4)	max. 0.5 ppm	Ion Chromatography
Aluminium (Al)	max. 20 ppb	ICP-MS
Arsenic (As)	max. 10 ppb	ICP-MS
Barium (Ba)	max. 50 ppb	ICP-MS
Calcium (Ca)	max. 300 ppb	ICP-MS
Cadmium (Cd)	max. 10 ppb	ICP-MS
Cobalt (Co)	max. 10 ppb	ICP-MS
Chromium (Cr)	max. 10 ppb	ICP-MS
Copper (Cu)	max. 20 ppb	ICP-MS
Gallium (Ga)	max. 10 ppb	ICP-MS
Germanium (Ge)	max. 50 ppb	ICP-MS
Gold (Au)	max. 10 ppb	ICP-MS
Iron (Fe)	max. 100 ppb	ICP-MS
Indium (In)	max. 10 ppb	ICP-MS
Lead (Pb)	max. 200 ppb	ICP-MS
Lithium (Li)	max. 50 ppb	ICP-MS
Magnesium (Mg)	max. 300 ppb	ICP-MS
Manganese (Mn)	max. 20 ppb	ICP-MS
Molybdenum (Mo)	max. 10 ppb	ICP-MS
Nickel (Ni)	max. 50 ppb	ICP-MS
Platinum (Pt)	max. 50 ppb	ICP-MS
Potassium (K)	max. 100 ppb	ICP-MS
Silver (Ag)	max. 10 ppb	ICP-MS
Sodium (Na)	max. 200 ppb	ICP-MS
Strontium (Sr)	max. 10 ppb	ICP-MS
Tin (Sn)	max. 50 ppb	ICP-MS
Titanium (Ti)	max. 200 ppb	ICP-MS
Thallium (Tl)	max. 50 ppb	ICP-MS
Vanadium (V)	max. 10 ppb	ICP-MS
Zinc (Zn)	max. 50 ppb	ICP-MS
Zirconium (Zr)	max. 50 ppb	ICP-MS
Non-volatile matter	max. 5 ppm	-
Particles (>0.5µm)	max. 100 pcs/ml	Liquid Particle Counter

Code	Capacity
A1020-7-2500	2.5 L

ACETIC ACID, SOLUTION 0.1 MOL/L (0.1N)

- CH_3COOH
- M = 60.05 g/mol
- CAS [64-19-7]
- EC number: 200-580-7

Physical data:
- Form: Liquid
- Density: ~1,002 g/cm³
- Solub. in water (20°C): miscible

Safety:
- EC Index no.: 607-002-00-6

1 ml = 0.006 g CH_3COOH

A1029-0-1000 Acetic acid, solution 0.1 mol/l (0.1N)

HS-No: 2915 21 00 00

Code	Capacity
A1029-0-1000	1.0 L

ACETIC ACID, SOLUTION 1 MOL/L (1N)

- CH_3COOH
- M = 60.05 g/mol
- CAS [64-19-7]
- EC number: 200-580-7

Physical data:
- Form: Liquid
- Density: ~1,01 g/cm³

Safety:
- EC Index no.: 607-002-00-6
- Poison class CH (Swiss): 3

1 ml = 0.060 g CH_3COOH

A1030-0-1000 Acetic acid, solution 1 mol/l (1N)

HS-No: 2915 21 00 00

Code	Capacity
A1030-0-1000	1.0 L

ACETIC ACID, SOLUTION 5 MOL/L (5N)

- CH_3COOH
- M = 60.05 g/mol
- CAS [64-19-7]
- EC number: 200-580-7

Physical data:
- Form: Liquid
- Density: ~1,01 g/cm³

Safety:
- EC Index no.: 607-002-00-6
- Poison class CH (Swiss): 3

1 ml = 0.30025 g CH_3COOH

A1031-0-2500 Acetic acid, solution 5 mol/l (5N)

HS-No: 2915 21 00 00

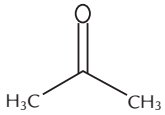
Code	Capacity
A1031-0-2500	2.5 L

ACETONE

F Xi

A

Dimethyl ketone, 2-Propanone



- C_3H_6O
- M = 58.08 g/mol
- CAS [67-64-1]
- EC number: 200-662-2

Physical data:
- Density: 0,79 g/cm³
- Solub. in water (20°C): miscible
- Melting point: - 95°C
- Boiling point: 56°C
- Flash point: < -20°C
- Ignition temp.: 540°C
- Vapour pressure: (20°C) 233 hPa
- Refraction index: (n 20°C/D) 1,35868
- Viscosity: (25°C) 0,31 mPas
- Dipolar moment: (20°C) 2,7 Debye
- Dielectric const.: (25°C) 20,7
- Evap. heat: (56°C) 521 KJ/kg
- Saturation conc.: (20°C) 533g/m³
- Expl. limit (upper): 13 Vol%
- Expl. limit (lower): 2,6 Vol%
- pH (395 g/l H_2O, 20°C) 5 - 6

Toxicological data:
- LD 50 (oral, rat): 5800 mg/kg
- MAK: 500 ml/m³, 1200 mg/m³
- WGK: 1

Safety:
- EC Index no.: 606-001-00-8
- R: 11-36-66-67
- S: 9-16-26
- VbF class: B
- Poison class CH (Swiss): 5

Transport/storage:
- ADR: 3 F1 II UN 1090
- IMDG: 3 II UN 1090
- IATA/ICAO: 3 II UN 1090
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

A1084-1 **Acetone**, reagent grade

HS-No: 2914 11 00 00

Purity (GC)	min. 99.5 %	Lithium (Li)	max. 0.02 ppm
Free Acid (as CH_3COOH)	max. 20 ppm	Magnesium (Mg)	max. 0.1 ppm
Free Alkali (as NH_3)	max. 2.0 ppm	Manganese (Mn)	max. 0.02 ppm
Spec. resistance	min. 5.0 MΩ cm	Molybdenum (Mo)	max. 0.05 ppm
Heavy metals (as Pb)	max. 0.2 ppm	Sodium (Na)	max. 0.5 ppm
Silver (Ag)	max. 0.02 ppm	Nickel (Ni)	max. 0.02 ppm
Aluminium (Al)	max. 0.2 ppm	Lead (Pb)	max. 0.05 ppm
Arsenic (As)	max. 0.01 ppm	Platinum (Pt)	max. 0.2 ppm
Gold (Au)	max. 0.1 ppm	Antimony (Sb)	max. 0.01 ppm
Boron (B)	max. 0.01 ppm	Tin (Sn)	max. 0.1 ppm
Barium (Ba)	max. 0.1 ppm	Strontium (Sr)	max. 0.02 ppm
Beryllium (Be)	max. 0.02 ppm	Titanium (Ti)	max. 0.1 ppm
Bismuth (Bi)	max. 0.1 ppm	Thallium (Tl)	max. 0.05 ppm
Calcium (Ca)	max. 0.5 ppm	Vanadium (V)	max. 0.05 ppm
Cadmium (Cd)	max. 0.05 ppm	Zinc (Zn)	max. 0.1 ppm
Cobalt (Co)	max. 0.02 ppm	Zirconium (Zr)	max. 0.2 ppm
Chromium (Cr)	max. 0.02 ppm	Ethanol (GC)	max. 100 ppm
Copper (Cu)	max. 0.02 ppm	Methanol (GC)	max. 500 ppm
Iron (Fe)	max. 0.1 ppm	Aldehydes (as formaldehyde)	max. 10.0 ppm
Gallium (Ga)	max. 0.02 ppm	Substances reducing $KMnO_4$ (as O)	max. 2.5 ppm
Indium (In)	max. 0.02 ppm	Evaporation residue	max. 5.0 ppm
Potassium (K)	max. 0.1 ppm	Water	max. 0.2 %

Code	Capacity
A1084-1-1000	1L
A1084-1-2500	2.5L
A1084-1-4000	4L
A1084-1-920E	200L

A1084-4 **Acetone**, HPLC grade

HS-No: 2914 11 00 00

Assay	min. 99.5 %
Colour	max. 10 Hazen
Insoluble in water	passes test %
Titrable acid	max. 0.0003 meq/g
Titrable base	max. 0.0006 meq/g
Aldehydes (as HCHO)	max. 0.002 %
Methanol	max. 0.05 %
2-Propanol	max. 0.05 %
Substances reducing permanganate	passes test
Non-volatile matter	max. 0.0005 %
Water	max. 0.5 %

Maximum absorbance in a 1.0cm cell at wavelength:	Absorbance:
330 nm	1.00
340 nm	0.10
350 nm	0.01
375 nm	0.005
400 nm	0.005

Code	Capacity
A1084-4-2501	2.5 L

A1084-6 **Acetone**, EC-100

HS-No: 2914 11 00 00

Purity (GC)	min. 99.8 %	Lithium (Li)	max. 10 ppb
Free Acid (as CH_3COOH)	max. 20 ppm	Magnesium (Mg)	max. 20 ppb
Free Alkali (as NH_3)	min. 2 cm	Manganese (Mn)	max. 10 ppb
Spec. resistance	max 5.0 MΩ ppm	Molybdenum (Mo)	max. 10 ppb
Heavy metals (as Pb)	max. 100 %	Sodium(Na)	max. 100 ppb
Silver (Ag)	max. 10 ppm	Nickel (Ni)	max. 10 ppb
Aluminium (Al)	max. 50 ppb	Lead (Pb)	max. 10 ppb
Arsenic (As)	max. 10 ppb	Platinum (Pt)	max. 50 ppb
Gold (Au)	max. 20 ppb	Antimony (Sb)	max. 10 ppb
Boron (B)	max. 10 ppb	Tin (Sn)	max. 20 ppb
Barium (Ba)	max. 20 ppb	Strontium (Sr)	max. 10 ppb
Beryllium (Be)	max. 10 ppb	Titanium (Ti)	max. 20 ppb
Bismuth (Bi)	max. 20 ppb	Thallium (Tl)	max. 10ppb
Calcium (Ca)	max. 100 ppb	Vanadium (V)	max. 10ppb
Cadmium (Cd)	max. 10 ppb	Zinc (Zn)	max. 20 ppb
Cobalt (Co)	max. 10 ppb	Zirconium (Zr)	max. 20 ppb
Chromium (Cr)	max. 10 ppb	Ethanol (GC)	max. 100 ppm
Copper (Cu)	max. 10 ppb	Methanol (GC)	max. 500 ppm
Iron (Fe)	max. 10 ppb	Aldehydes (as formaldehyde)	max. 10 ppm
Gallium (Ga)	max. 10 ppb	Substances reducing $KMnO_4$ (as O)	max. 2.5 ppm
Indium (In)	max. 10 ppb	Evaporation residue	max. 3 ppm
Potassium (K)	max. 20 ppb	Water	max. 0.2 %

Code	Capacity
A1084-6-2500	2.5L
A1084-6-4000	4.0L
A1084-6-920E	200L

A1084-7 Acetone, EC-10

HS-No: 2914 11 00 00

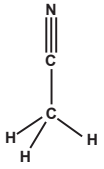
Purity (GC)	min. 99.8 %	Lithium (Li)	max. 10 ppb
Free Acid (as CH_3COOH)	max. 20 ppm	Magnesium (Mg)	max. 20 ppb
Free Alkali (as NH_3)	min. 2 cm	Manganese (Mn)	max. 10 ppb
Spec. resistance	max 5.0 MΩ ppm	Molybdenum (Mo)	max. 10 ppb
Heavy metals (as Pb)	max. 100 %	Sodium (Na)	max. 100 ppb
Silver (Ag)	max. 10 ppm	Nickel (Ni)	max. 10 ppb
Aluminium (Al)	max. 50 ppb	Lead (Pb)	max. 10 ppb
Arsenic (As)	max. 10 ppb	Platinum (Pt)	max. 50 ppb
Gold (Au)	max. 20 ppb	Antimony (Sb)	max. 10 ppb
Boron (B)	max. 10 ppb	Tin (Sn)	max. 20 ppb
Barium (Ba)	max. 20 ppb	Strontium (Sr)	max. 10 ppb
Beryllium (Be)	max. 10 ppb	Titanium (Ti)	max. 20 ppb
Bismuth (Bi)	max. 20 ppb	Thallium (Tl)	max. 10ppb
Calcium (Ca)	max. 100 ppb	Vanadium (V)	max. 10ppb
Cadmium (Cd)	max. 10 ppb	Zinc (Zn)	max. 20 ppb
Cobalt (Co)	max. 10 ppb	Zirconium (Zr)	max. 20 ppb
Chromium (Cr)	max. 10 ppb	Ethanol (GC)	max. 100 ppm
Copper (Cu)	max. 10 ppb	Methanol (GC)	max. 500 ppm
Iron (Fe)	max. 10 ppb	Aldehydes (as formaldehyde)	max. 10 ppm
Gallium (Ga)	max. 10 ppb	Substances reducing $KMnO_4$ (as O)	max. 2.5 ppm
Indium (In)	max. 10 ppb	Evaporation residue	max. 3 ppm
Potassium (K)	max. 20 ppb	Water	max. 0.2 %

Code	Capacity
A1084-7-2500	2.5L
A1084-7-4000	4.0L
A1084-7-920E	200L

ACETONITRILE

F Xn

Methyl cyanide, Cyanomethane



- CH_3CN
- M= 41.05 g/mol
- CAS [75-05-8]
- EC number: 200-835-2

Physical data:
- Density: 0,786 g/cm³
- Solub. in water (20°C): miscible
- Melting point: - 45,7°C
- Boiling point: 81,6°C
- Flash point: 5°C
- Ignition temp.: 524°C
- Vapour pressure: (20°C) 97 hPa
- Refraction index: (n 20°C), 1,3442
- Viscosity: (25°C) 0,39 mPas
- Dipolar moment: (20°C) 3,44 Debye
- Dielectric const.: (20°C) 37,5
- Evap. heat: (81°C) 833 KJ/kg
- Saturation conc.: (20°C) 163g/m³
- Expl. limit (upper): 17 Vol%
- Expl. limit (lower): 3,0 Vol%

Toxicological data:
- LD 50 (oral, rat): 2730 - 3800 mg/kg
- MAK: 40 ml/m³, 68 mg/m³
- WGK: 2

Safety:
- EC Index no.: 608-001-00-3
- R: 11-20/21/22-36
- S: 16-36/37-46
- VbF class: B
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 3 F1 II UN 1648
- IMDG: 3 II UN 1648
- IATA/ICAO: 3 II UN 1648
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

A1133-1 Acetonitrile, reagent grade

HS-No: 2926 90 95 90

Assay	min. 99.5 %	Copper (Cu)	max. 0.000002 %
Colour	max. 10 Hazen	Iron (Fe)	max. 0.00001 %
Acidity	max. 0.0002 meq/g	Lead (Pb)	max. 0.00001 %
Alkalinity	max 0.0001 meq/g	Magnesium (Mg)	max. 0.00001 %
Cyanides (CN)	max. 0.005 %	Manganese (Mn)	max. 0.000002 %
Aluminium (Al)	max. 0.00005 %	Nickel (Ni)	max. 0.000002 %
Barium (Ba)	max. 0.00001 %	Tin (Sn)	max. 0.00001 %
Boron (B)	max. 0.000002 %	Zinc (Zn)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Reaction to H_2SO_4	passes test
Calcium (Ca)	max. 0.00005 %	Non-Volatile matter	max. 0.001 %
Chromium (Cr)	max. 0.000002 %	Water (K.F.)	max. 0.1 %
Cobalt (Co)	max. 0.000002 %		

Code	Capacity
A1133-1-1001	1L Glass
A1133-1-2501	2.5L Glass

A1133-4 Acetonitrile, HPLC grade

HS-No: 2926 90 95 90

Assay (G.C)	min. 99.9 %
Colour	max. 10 Hazen
Titrable Acid	max. 0.008 meq/g
Titrable Base	0.0006 meq/g
Non-volatile matter	0.0002 %
Water (K.F.)	0.02 %

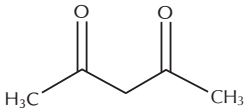
Maximum absorbance in a 1.0cm cell at wavelength:	Absorbance:
190 nm	1.00
200 nm	0.05
210 nm	0.04
220 nm	0.02
230 nm	0.01
254 nm	0.005
400 nm	0.005

Code	Capacity
A1133-4-2501	2.5 L

ACETYLACETONE

Xn

2, 4-Pentanedione, ACAC



- $C_5H_8O_2$
- M= 100.12 g/mol
- CAS [123-54-6]
- EC number: 204-634-0

Physical data:
- Form: Liquid
- Density: 0,97 g/cm³
- Solub. in water (20°C): 200 g/l
- Melting point: -23°C
- Boiling point: 140°C
- Flash point: 34°C
- Ignition temp.: 335°C
- Vapour pressure: (20°C) 9 hPa
- Reflection index: (n 20°C) 1, 4510
- Dielectric const.: (20°C) 25, 7
- Evap. heat: (139°C) 750 KJ/kg
- Saturation conc.: (20°C) 38 g/m³
- Expl. limit (upper): 11,6 Vol%
- Expl. limit (lower): 2,4 Vol%
- pH (200 g/l H_2O, 20°C) ~6

Toxicological data:
- LD 50 (oral, rat): 575 mg/kg
- WGK: 1

Safety:
- EC Index no.: 606-029-00-0
- R: 10-22
- S: 21-23.2-51-24/25-46
- VbF class: All
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3FT1 III UN 2310
- IMDG: 3 III UN 2310
- IATA: 3 III UN 2310
- PAX: 309
- CAO: 310
- LGK: 3A
- Disposal: 1

A1135-2 Acetylacetone, synthesis grade

HS-No: 2914 19 90 90

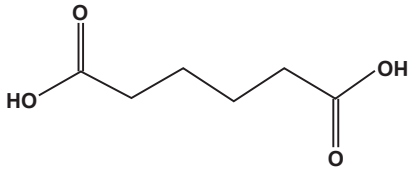
Assay	min. 99 %	Non-volatile matter	max. 0.005
Identity (IR-spectrum)	passes test	Water	max. 0.1 %
Density (20°/4°)	0.972 – 0.974		

Code	Capacity
A1135-2-1001	1.0 L

ADIPIC ACID

Xi

Hexanedioic acid, 1,4-Butanedicarboxylic acid



- $C_6H_{10}O_4$
- M= 146.14 g/mol
- CAS [124-04-9]
- EC number: 204-673-3

Physical data:
- Bulk density: ~700 kg/m³
- Solub. in water (25°C): 24 g/l
- Melting point: 150 - 153°C
- Boiling point: (13 hPa) 205°C
- Flash point: 196°C
- Vapour pressure: (151°C) 0,4 hPa
- pH (25 g/l H_2O, 25°C) 2,7

Toxicological data:
- LD 50 (oral, rat): ~5700 mg/kg
- WGK: 1

Safety:
- EC Index no.: 607-144-00-9
- R: 36
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

A2001-3 Adipic acid, extra pure

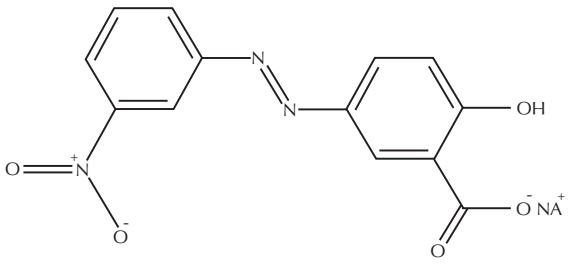
HS-No: 2917 12 10 00

Assay	99.6 - 101.0 %	Arsenic (As)	max. 0.0003 %
Chloride (Cl)	max. 0.02 %	Copper (Cu)	max. 0.001 %
Nitrate (NO_3)	max. 0.003 %	Iron (Fe)	max. 0.001 %
Sulphate (SO_4)	max. 0.05 %	Lead (Pb)	max. 0.001 %
Heavy Metals (as Pb)	max. 0.001 %	Zinc (Zn)	max. 0.001 %

Code	Capacity
A2001-3-0500	500 g

ALIZARIN YELLOW

2-Hydroxy-5[(3-nitropheny)azo]benzoic acid monosodium salt, Mordant yellow 1



- $C_{13}H_8N_3NaO_5$
- M= 309.21 g/mol
- CAS [584-42-9]
- EC number: 209-536-1

Physical data:
- Form: Liquid
- Bulk density: ~520 kg/m³
- Solub. in water (25 °C): 12 g/l
- pH (10 g/l H_2O, 25°C) ~7,9

Transport/storage:
- LGK: 10-13
- Disposal: 3

Toxicological data:
- WGK: 3*

A3000-0 Alizarin yellow, C.I. 14025, indicator

HS-No: 3204 19 00 90

pH range (yellow – orange)	10.2 – 12.1
Absorption maximum λ1 (pH 10.2)	350 – 355 nm
Absorptivity (A1%/1 cm; λ_1, pH 10.2, on dried material)	620 – 720
Absorptivity (E1%/1 cm; λ_2, pH 12.1, on dried material)	800 - 900
Suitability for microbiology	passes test
Loss on drying (110°C)	max. 1 %

Code	Capacity
A3000-1-0025	25 g

ALUMINIUM AMMONIUM SULFATE DODECAHYDRATE

Aluminium ammonium sulfate, Ammonium alum

- $NH_4Al(SO_4)_2 \cdot 12H_2O$
- M = 453.33 g/mol
- CAS [7784-26-1]
- EC number: 232-055-3

Physical data:
- Bulk density: ~700 - 800 kg/m³
- Solub. in water (20°C): 150 g/l
- Melting point: 93°C
- Boiling point: 200°C
- pH (100 g/l H_2O, 25°C) ~ 2,6

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 14

A4007-3 Aluminium ammonium sulfate dodecahydrate, extra pure

HS-No: 2833 30 00 00

Assay	min. 99 %	Copper (Cu)	max. 0.002 %
Insoluble in H_2O	max. 0.02 %	Heavy Metals (as Pb)	max. 0.002 %
Chloride (Cl)	max. 0.005 %	Iron (Fe)	max. 0.001 %
Phosphates (PO_4)	max. 0.005 %	Lead (Pb)	max. 0.002 %
Precipitable compounds with ammonia		Nickel (Ni)	max. 0.002 %
(as sulfate)	max. 0.3 %	Loss on drying (300°C)	45 - 48 %
Arsenic (As)	max. 0.0002 %		

Code	Capacity
A4007-3-0500	500 g
A4007-3-1000	1kg

ALUMINIUM CHLORIDE HEXAHYDRATE

Xi

Hydrochloric acid aluminium salt hexahydrate

- $AlCl_3 \cdot 6H_2O$
- M = 241.43 g/mol
- CAS [7784-13-6]
- EC number: 231-208-1

Physical data:
- Spec. density: ~2,40 g/m³
- Bulk density: ~800 kg/m³
- Solub. in water (20°C): 1330 g/l
- Melting point: ~100°C
- pH (50 g/l H_2O, 20°C) ~ 2,5

Toxicological data:
- LD 50 (oral, rat): 3311 mg/kg
- WGK: 1

Safety:
- R: 36/38
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

A4010-1 Aluminium chloride hexahydrate, reagent grade

HS-No: 2827 32 00 00

Assay	min. 97.0 %	Ammonium (NH_4)	max. 0.002 %
Reaction in water solution	passes test	Iron (Fe)	max. 0.001 %
Appearance of solution	passes test	Heavy metals (as Pb)	max. 0.0005 %
Insolubility matter in water	max. 0.025 %	Alkali metals and alkali earth metals	
Sulfates (SO_4)	max. 0.01 %	(as sulfate)	max. 0.2 %

Code	Capacity
A4010-1-0500	500 g

A4010-3, Aluminium chloride hexahydrate, extra pure

HS-No: 2827 32 00 00

Assay (complexometric)	min. 99 %	Iron (Fe)	max. 0.0005 %
Appearance of solution	passes test	Magnesium (Mg)	max. 0.01 %
pH (5%, H_2O)	2.5 - 3.5	Potassium (K)	max. 0.01 %
Sulfates (SO_4)	max. 0.01 %	Sodium (Na)	max. 0.1 %
Ammonium (NH_4)	max. 0.01 %	Non-precipitable with ammonia	
Arsenic (As)	max. 0.0004 %	(as SO_4)	max. 0.2 %
Calcium (Ca)	max. 0.02 %	Water	45 - 48 %
Heavy Metals (as Pb)	max. 0.001 %		

Code	Capacity
A4010-3-0500	500 g
A4010-3-1000	1 kg

ALUMINIUM HYDROXIDE

Hydrargillite

- $Al(OH)_3$
- M= 78.00 g/mol
- CAS [21645-51-2]
- EC number: 244-492-7

Physical data:
- Spec. density: 2,42 g/cm³
- Bulk density: ~600 kg/m³
- Solub. in water (20°C): ~0,0015 g/l
- Melting point: 300°C (release of crystalline water)
- Vapour pressure: (20°C) < 0,1 hPa
- pH (100 g/l H_2O, 20°C) ~ 8 - 9

Toxicological data:
- LD 50 (oral, rat): > 5000 mg/kg
- MAK: 1,5 mg/m³
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

A4014-1, Aluminium hydroxide, reagent grade

HS-No: 2818 30 00 90

Assay (complexometric)	min. 90 %	Lead (Pb)	max. 0.002 %
Arsenic (As)	max. 0.0003 %	Nickel (Ni)	max. 0.002 %
Copper (Cu)	max. 0.002 %	Calcination Residue	32 - 35 %
Iron (Fe)	max. 0.005 %		

Code	Capacity
A4014-1-0500	500 g

ALUMINIUM NITRATE NONAHYDRATE

O Xi

- $Al(NO_3)_3 \cdot 9H_2O$
- M = 375.13 g/mol
- CAS [7784-27-2]
- EC number: 236-751-8

Physical data:
- Bulk density: ~ 880 kg/m³
- Solub. in water (20°C): 419 g/l
- Melting point: 73°C
- Boiling point: 135°C (decomposes)
- pH (50 g/l H_2O, 20°C) ~ 2 - 4

Toxicological data:
- LD 50 (oral,rat): 3671 mg/kg
- WGK: 1

Safety:
- R: 8-36/38
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 5.1 O2 III UN 1438
- IMDG: 5.1 III UN 1438
- IATA/ICAO: 5.1 III UN 1438
- PAX: 516
- CAO: 518
- LGK: 5.1B
- Disposal: 14

A4018-1, Aluminium nitrate nonahydrate, reagent grade

HS-No: 2834 29 80 00

Assay (precipitation titration, NH_4F)	min. 98.0 %	Heavy Metals (Pb)	max. 0.001 %
pH (5%, H_2O)	2 - 4	Iron (Fe)	max. 0.002 %
Chloride (Cl)	max. 0.001 %	Potassium (K)	max. 0.002 %
Sulfate (SO_4)	max. 0.005 %	Sodium (Na)	max. 0.005 %
		Ammonium (NH_4)	max. 0.05 %

Code	Capacity
A4018-1-0500	500 g
A4018-1-1000	1kg

A4018-3, Aluminium nitrate nonahydrate, extra pure

HS-No: 2834 29 80 00

Assay (complexometric)	min. 98.0 %	Iron (Fe)	max. 0.005 %
Insoluble in water	max. 0.02 %	Lead (Pb)	max. 0.001 %
pH (5%, H_2O)	2.5 - 3.5	Magnesium (Mg)	max. 0.005 %
Chloride (Cl)	max. 0.005 %	Nickel (Ni)	max. 0.001 %
Sulfate (SO_4)	max. 0.005 %	Potassium (K)	max. 0.05 %
Ammonium (NH_4)	max. 0.05 %	Sodium (Na)	max. 0.01 %
Arsenic (As)	max. 0.0001 %	Non-precipitable with ammonia	
Calcium (Ca)	max. 0.02 %	(as SO_4)	max. 0.5 %
Copper (Cu)	max. 0.001 %		

Code	Capacity
A4018-3-0500	500 g
A4018-3-1000	1kg

ALUMINIUM OXIDE

Alum earth, Alumina, Good crucibles

- Al_2O_3
- M= 101.96 g/mol
- CAS [1344-28-1]
- EC number: 215-691-6

Physical data:
- Form: Solid
- Bulk density: ~90-190 kg/m³
- Solub. in water (20°C): insoluble
- Melting point: ~ 1760°C

Toxicological data:
- MAK: 1,5 mg/m³
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

A4024-1, Aluminium oxide, reagent grade

HS-No: 2818 20 00 00

Sulfate (SO_4)	max. 0.05 %	Solubility test in water	max. 0.5 %
Chloride (Cl)	max. 0.01 %	Loss on ignition	max. 5.0 %
Iron (Fe)	max. 0.01 %	Alkali metals and alkali earth metals	
Heavy metals (Pb)	max. 0.005 %	(as sulfate)	max. 0.50 %

Code	Capacity
A4024-1-0500	500 g

ALUMINIUM POTASSIUM SULFATE DODECAHYDRATE

Potassium aluminium sulfate, Alum potassium

- $KAl(SO_4)_2 \cdot 12H_2O$
- M = 474.39 g/mol
- CAS [7784-24-9]
- EC number: 233-141-3

Physical data:
- Spec. density: 1,75 g/cm³
- Bulk density: ~900 kg/m³
- Solub. in water (20°C): 139 g/l
- Melting point: 92°C
- pH (50 g/l H_2O, 20°C) ~ 3,0 - 3,5

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

A4038-1, Aluminium potassium sulfate dodecahydrate, reagent grade

HS-No: 2833 30 00 00

Assay	min. 99.5 %	Cadmium (Cd)	max. 0.0005 %
Insoluble in water	max. 0.005 %	Copper (Cu)	max. 0.0005 %
pH (10%, H_2O)	3.0 - 3.5	Heavy Metals (as Pb)	max. 0.001 %
Chlorides (Cl)	max. 0.0005 %	Iron (Fe)	max. 0.0005 %
Ammonium (NH_4)	max. 0.005 %	Lead (Pb)	max. 0.001 %
Arsenic (As)	max. 0.0002 %	Sodium (Na)	max. 0.01 %

Code	Capacity
A4038-1-0500	500 g
A4038-1-1000	1kg

ALUMINIUM SULFATE

- $Al_2(SO_4)_3 \bullet 18H_2O$
- M = 666.42 g/mol
- CAS [7784-31-8]
- EC number: 233-135-0

Physical data:
- Form: Solid
- Bulk density: ~820 kg/m³
- Solub. in water (20°C): ~600 g/l
- Melting point: 92°C
- pH (20 g/l H_2O, 20°C) ~ 2,5 - 4,0

Toxicological data:
- LD 50 (oral, rat): 9000 mg/kg
- WGK: 1

Transport/storage:
- LGK: 10-13

Safety:
- S: 24/25
- Poison class CH (Swiss): 4

A4042-3, Aluminium sulfate 18-hydrate, extra pure

HS-No: 2833 22 00 00

Assay (complexometric, $Al_2(SO_4)_3$) ...	51 – 59 %	Arsenic (As)	max. 0.0003 %
Appearance of solution	passes test	Copper (Cu)	max. 0.002 %
Insoluble in water	passes test	Heavy metals (ss Pb)	max. 0.002 %
pH (2%, H_2O)	2.5 – 4.0	Iron (Fe)	max. 0.005 %
Alkali and alkaline earth metals	max. 0.4 %	Lead (Pb)	max. 0.002 %
Chloride (Cl)	max. 0.005 %	Non-precipitable with ammonia	
Ammonium (NH_4)	max. 0.01 %	(as SO_4)	max. 0.4 %

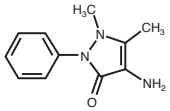
Code	Capacity
A4042-3-0500	500 g

4-AMINOANTIPYRINE

Xn

4-Aminoantipyrine

- $C_{11}H_{13}N_3O$
- M = 203.24 g/mol
- CAS [8307-8]
- EC number: 201-452-3



Physical data:
- Solub. in water 56 g/l (20°C)
- M = 203.25 g/mol
- pH value 7.1 (100 g/l, H_2O, 20 °C) (slurry)
- Melting point 107 - 109 °C
- Bulk density ~ 430 kg/m³

Toxicological data:
- WGK 1
- LD 50 oral rat 1700 mg/kg

Safety:
- harmful
- R 22
- Poison class (CH) 3

Transport/storage:
- LGK 10-13
- Disposal 3

A5000-1, 4-Aminoantipyrine, reagent grade

HS-No: 2933 11 90 00

Melting point	106 ~ 109 ºC	Residue after ignition (as sulfate)	max. 0.05 %
Solubility test in water	passes test	Chlorides (Cl)	max. 0.02 %

Code	Capacity
A5000-1-0025	500 g

AMMONIA SOLUTION 10-15%


C

N

Ammonia water, Ammonium hydroxide solution

- NH_3
- M = 17.03 g/mol
- CAS [1336-21-6]
- EC number: 215-647-6

Physical data:
- Density: 0,93 g/cm³
- Melting point: -57,5°C
- Boiling point: 37,7°C
- Flash point: 25°C
- Vapour pressure: (20°C) ~ 500 hPa
- Expl. limit (upper): 33,6 Vol%
- Expl. limit (lower): 15,4 Vol%
- pH (20°C) > 12

Toxicological data:
- LD 50 (oral,rat): 350 mg/kg
- MAK: 20 ml/m³ , 14 mg/m³
- WGK: 2

Safety:
- EC Index no.: 007-001-01-2
- R: 34-50
- S: 23.2-51-26-36/37/39-45-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C5 lll UN 2672
- IMDG: 8 III UN 2672
- IATA/ICAO: 8 III UN 2672
- PAX: 819
- CAO: 813
- LGK: 8 A
- Disposal: 13

A5015-1, Ammonia solution 10-15%, reagent grade

HS-No: 2814 20 00 00

Assay	10 – 15 %	Iron (Fe)	max. 0.000001 %
Colour	max. 10 Hazen	Lead (Pb)	max. 0.000002 %
Chlorides (Cl)	max. 0.00005 %	Lithium (Li)	max. 0.000005 %
Phosphates (PO_4)	max. 0.000005 %	Magnesium (Mg)	max. 0.000001 %
Sulfates (SO_4)	max. 0.00005 %	Manganese (Mn)	max. 0.000002 %
Aluminium (Al)	max. 0.000005 %	Nickel (Ni)	max. 0.000002 %
Barium (Ba)	max. 0.000001 %	Potassium (K)	max. 0.000005 %
Cadmium (Cd)	max. 0.000005 %	Sodium (Na)	max. 0.000005 %
Calcium (Ca)	max. 0.000001 %	Tin (Sn)	max. 0.000001 %
Chromium (Cr)	max. 0.000002 %	Zinc (Zn)	max. 0.000005 %
Copper (Cu)	max. 0.000002 %	Calcination residue (as SO_4)	max. 0.002 %

Code	Capacity
A5015-1-920E	200 L

AMMONIA, SOLUTION 25 %


C

N

Ammonia water, Ammonium hydroxide solution

- NH_3
- M = 17.03 g/mol
- CAS [1336-21-6]
- EC number: 215-647-6

Physical data:
- Density: 0,91 g/cm³
- Melting point: -57,5°C
- Boiling point: 37,7°C
- Flash point: 25°C
- Vapour pressure: (20°C) ~ 500 hPa
- Expl. limit (upper): 33,6 Vol%
- Expl. limit (lower): 15,4 Vol%
- pH (20°C) > 12

Toxicological data:
- LD 50 (oral,rat): 350 mg/kg
- MAK: 20 ml/m³ , 14 mg/m³
- WGK: 2

Safety:
- EC Index no.: 007-001-01-2
- R: 34-50
- S: 23.2-51-26-36/37/39-45-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C5 lll UN 2672
- IMDG: 8 III UN 2672
- IATA/ICAO: 8 III UN 2672
- PAX: 819
- CAO: 813
- LGK: 8 A
- Disposal: 13

A5016-1, Ammonia solution 25%, reagent grade

HS-No: 2814 20 00 00

Assay	min. 25 %	Iron (Fe)	max. 0.000001 %
Colour	max. 10 Hazen	Lead (Pb)	max. 0.000002 %
Chlorides (Cl)	max. 0.00005 %	Lithium (Li)	max. 0.000005 %
Phosphates (PO_4)	max. 0.000005 %	Magnesium (Mg)	max. 0.000001 %
Sulfates (SO_4)	max. 0.00005 %	Manganese (Mn)	max. 0.000002 %
Aluminium (Al)	max. 0.000005%	Nickel (Ni)	max. 0.000002 %
Barium (Ba)	max. 0.000001 %	Potassium (K)	max. 0.000005 %
Cadmium (Cd)	max. 0.000005 %	Sodium (Na)	max. 0.000005 %
Calcium (Ca)	max. 0.000001 %	Tin (Sn)	max. 0.000001 %
Chromium (Cr)	max. 0.000002 %	Zinc (Zn)	max. 0.000005 %
Copper (Cu)	max. 0.000002 %	Calcination residue (as SO_4)	max. 0.002 %

Code	Capacity
A5016-1-1000	1 L
A5016-1-2500	2.5 L

AMMONIA, SOLUTION 28 %


C

N

Ammonia water

- NH_3
- M = 17.03 g/mol
- CAS [1336-21-6]
- EC number: 215-647-6

Physical data:
- Density: ~ 0,90 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ -63 °C
- Boiling point: 36 °C
- Vapour pressure: (20 °C) 535 hPa
- pH (20 °C) > 12

Toxicological data:
- LD 50 (oral,rat): 350 mg/kg
- MAK: 20 ml/m³ , 14 mg/m³
- WGK: 2

Safety:
- EC Index no.: 007-001-01-2
- R: 34-50
- S: 23.2-51-26-36/37/39-45-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C5 III UN 2672
- IMDG: 8 III UN 2672
- IATA/ICAO: 8 III UN 2672
- PAX: 819
- CAO: 813
- LGK: 8
- Disposal: 13

A5023-1, Ammonia solution 28%, reagent grade

HS-No: 2814 20 00 00

Assay (acidimetric)	min. 28.0 %	Indium (In)	max. 0.02 ppm
Carbonate (CO_2)	max. 10 ppm	Potassium (K)	max. 0.10 ppm
Chloride (Cl)	max. 0.5 ppm	Lithium (Li)	max. 0.02 ppm
Phosphate (PO_4)	max. 0.2 ppm	Magnesium (Mg)	max. 0.05 ppm
Sulphate (SO_4)	max. 1.0 ppm	Manganese (Mn)	max. 0.01 ppm
Arsenic and Antimony (as As)	max. 0.05 ppm	Molybdenum (Mo)	max. 0.01 ppm
Silver (Ag)	max. 0.02 ppm	Sodium (Na)	max. 0.20 ppm
Aluminium (Al)	max. 0.01 ppm	Nickel (Ni)	max. 0.01 ppm
Gold (Au)	max. 0.02 ppm	Lead (Pb)	max. 0.02 ppm
Boron (B)	max. 0.01 ppm	Platinum (Pt)	max. 0.02 ppm
Barium (Ba)	max. 0.02 ppm	Tin (Sn)	max. 0.02 ppm
Bismuth (Bi)	max. 0.02 ppm	Strontium (Sr)	max. 0.02 ppm
Calcium (Ca)	max. 0.10 ppm	Titanium (Ti)	max. 0.05 ppm
Cadmium (Cd)	max. 0.01 ppm	Thallium (TI)	max. 0.01 ppm
Cobalt (Co)	max. 0.01 ppm	Vanadium (V)	max. 0.01 ppm
Chromium (Cr)	max. 0.01 ppm	Zinc (Zn)	max. 0.05 ppm
Copper (Cu)	max. 0.01 ppm	Zirconium (Zr)	max. 0.02 ppm
Iron (Fe)	max. 0.05 ppm	Residue on ignition (as SO_4)	max. 5 ppm
Gallium (Ga)	max. 0.02 ppm	Subtances reducing $KMnO_4$	max. 3 ppm
Germanium (Ge)	max. 0.05 ppm	Non volatilc matter	max. 3 ppm

Code	Capacity
A5023-1-1000	1L
A5023-1-2500	2.5L
A5023-1-2501	2.5L Glass
A5023-1-4000	4.0L

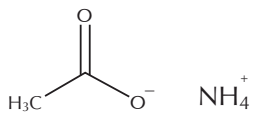
A5023-7, Ammonia solution 29%, electronic grade EC-10

HS-No: 2814 20 00 00

Assay (acidimetric)	min. 28.0 %	Indium (In)	max. 20 ppb
Carbonate (CO_2)	max. 10 ppm	Potassium (K)	max. 50 ppb
Chloride (Cl)	max. 0.5 ppm	Lithium (Li)	max. 20 ppb
Phosphate (PO_4)	max. 0.5 ppm	Magnesium (Mg)	max. 50 ppb
Sulphate (SO_4)	max. 1 ppm	Manganese (Mn)	max. 10 ppb
Arsenic and Antimony (as As)	max. 50 ppb	Molybdenum (Mo)	max. 10 ppb
Silver (Ag)	max. 20 ppb	Sodium (Na)	max. 30 ppb
Aluminium (Al)	max. 50 ppb	Nickel (Ni)	max. 10 ppb
Gold (Au)	max. 20 ppb	Lead (Pb)	max. 20 ppb
Boron (B)	max. 10 ppb	Platinum (Pt)	max. 20 ppb
Barium (Ba)	max. 20 ppb	Tin (Sn)	max. 20 ppb
Bismuth (Bi)	max. 20 ppb	Strontium (Sr)	max. 20 ppb
Calcium (Ca)	max. 150 ppb	Titanium (Ti)	max. 10 ppb
Cadmium (Cd)	max. 10 ppb	Thallium (TI)	max. 20 ppb
Cobalt (Co)	max. 10 ppb	Vanadium (V)	max. 10 ppb
Chromium (Cr)	max. 10 ppb	Zinc (Zn)	max. 50 ppb
Copper (Cu)	max. 10 ppb	Zirconium (Zr)	max. 10 ppb
Iron (Fe)	max. 50 ppb	Residue on ignition (as SO_4)	max. 5 ppm
Gallium (Ga)	max. 20 ppb	Subtances reducing $KMnO_4$	max. 3 ppm
Germanium (Ge)	max. 50 ppb	Non volatilc matter	max. 3 ppm

Code	Capacity
A5023-7-917E	170 kg
A5023-7-2500	2.5L
A5023-7-4000	4.0 L

AMMONIUM ACETATE



- CH_3COONH_4
- M = 77.08 g/mol
- CAS [631-61-8]
- EC number: 211-162-9

Physical data:
- Spec. density: 1,17 g/cm³
- Bulk density: ~ 410 kg/m³
- Solub. in water (20°C): soluble
- Melting point: 114°C
- Boiling point: 136°C
- pH (50 g/l H_2O, 20°C) ~ 6,7 - 7,3

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

A5034-1, Ammonium acetate, reagent grade

HS-No: 2915 29 00 90

Assay (acidimetric)	min. 98.0 %	Calcium(Ca)	max. 0.001 %
pH (5%, H_2O)	6.7 - 7.6	Heavy metals (Pb)	max. 0.0002 %
Insoluble in water	max. 0.005	Iron (Fe)	max. 0.0002 %
Chloride (Cl)	max. 0.0005 %	$KMnO_4$ red. Matter (as HCOOH)	max. 0.005 %
Nitrates (NO_3)	max. 0.001 %	Calcination residue (as SO_4)	max. 0.01 %
Sulfate (SO_4)	max. 0.001%	Water	max. 2 %

Code	Capacity
A5034-1-0500	500g

A5034-3, Ammonium acetate, extra pure

HS-No: 2915 29 00 90

Assay (acidimetric)	min. 96 %	Heavy metals (Pb)	max. 0.0005 %
pH (5%, H_2O)	6.0 - 7.5	Iron (Fe)	max. 0.001 %
Chloride (Cl)	max. 0.002 %	Calcination residue (as SO_4)	max. 0.02 %
Sulfate (SO_4)	max. 0.01 %	Water	max. 2.5 %

Code	Capacity
A5034-3-0500	500g
A5034-3-1000	1kg

AMMONIUM BROMIDE

- NH_4Br
- M = 97.94 g/mol
- CAS [12124-97-9]
- EC number: 235-183-8

Physical data:
- Spec. density: 2,43 g/m³
- Bulk density: ~1100 kg/m³
- Solub. in water (20°C): 598 g/l
- Melting point: 542°C
- pH (50 g/l H_2O, 25°C) 4,8

Toxicological data:
- WGK: 1

Safety:
- R: 36
- S: 24/25
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13

A5046-1, Ammonium bromide, reagent grade

HS-No: 2827 59 00 00

Assay (argentometric)	min. 99.5 %	Barium (Ba)	max. 0.0005 %
pH (5%, H_2O)	5.0 - -6.0	Calcium (Ca)	max. 0.001 %
Insoluble in water	max. 0.005 %	Heavy Metals (Pb)	max. 0.0005 %
Bromates (BrO_3)	max. 0.001 %	Iron (Fe)	max. 0.0001 %
Chloride (Cl)	max. 0.1 %	Magnesium (Mg)	max. 0.002 %
Iodides (I)	max. 0.005 %	$KMnO_4$ red. matter	passes test
Sulfate (SO_4)	max. 0.005 %	Calcination residue (as Sulfate)	max. 0.01 %
Sulfides (S)	max. 0.0002 %	Loss on drying (105 °C)	max. 0.1 %

Code	Capacity
A5046-1-0500	500 g

AMMONIUM CARBONATE

Xn

Salt of hartshorn

- $(NH_4)_2CO_3$
- CAS [506-87-6]
- EC number: 208-58-0

Physical data:
- Solub. in water (20°C): soluble
- Melting point: 58°C (decomposes)
- pH (100 g/l H_2O, 20°C) 9,4

Toxicological data:
- LD 50 (oral, rat): 1975 mg/kg
- WGK: 1

Safety:
- R: 22
- S: 46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

A5052-1, Ammonium carbonate, reagent grade

HS-No: 2836 10 00 00

Assay (argentometric)	min. 99.5 %	Barium (Ba)	max. 0.0005 %
pH (5%, H_2O)	5.0 - 6.0	Calcium (Ca)	max. 0.001 %
Insoluble in water	max. 0.005 %	Heavy metals (Pb)	max. 0.0005 %
Bromates (BrO_3)	max. 0.001 %	Iron (Fe)	max. 0.0001 %
Chloride (Cl)	max. 0.1 %	Magnesium (Mg)	max. 0.002 %
Iodides (I)	max. 0.005 %	$KMnO_4$ red. matter	passes test
Sulfate (SO_4)	max. 0.005 %	Calcination residue (as Sulfate)	max. 0.01 %
Sulfides (S)	max. 0.0002 %	Loss on drying (105°C)	max. 0.1%

Code	Capacity
A5052-1-0500	500g

AMMONIUM CERIUM (IV) SULFATE DIHYDRATE

Ceric ammonium sulfate, Cerium (IV) ammonium sulfate, tetra-Ammonium-tetrasulfatocerate (IV)

- $(NH_4)_4[Ce](SO_4)_4]\bullet 2H_2O$
- M = 632.56 g/mol
- CAS [10378-47-9]
- EC number:

Physical data:
- Form: Solid
- Bulk density: ~800 kg/m³
- Solub. in water (20°C): hydrolysis reaction
- pH (100 g/l H_2O, 20°C) ~ 1,2

Toxicological data:
- WGK: 3*

Transport/storage:
- LGK: 10-13
- Disposal: 28

A5057-1, Ammonium cerium (IV) sulfate dihydrate, reagent grade

HS-No: 2846 10 00 90

Assay	min. 98.0 %	Aluminum (as Al_2O_3)	max. 0.08 %
Other Cerium Salts (as CeO_2)	max. 0.25 %	Substances not precipitated by	
Other rare earth metals (RxOy)	max. 0.2 %	ammonium hydroxide (as sulfate)	max. 0.2 %
Insolubility matter in sulfuric acid	max. 0.05 %	Iron (Fe)	max. 0.005 %
Chloride (Cl)	max. 0.01 %	Heavy Metals (as Pb)	max. 0.005 %

Code	Capacity
A5057-1-0101	100 g

AMMONIUM CHLORIDE

Xn

Sal ammoniac

- NH_4Cl
- M = 53.49 g/mol
- CAS [12125-02-9]
- EC number: 235-186-4

Physical data:
- Spec. density: 1,52 g/cm³
- Bulk density: ~500 kg/m³
- Solub. in water (20°C): 372 g/l
- Melting point: 335°C (decomposes)
- Ignition temp.: > 400°C
- Vapour pressure: (30°C) 1,3 hPa
- pH (50 g/l H_2O, 20°C) 4,5 - 5,5

Toxicological data:
- LD 50 (oral, rat): 1440 mg/kg
- MAK: 1,5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 017-014-00-8
- R: 22-36
- S: 22-46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 14

A5058-1, Ammonium chloride, reagent grade

HS-No: 2827 10 00 00

Assay (argentometric)	min. 99.8 %	Heavy metals (Pb)	max. 0.0005 %
Insoluble matter	max. 0.005 %	Lead (Pb)	max. 0.0002 %
pH (5%, H_2O)	4.5 - 5.5	Magnesium (Mg)	max. 0.0005 %
Nitrates (NO_3)	max. 0.0005 %	Nickel (Ni)	max. 0.0001 %
Phosphates PO_4)	max. 0.0002 %	Potassium (K)	max. 0.005 %
Sulfate (SO_4)	max. 0.002 %	Sodium (Na)	max. 0.005 %
Calcium (Ca)	max. 0.0005 %	Zinc (Zn)	max. 0.0002 %
Copper (Cu)	max. 0.0002 %	Calcination residue (as SO_4)	max. 0.01%

Code	Capacity
A5058-1-0500	500g
A5058-1-1000	1kg

A5058-3, Ammonium chloride, extra pure

HS-No: 2827 10 00 00

Assay (argentometric)	min. 99.5 %	Calcium (Ca)	max. 0.02 %
Acidly or alkalinely reacting impurities	passes test	Copper (Cu)	max. 0.0025 %
Appearance of solution	clear and colourless	Heavy metals (Pb)	max. 0.001 %
Iodides, bromides (I, Br)	passes test	Iron (Fe)	max. 0.002 %
pH (5%, H_2O)	4.6 – 6.0	Lead (Pb)	max. 0.001 %
Sulfate (SO_4)	max. 0.015 %	Zinc (Zn)	max. 0.0025 %
Thiocyanates (SCN)	max. 0.01 %	Calcination residue (as SO_4)	max. 0.1 %
Arsenic (As)	max. 0.0003 %	Loss on drying (150ºC)	max. 0.5 %

Code	Capacity
A5058-3-0500	500g
A5058-3-1000	1kg

AMMONIUM DICHROMATE

 E  T+  N

Ammonium bichromate, Ammonium pyrochromate

- $(NH_4)_2Cr_2O_7$
- M = 252.07 g/mol
- CAS [7789-09-5]
- EC number: 232-143-1

Physical data:
- Form: Solid
- Spec. density: 2,15 g/m³
- Solub. in water (20°C): 360 g/l
- Melting point: 180°C (decomposes, explosion reaction)
- Ignition temp.: 218 °C
- pH (100 g/l H_2O, 20°C) 3,45

Toxicological data:
- LD 50 (oral, rat): 53,75 mg/kg
- WGK: 3

Safety:
- EC Index no.: 024-003-00-1
- R: 45-46-60-61-1-8-E21-E25-E26-34 -42/43-E48/23-50/53
- S: 53-45-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 O2 II UN 1439
- IMDG: 5.1 II UN 1439
- IATA/ICAO: 5.1 II UN 1439
- PAX: 508
- CAO: 511
- LGK: 4.1A
- Disposal: 15

A5064-1, Ammonium dichromate, reagent grade

HS-No: 2841 50 00 00

Assay	min. 99.0 %	Sodium (Na)	max. 0.005 %
Insolubility matter in water	max. 0.002 %	Potassium (K)	max. 0.07 %
Chloride (Cl)	max. 0.002 %	Calcium (Ca)	max. 0.002 %
Sulfate (SO_4)	max. 0.01 %	Iron (Fe)	max. 0.002 %

Code	Capacity
A5064-1-0500	500 g

AMMONIUM DIHYDROGEN PHOSPHATE

Ammonium biphosphate, Ammonium phosphate monobasic, Primary ammonium phosphate, Monoammonium ortophosphate

- $(NH_4)H_2PO_4$
- M = 115.30 g/mol
- CAS [7722-76-1]
- EC number: 231-764-5

Physical data:
- Spec. density: 1,80 g/cm³
- Bulk density: ~800 - 1100 kg/m³
- Solub. in water (20°C): 370 g/l
- Melting point: 190°C
- pH (50 g/l H_2O, 20°C) 3,8 - 4,4

Toxicological data:
- LD 50 (oral, rat): 2500 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 14

A5067-1, Ammonium dihydrogen phosphate, reagent grade

HS-No: 3105 40 00 00

Assay (acidimetric)	min. 99 %	Arsenic (As)	max. 0.00005 %
Insoluble in water	max. 0.005 %	Heavy Metals (Pb)	max. 0.0005 %
pH (5%, H_2O)	3.8 - 4.4	Iron (Fe)	max. 0.001 %
Chlorides (Cl)	max. 0.0005 %	Potassium (K)	max. 0.005 %
Nitrates (NO_3)	max. 0.001 %	Sodium (Na)	max. 0.005 %
Sulfates (SO_4)	max. 0.005 %	Precipitable by ammonia	max. 0.005 %

Code	Capacity
A5067-1-0500	500 g
A5067-1-1000	1kg

AMMONIUM FLUORIDE

- FH_4N
- M = 37.04 g/mol
- CAS [12125-01-8]
- EC number: 235-185-9

Physical data:
- Spec. density: 1,01 g/cm³
- Bulk density: 250 - 350 kg/m³
- Solub. in water (20°C): 820 g/l
- pH (50 g/l H_2O, 20°C) 6

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 6.1B
- Disposal: 23

A5069-1, Ammonium fluoride, reagent grade

HS-No: 2826 11 00 00

Assay (precipitation titration,NH_4F)	min. 98.0 %	Iron (Fe)	max. 0.0005 %
Ammonium hydrogen diflouride	max. 0.5 %	Potassium (K)	max. 0.002 %
Hexafluorosilicate (SiF6)	max. 0.1 %	Sodium (Na)	max. 0.002 %
Chloride (Cl)	max. 0.0005 %	Water	max. 5 %
Sulfates (SO_4)	max. 0.005 %	Insoluble substances	max. 0.005 %
Heavy Metals (Pb)	max. 0.0005 %	Residue on ignition	max. 0.01 %

Code	Capacity
A5069-1-0500	500g
A5069-1-1000	1kg

AMMONIUM HEPTAMOLYBDATE TETRAHYDRATE

Ammonium molybdate, Hexammonium heptamolybdate 4-hydrate

- $(NH_4)_6Mo_7O_{24}\cdot 4H_2O$
- M = 1235.86 g/mol
- CAS [12027-67-7]
- EC number: 234-722-4

Physical data:
- Spec. density: 2,5 g/cm³
- Bulk density: ~800 kg/m³
- Solub. in water (20°C): 400 g/l
- Melting point: 90°C (release of crystalline water)
- pH (50 g/l H_2O, 20°C) ~ 5,3

Toxicological data:
- LD 50 (oral, rat): 3883 mg/kg
- MAK: 5mg/m³
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 28

A5071-1, Ammonium heptamolybdate tetrahydrate, reagent grade

HS-No: 2841 70 00 00

Assay $[NH_4]_6Mo_7O_{24}\bullet 4H_2O]$	min. 99 %	Sulphate (SO_4)	max. 0.005 %
Assay (MoO_3)	81.0 – 83.0 %	Copper (Cu)	max. 0.001 %
Insoluble matter	max. 0.005 %	Heavy metals (as Pb)	max. 0.001 %
Chloride (Cl)	max. 0.0005 %	Iron (Fe)	max. 0.0005 %
Nitrate (NO_3)	passes test	Lead (Pb)	max. 0.001 %
Arsenate, phosphate		Magnesium (Mg)	max. 0.005 %
and silicate (as SiO_2)	max. 0.0005 %	Potassium (K)	max. 0.002 %
Phosphate (PO_4)	max. 0.0005 %	Sodium (Na)	max. 0.01 %

Code	Capacity
A5071-1-0500	500 g

AMMONIUM HYDROGEN CARBONATE

Xn

Ammonium bicarbonate

- NH_4HCO_3
- M = 79.06 g/mol
- CAS [1066-33-7]
- EC number: 213-911-5

Physical data:
- Spec. density: 2,4 g/cm³
- Bulk density: ~600 kg/m³
- Solub. in water (20°C): 220 g/l
- Melting point: 106°C
- Vapour pressure: (20°C) 67 hPa
- pH (50 g/l H_2O, 20°C) ~ 8

Toxicological data:
- LD 50 (oral, rat): 1576 mg/kg
- WGK: 1

Safety:
- R: 22
- S: 46
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

A5077-1, Ammonium hydrogen carbonate, reagent grade

HS-No: 2836 10 00 00

Assay (acidimetric)	min. 99 %	Iron (Fe)	max. 0.001 %
Chlorides (Cl)	max. 0.0005 %	Lead (Pb)	max. 0.001 %
Phosphates (PO_4)	max. 0.0005 %	Magnesium (Mg)	max. 0.001 %
Sulfates (SO_4)	max. 0.005 %	Nickel (Ni)	max. 0.001 %
Arsenic (As)	max. 0.0001 %	Potassium (K)	max. 0.001 %
Calcium (Ca)	max. 0.01 %	Sodium (Na)	max. 0.002 %
Copper (Cu)	max. 0.001 %	Calcination residue (as SO_4)	max. 0.05

Code	Capacity
A5077-1-0500	500 g
A5077-1-1000	1kg

AMMONIUM IODIDE

- NH_4I
- M = 144.94 g/mol
- CAS [12027-06-4]
- EC number: 234-717-7

Physical data:
- Form: Solid
- Spec. density: 2,52 g/cm³
- Bulk density: ~900 - 1000 kg/m³
- Solub. in water (20°C): soluble
- Melting point: 405°C
- pH (50 g/l H_2O, 20°C) 4,5 - 6,5

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 14

A5080-3, Ammonium iodide, extra pure

HS-No: 2827 60 00 90

Assay (argentometric)	min. 99 %	Thiosulfates (S2O3)	max. 0.01 %
pH (5%, H_2O)	4.5 – 6.5	Arsenic (As)	max. 0.0005 %
Insoluble in water	max. 0.005 %	Heavy metals (Pb)	max. 0.001 %
Bromides, chlorides (as Cl)	max. 0.02 %	Iron (Fe)	max. 0.001 %
Iodates (IO_3)	max. 0.01 %	Sulfated Ash	max. 0.1 %
Sulfate (SO_4)	max. 0.01 %	Loss on drying (105ºC)	max. 1 %

Code	Capacity
A5080-3-0500	500 g

AMMONIUM IRON (III) SULFATE DODECAHYDRATE

Iron (III) ammonium sulfate, Alum iron, Ferric ammonium alum, Iron alum, Iron (III) ammonium sulfate, Ferric ammonium sulfate

- $NH_4Fe(SO_4)_2 \cdot 12H_2O$
- M = 482.19 g/mol
- CAS [7783-83-7]
- EC number: 233-382-4

Physical data:
- Bulk density: ~750 kg/m³
- Solub. in water (25°C): 1240 g/l
- Melting point: 39 - 41°C
- pH (100 g/l H_2O, 20°C) ~ 1,8

Toxicological data:
- WGK: 1

Transport/storage:
- LGK: 10-13
- Disposal: 15

A5092-1, Ammonium iron (III) sulfate dodecahydrate, reagent grade

HS-No: 2833 30 00 00

Assay (iodometric)	min. 99 %	Iron (II) (Fe (II))	max. 0.001 %
Insoluble in water	max. 0.005 %	Lead (Pb)	max. 0.0005 %
Chloride (Cl)	max. 0.0005 %	Magnesium (Mg)	max. 0.001 %
Nitrates (NO_3)	max. 0.01 %	Manganese (Mn)	max. 0.005 %
Phosphates (PO_4)	max. 0.002 %	Potassium (K)	max. 0.01 %
Calcium (Ca)	max. 0.002 %	Sodium (Na)	max. 0.01 %
Copper (Cu)	max. 0.001 %	Zinc (Zn)	max. 0.001 %

Code	Capacity
A5092-1-0500	500 g
A5092-1-1000	1 kg

A5092-3, Ammonium iron (III) sulfate dodecahydrate, extra pure

HS-No: 2833 30 00 00

Assay (iodometric)	min. 97.0 %	Iron (II) (Fe (II))	max. 0.002 %
Insoluble in water	max. 0.01 %	Lead (Pb)	max. 0.001 %
Chloride (Cl)	max. 0.002 %	Magnesium (Mg)	max. 0.03 %
Calcium (Ca)	max. 0.03 %	Zinc (Zn)	max. 0.005 %
Copper (Cu)	max. 0.0005 %		

Code	Capacity
A5092-3-0500	500 g
A5092-3-1000	1 kg

AMMONIUM IRON (II) SULFATE HEXAHYDRATE

Iron (II) ammonium sulfate, Ferrous ammonium sulfate, Mohr's salt

- $(NH_4)2Fe(SO_4)_2 \cdot 6H_2O$
- M = 392.14 g/mol
- CAS [7783-85-9]
- EC number: 233-151-8

Physical data:
- Spec. density: 1,86 g/cm³
- Bulk density: ~900 kg/m³
- Solub. in water (20°C): 269 g/l
- Melting point: 100°C
- pH (50 g/l H_2O, 20°C) 3 - 5

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 15

A5086-1, Ammonium iron (II) sulfate hexahydrate, reagent grade

HS-No: 2833 30 00 00

Assay (manganometric)	min. 99 %	Copper (Cu)	max. 0.002 %
pH (5%, H_2O)	3 - 5	Iron (III) (Fe (III))	max. 0.01 %
Insoluble in diluted H_2SO_4	max. 0.01 %	Lead (Pb)	max. 0.001 %
Non precipitable by ammonia (as SO_4)	max. 0.05 %	Manganese (Mn)	max. 0.01 %
Chlorides (Cl)	max. 0.001 %	Potassium (K)	max. 0.01 %
Phosphates (PO_4)	max. 0.002 %	Sodium (Na)	max. 0.01 %
Calcium (Ca)	max. 0.002 %	Zinc (Zn)	max. 0.003 %

Code	Capacity
A5086-1-0500	500 g
A5086-1-1000	1 kg

AMMONIUM IRON (II) SULFATE SOLUTION 0.1MOL/l (0.1N)

A5089-0, Ammonium iron (II) sulfate solution 0.1mol/l (0.1N)

HS-No: 2833 30 00 00

Iron (II) ammonium sulfate, Iron alum

- $NH_4Fe(SO_4)_2 \cdot 12H_2O$
- M = 482.19 g/mol
- CAS [7783-83-7]
- EC number: 233-382-4

Physical data:
- Density: 1,025 g/cm³

Toxicological data:
- WGK: 1

Transport/storage:
- LGK: 10-13
- Disposal: 15

1 ml = 0.04822 g $(NH_4)Fe(SO_4)_2 \cdot 12H_2O$

Code	Capacity
A5089-0-1000	1 L

AMMONIUM MONOVANADATE


T

Ammonium metavanadate, Ammonium vanadate

- NH_4VO_3
- M = 116.98 g/mol
- CAS [7803-55-6]
- EC number: 232-261-3

Physical data:
- Bulk density: ~600 kg/m³
- Solub. in water (15°C): 5,2 g/l
- Melting point: ~200°C (decomposes)
- pH (5 g/l H_2O, 20°C) ~6,5

Toxicological data:
- LD 50 (oral, rat): 169 mg/kg
- WGK: 3

Safety:
- R: 20-25-36/37
- S: 26-37-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 T5 II UN 2859
- IMDG: 6.1 II UN 2859
- IATA/ICAO: 6.1 II UN 2859
- PAX: 613
- CAO: 615
- LGK: 6.1B
- Disposal: 15

A5097-1, Ammonium monovanadate, reagent grade

HS-No: 2841 90 30 00

Assay (titr. with Fe(II))	min. 99.5 %	Copper (Cu)	max. 0.001 %
Chloride (Cl)	max. 0.002 %	Iron (Fe)	max. 0.001 %
Phosphates (PO_4)	max. 0.005 %	Lead (Pb)	max. 0.002 %
Sulfates (SO_4)	max. 0.005 %	Nickel (Ni)	max. 0.002 %
Cadmium (Cd)	max. 0.001 %	Zinc (Zn)	max. 0.001 %
Cobalt (Co)	max. 0.002 %		

Code	Capacity
A5097-1-0101	100 g
A5097-1-1000	1 kg

AMMONIUM NITRATE


O

Nitric acid ammonia, Ammonia nitrate

- NH_4NO_3
- M = 80.04 g/mol
- CAS [6484-52-2]
- EC number: 229-347-8

Physical data:
- Spec. density: 1,72 g/cm³
- Bulk density: ~600 - 700 kg/m³
- Solub. in water (20°C): soluble
- Melting point: 169°C
- Boiling point: 302°C
- pH (100 g/l H_2O, 20°C) ~5,5

Toxicological data:
- LD 50 (oral, rat): 2462 mg/kg
- WGK: 1

Safety:
- R: 8-9
- S: 15-16-41
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 5.1 O2 III UN 1942
- IMDG: 5.1 III UN 1942
- IATA/ICAO: 5.1 III UN 1942
- PAX: 516
- CAO: 518
- LGK: 5.1C
- Disposal: 14

A5105-1, Ammonium nitrate, reagent grade

HS-No: 3102 30 90 00

Assay (acidimetric)	min. 99 %	Copper (Cu)	max. 0.0005 %
Insoluble matter	max. 0.005 %	Iron (Fe)	max. 0.0001 %
pH (5%, H_2O)	4.5 – 6.0	Lead (Pb)	max. 0.0005 %
Chloride (Cl)	max. 0.0003 %	Magnesium (Mg)	max. 0.001 %
Nitrites (NO_2)	max. 0.005 %	Potassium (K)	max. 0.001 %
Phosphates (PO_4)	max. 0.0005 %	Sodium (Na)	max. 0.001 %
Sulfates (SO_4)	max. 0.002 %	Zinc (Zn)	max. 0.0005 %
Calcium (Ca)	max. 0.003 %	Calcination residue (as SO_4)	max. 0.01 %
Cadmium (Cd)	max. 0.0005 %	Water	max. 5 %

Code	Capacity
A5105-1-0500	500 g
A5105-1-1000	1 kg

AMMONIUM OXALATE MONOHYDRATE


Xn

Oxalic acid ammonium salt

- $C_2H_8N_2O_4 \cdot H_2O$
- M = 142.11 g/mol
- CAS [6009-70-7]
- EC number: 214-202-3

Physical data:
- Spec. density: 1,50 g/cm³
- Bulk density: ~480 kg/m³
- Solub. in water (20°C): ~ 45 g/l
- Melting point: 70°C
- pH (50 g/l H_2O, 25°C) ~6,3

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 607-007-00-3
- R: 21/22
- S: 24/25-37-46
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T2 III UN 2811
- IMDG: 6.1 III UN 2811
- IATA/ICAO: 6.1 III UN 2811
- PAX: 619
- CAO: 619
- LGK: 10-13
- Disposal: 14

A5110-1, Ammonium oxalate monohydrate, reagent grade

HS-No: 2917 11 00 90

Assay (permanganometric)	min. 99.5 %	Heavy metals (as Pb)	max. 0.0005 %
Insoluble matter	max. 0.005 %	Iron (Fe)	max. 0.0002 %
pH (2.5%, H_2O)	6 - 7	Lead (Pb)	max. 0.0005 %
Chloride (Cl)	max. 0.0005 %	Magnesium (Mg)	max. 0.001 %
Nitrates (NO_3)	max. 0.0005 %	Sodium (Na)	max. 0.001 %
Sulfates (SO_4)	max. 0.002 %	Potassium (K)	max. 0.001 %
Calcium (Ca)	max. 0.001 %	Zinc (Zn)	max. 0.0005 %
Cadmium (Cd)	max. 0.0005 %	Calcination residue (as SO_4)	max. 0.02 %
Copper (Cu)	max. 0.0005 %		

Code	Capacity
A5110-1-0500	500 g

AMMONIUM PEROXODISULFATE


O

Xn

Ammonium persulfate, Peroxodisulfuric acid diammonium salt

- $(NH_4)_2S_2O_8$
- M = 228.20 g/mol
- CAS [7727-54-0]
- EC number: 231-786-5

Physical data:
- Spec. density: 0,98 - 1,15 g/cm³
- Bulk density: ~900 kg/m³
- Solub. in water (20°C): 620 g/l
- Melting point: 120°C (decomposes)
- pH (100 g/l H_2O, 20°C) 3,2

Toxicological data:
- LD 50 (oral, rat): 495 mg/kg
- WGK: 1

Safety:
- EC Index no.: 016-060-00-6
- R: 8-22-36/37/38-42/43
- S: 22-24-26-37-45
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 5.1 O2 III UN 1444
- IMDG: 5.1 III UN 1444
- IATA/ICAO: 5.1 III UN 1444
- PAX: 516
- CAO: 518
- LGK: 5.1B
- Disposal: 22

A5108-1, Ammonium peroxodisulfate, reagent grade AR

HS-No: 2833 40 00 10

Assay	min. 98.0 %	Chloride and chlorate (as Cl)	max. 0.001 %
Appearance of solution	passes test	Manganese (Mn)	max. 0.00005 %
Insoluble matter in water	max. 0.005	Iron (Fe)	max. 0.0005 %
Residue after ignition (as Sulfate)	max. 0.02 %	Heavy Metals (as Pb)	max. 0.0005 %

Code	Capacity
A5108-1-0500	500 g

A5108-3, Ammonium peroxodisulfate, extra pure

HS-No: 2833 40 00 10

Assay (iodometric)	min. 98 %	Iron (Fe)	max. 0.001 %
Insoluble matter	max. 0.02 %	Lead (Pb)	max. 0.001 %
Chloride (Cl)	max. 0.002 %	Manganese (Mn)	max. 0.0002 %
Copper (Cu)	max. 0.005 %	Nickel (Ni)	max. 0.005 %
Heavy metals (as Pb)	max. 0.003 %	Calcination residue (as SO_4)	max. 0.1 %

Code	Capacity
A5108-3-0500	500 g

AMMONIUM SULFATE

Sulfuric acid diammonium salt

- $(NH_4)_2SO_4$
- M = 132.14 g/mol
- CAS [7783-20-2]
- EC number: 231-984-1

Physical data:
- Spec. density: 1,77 g/cm³
- Bulk density: ~850 kg/m³
- Solub. in water (20°C): 754 g/l
- Melting point: 280°C (decomposes)
- pH (50 g/l H_2O, 20°C) ~5-6

Toxicological data:
- LD 50 (oral, rat): 4250 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

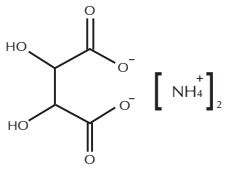
A5116-1, Ammonium sulfate, reagent grade

HS-No: 3102 21 00 00

Assay (acidimetric)	min. 99.5 %	Copper (Cu)	max. 0.0002 %
Insoluble matter	max. 0.001 %	Heavy metals (as Pb)	max. 0.0005 %
pH (5%, H_2O)	5 - 6	Iron (Fe)	max. 0.0002 %
Chlorides (Cl)	max. 0.0003 %	Lead (Pb)	max. 0.0002 %
Nitrates (NO_3)	max. 0.001 %	Magnesium (Mg)	max. 0.0005 %
Phosphates (PO_4)	max. 0.0005 %	Zinc (Zn)	max. 0.0001 %
Arsenic (As)	max. 0.00002 %	Calcination residue (as SO_4)	max. 0.005 %
Cadmium (Cd)	max. 0.0001 %	Loss on drying (105°C)	max. 0.1 %
Calcium (Ca)	max. 0.001 %		

Code	Capacity
A5116-1-0500	500 g
A5116-1-1000	1 kg

AMMONIUM TARTRATE



Tartaric acid diammonium salt

- $C_4H_{12}N_2O_6$ • M = 184.15 g/mol
- M = 184.15 g/mol
- CAS [3164-29-2]
- EC number: 221-618-9

Physical data:
- Spec. density: 1,60 g/cm³
- Solub. in water (15°C): 63 g/l
- pH (50 g/l H_2O, 20°C) 6,5 - 7

Safety:
- S: 24-25
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

A5126-1, Ammonium tartrate, reagent grade

HS-No: 2918 13 00 90

Assay	min. 99.0 %	Calcium (Ca)	max. 0.02 %
pH (%,H_2O)	5.5 - 6.5	Heavy metals (as Pb)	max. 0.001 %
Chloride (Cl)	max. 0.002 %	Iron (Fe)	max. 0.001 %
Sulfate (SO_4)	max. 0.01 %	Sulfated ash (as SO_4)	max. 0.05 %

Code	Capacity
A5126-1-0500	500 g

AMMONIUM THIOCYANATE

Xn

Ammonium sulfocyanate,
Ammonium rhodanide,
Thiocyanic acid ammonium salt,
Ammonium sulfocyanate

- NH_4SCN
- M = 76.12 g/mol
- CAS [1762-95-4]
- EC number: 217-175-6

Physical data:
- Spec. density: 1,31 g/cm³
- Bulk density: ~600 kg/m³
- Solub. in water (20°C): soluble
- Melting point: 150°C
- Boiling point: 170°C (decomposes)
- pH (50 g/l H_2O, 20°C) 4,8 - 5,8

Toxicological data:
- LD 50 (oral, rat): 500 mg/kg
- WGK: 1

Safety:
- EC Index no.: 615-004-00-3
- R: 20/21/22-32
- S: 13-36/37-46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 14

A5119-1, Ammonium thiocyanate, reagent grade

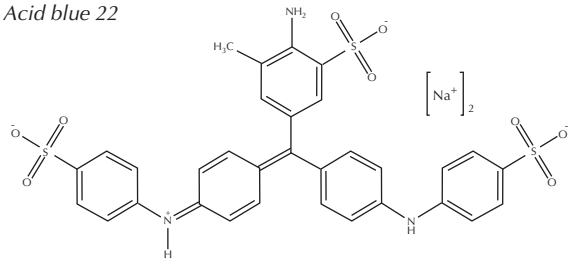
HS-No: 2838 00 00 00

Assay (argentonmetric)	min. 99 %	Copper (Cu)	max. 0.0004 %
Insoluble in water	max. 0.005 %	Iron (Fe)	max. 0.0001 %
pH (5%, H_2O)	4.8 - 5.8	Lead (Pb)	max. 0.0004 %
Chlorides (Cl)	max. 0.004 %	Calcination residue (as SO_4)	max. 0.025 %
Sulfides (S)	max. 0.001 %	1_2 consuming substances	max. 0.004 meq/g
Sulfates (SO_4)	max. 0.0025 %		

Code	Capacity
A5119-1-0500	500 g

ANILINE BLUE

Acid blue 22



- $C_{32}H_{25}N_3Na_2O_9S_3$
- M = 737.72 g/mol
- CAS [28631-66-5]
- EC number: 249-113-9

Physical data:
- Form: Solid
- Solub. in water (20°C): soluble

Transport/storage:
- LGK: 10-13

A5130-0, Aniline blue (water soluble)

HS-No: 3204 12 00 00

Absorption maximum λ in water	595 – 605 nm	Related substances (TLC)	passes test
Absorptivity (A1%/1cm; λ max)	250 – 500	Loss on drying (110ºC)	max. 7 %

Code	Capacity
A5130-0-0025	25 g

ANTI BUMPING GRANULES

- CAS [1344-28-1]

Physical data:
- Granular

A5135-0, Anti bumping granules

	Standard
Particle size	~ 1 – 3mm

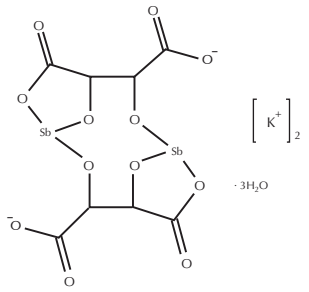
Code	Capacity
A5135-0-0250	250 g

Granules of fused alumina, more effective and easier to use than broken porous pot in preventing boiling liquids form "bumping"

ANTIMONY POTASSIUM TARTRATE

Xn N

Potassium antimony (III) oxide tartrade trihydrate, Potassium antimonyl tartrate, Tartar emetic, Antimony potassium tartrate



- $C_8H_4K_2O_{12}Sb_2 \cdot 3H_2O$
- M = 667.87 g/mol
- CAS [28300-74-5]
- EC number: 234-293-3

Physical data:
- Form: Solid
- Spec. density: 2,6 g/cm³
- Bulk density: ~1250 kg/m³
- Solub. in water (20°C): 83 g/l
- pH (50 g/l H_2O, 20°C) ~ 4

Toxicological data:
- LD 50 (oral, rat): 115 mg/kg
- MAK: 0,5 mg/m³
- WGK: 3

Safety:
- EC Index no.: 051-003-00-9
- R: 20/22-51/53
- S: 46/61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T5 III UN 1551
- IMDG: 6.1 III UN 1551
- IATA/ICAO: 6.1 III UN 1551
- PAX: 619
- CAO: 10-13

A5140-3, Antimony potassium tartrate, extra pure

HS-No: 2918 13 00 90

Assay (iodometric)	min. 98.0 %	Sulfates (SO_4)	max. 0.02 %
Insoluble in water	max. 0.005 %	Arsenic (As)	max. 0.05 %
pH (5%, H_2O)	3.8 – 4.2	Lead (Pb)	max. 0.05 %
Chlorides (C1)	max. 0.01 %		

Code	Capacity
A5140-3-0500	500 g

ANTIMONY TRICHLORIDE

C N

- $SbC1_3$
- M = 228.11 g/mol
- CAS [10025-91-9]
- EC number: 233-047-2

Physical data:
- Vapour pressure 0.16 hPa (20 °C)
- Spec. density: 3.14 g/cm³ (20 °C)
- Solub. in water 931 g/l (20 °C) (hydrolysis)
- M = 228.11 g/mol
- pH value acid
- Melting point 73 °C
- Bulk density ~ 1600 kg/m³
- Boiling point 233 °C (1013 hPa)
- Water absorption hygroscopic

Safety:
- EC-Index-No. 051-001-00-8
- corrosive, dangerous for the environment
- R 34-51/53
- S 26-45-61
- Poison class (CH)

Toxicological data:
- WGK 3*
- LD 50 oral 525 mg/kg

Transport/storage:
- LGK 8 B
- Packing-cat D
- Disposal 15
- Road/Rail 8/11 b
- IMDG-Code 8/II UN 1733
- IATA/DGR 8

A5144-1, Antimony Trichloride, reagent grade

HS-No: 2918 13 00 90

Assay	min. 99 %	Iron (Fe)	max. 0.002 %
Appearance of solution	passes test	Arsenic (As)	max. 0.005 %
Solubility test in ethanol	passes test	Substances not precipitated by	
Insolubility matter in hydrochloric acid	max. 0.005 %	hydrogen sulfide (as sulfate)	max. 0.2 %

Code	Capacity
A5144-1-0500	500 g

ARSENIC

T

Physical data:
- Density: ~1,01 g/cm³
- Solub. in water (20°C): miscible
- pH (20°C) < 1

Toxicological data:
- WGK: 2

Safety:
- R: 45-36/38
- S: 53-26-37-45

Transport/storage:
- ADR: 8 CT1 II UN 2922
- IMDG: 8 II UN 2922
- IATA/ICAO: 8 II UN 2922
- PAX: 808
- CAO: 812
- LGK: 6.1B

Special regulations
- Restricted chemical

1 ml = 1000±5 mg/l

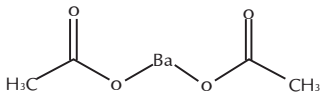
A1001-0-0500 Arsenic standard solution 1000mg/l for AA (arsenic (III) oxide in nitric acid 0.5 mol/l)

HS-No: 3822 00 00 00

Code	Capacity
A1001-0-0500	500 ml

BARIUM ACETATE

Xn



Acetic acid barium salt

- $Ba(CH_3COO)_2$
- M = 255.43 g/mol
- CAS [543-80-6]
- EC number: 208-849-0

Physical data:
- Spec. density: ~2,47 g/cm³
- Bulk density: ~1200 kg/m³
- Solub. in water (20°C): ~720 g/l
- Melting point: ~450°C
- pH (50 g/l H_2O, 20°C) ~6,5 - 8,5

Toxicological data:
- LD 50 (oral, rat): 921 mg/kg
- MAK: 0,5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 056-002-00-7
- R: 20/22
- S: 28.1-46
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T5 III UN 1564
- IMDG: 6.1 III UN 1564
- IATA/ICAO: 6.1 III UN 1564
- PAX: 619
- CAO: 619
- LGK: 10-13
- Disposal: 15

B1001-1, Barium acetate, reagent grade

HS-No: 2915 29 00 90

Assay (complexometric)	min. 99.0 %	Heavy metals (as Pb)	max. 0.0005 %
Insoluble in water	max. 0.01 %	Iron (Fe)	max. 0.0005 %
pH (5%, H_2O)	7.0 - 8.5	Strontium (Sr)	max. 0.15 %
Chloride (Cl)	max. 0.0005 %	Non-precipitable with H_2SO_4 (as SO_4)	
Oxidizing substances (as NO_3)	max. 0.005 %		max. 0.1 %
Calcium (Ca)	max. 0.005 %		

Code	Capacity
B1001-1-0500	500 g
B1001-1-1000	1 kg

BARIUM CHLORIDE DIHYDRATE

T

- $BaCl_2 \cdot 2H_2O$
- M = 244.28 g/mol
- CAS [10326-27-9]
- EC number: 233-788-1

Physical data:
- Bulk density: ~ 1200 - 1400 kg/m³
- Solub. in water (20°C): 357 g/l
- Melting point: 962°C (release of crystalline water)
- pH (50 g/l H_2O, 20°C) ~ 5,2 - 8,2

Toxicological data:
- LD 50 (oral, rat): 118 mg/kg (anhydrous substance)
- MAK: 0,5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 056-004-00-8
- R: 20-25
- S: 45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T5 III UN 1564
- IMDG: 6.1 III UN 1564
- IATA/ICAO: 6.1 III UN 1564
- PAX: 619
- CAO: 619
- LGK: 6.1B
- Disposal: 15

B1010-1, Barium chloride dihydrate, reagent grade

HS-No: 2827 39 80 90

Assay (complexometric)	min. 99 %	Lead (Pb)	max. 0.001 %
pH (5%, H_2O)	5.2 - 8.2	Magnesium (Mg)	max. 0.001 %
Total N	max. 0.002 %	Potassium (K)	max. 0.002 %
Oxidizing substances	max. 0.005 %	Sodium (Na)	max. 0.005 %
Heavy Metals (as Pb)	max. 0.0005 %	Strontium (Sr)	max. 0.05 %
Calcium (Ca)	max. 0.005 %	Loss on drying (150 °C)	14 - 16
Iron (Fe)	max. 0.0001 %		

Code	Capacity
B1010-1-0500	500 g
B1010-1-1000	1 kg

BARIUM HYDROXIDE OCTAHYDRATE

C

Caustic baryta, Barium oxide hydrate octahydrate

- $Ba(OH)_2 \cdot 8H_2O$
- M = 315.48 g/mol
- CAS [12230-71-6]
- EC number: 241-234-5

Physical data:
- Spec. density: 2,18 g/cm³
- Bulk density: ~ 900 - 1100 kg/m³
- Solub. in water (15°C): 56 g/l
- Melting point: 78°C
- pH (50 g/l H_2O, 20°C) ~ 12,5

Toxicological data:
- MAK: 0,5 mg/m³
- WGK: 1

Safety:
- R: 20/22-34
- S: 26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 CT2 II UN 2923
- IMDG: 8 II UN 2923
- IATA/ICAO: 8 II UN 2923
- PAX: 814
- CAO: 816
- LGK: 8 B
- Disposal: 28

B1014-1, Barium hydroxide octahydrate, reagent grade

HS-No: 2816 40 00 00

Assay (acidimetric)	min. 98 %	Heavy metals (as Pb)	max. 0.0005 %
Insoluble in hydrochloric acid	max. 0.005 %	Lead (Pb)	max. 0.0005 %
Carbonates ($BaCO_3$)	max. 2 %	Magnesium (Mg)	max. 0.002 %
Chlorides (Cl)	max. 0.001 %	Potassium (K)	max. 0.005 %
Sulfides (S)	max. 0.0005 %	Sodium (Na)	max. 0.005 %
Calcium (Ca)	max. 0.002 %	Strontium (Sr)	max. 1.5 %
Cadmium (Cd)	max. 0.0005 %	Zinc (Zn)	max. 0.0005 %
Copper (Cu)	max. 0.0005 %	Non precipitable with sulfuric acid	
Iron (Fe)	max. 0.0005 %	(as SO_4)	max. 0.2 %

Code	Capacity
B1014-1-0500	500 g

B1014-3, Barium hydroxide octahydrate, extra pure

HS-No: 2816 40 00 00

Assay (complexometric)	min. 97 %	Heavy metals (as Pb)	max. 0.001 %
Insoluble in hydrochloric acid	max. 0.01 %	Iron (Fe)	max. 0.001 %
Chlorides (C1)	max. 0.005 %	Lead (Pb)	max. 0.002 %
Sulfides (S)	max. 0.001 %	Nickel (Ni)	max. 0.002 %
Calcium (Ca)	max. 0.005 %	Non precipitable with H_2SO_4 (as SO_4)	
Copper (Cu)	max. 0.002 %		max. 0.2 %

Code	Capacity
B1014-3-1000	1 kg

BARIUM NITRATE

Xn

Nitric acid barium salt

- $Ba(NO_3)_2$
- M = 261.35 g/mol
- CAS [10022-31-8]
- EC number: 233-020-5

Physical data:
- Spec. density: 3.2 g/cm³
- Bulk density: ~1750 kg/m³
- Solub. in water (20°C): 90 g/l
- Melting point: 592 - 595°C
- pH (50 g/l H_2O, 20°C) ~5,2

Toxicological data:
- LD 50 (oral, rat): 355 mg/kg
- MAK: 0,5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 056-002-00-7
- R: 20/22
- S: 28.1-46
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 5.1 OT2 II UN 1446
- IMDG: 5.1 II UN 1446
- IATA/ICAO: 5.1 II UN 1446
- PAX: 508
- CAO: 511
- LGK: 5.1B
- Disposal: 28

B1020-1, Barium nitrate, reagent grade

HS-No: 2834 29 20 00

Assay (complexometric)	min. 99 %	Iron (Fe)	max. 0.0002 %
pH (5%, H_2O)	5 - 7	Magnesium (Mg)	max. 0.002 %
Chlorides (Cl)	max. 0.0005 %	Potassium (K)	max. 0.005 %
Ammonium (NH_4)	max. 0.001 %	Sodium (Na)	max. 0.005 %
Calcium (Ca)	max. 0.002 %	Strontium (Sr)	max. 0.05 %
Heavy metals (as Pb)	max. 0.0005 %		

Code	Capacity
B1020-1-0500	500 g
B1020-1-0501	500 g

BARIUM SULFATE

Sulfuric acid barium salt,
Blanc fixe

- $BaSO_4$
- M = 233.40 g/mol
- CAS [7727-43-7]
- EC number: 231-784-4

Physical data:
- Spec. density: 4,5 g/cm³
- Bulk density: ~700 kg/m³
- Solub. in water (20°C): < 0,01 g/l
- Melting point: 1580°C
- pH (50 g/l H_2O, 20°C) ~7

Toxicological data:
- LD 50 (oral, rat): >15000 mg/kg
- MAK: 1,5 mg/m³
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

B1029-3, Barium sulfate, extra pure

HS-No: 2833 27 00 00

Soluble in acid	max. 0.3 %	Heavy metals (as Pb)	max. 0.001 %
Phosphates (PO_4)	max. 0.005 %	Calcination residue (600°C)	max. 2 %
Arsenic (As)	max. 0.0001 %		

Code	Capacity
B1029-3-0500	500 g
B1029-3-1000	1 kg

BARIUM STANDARD SOLUTION 1000MG/L FOR AA

Barium nitrate in acid

Physical data:
- Form: Liquid
- Density: ~ 1,01 g/cm³
- Solub. in water (20°C): miscible
- pH (20°C) < 1

Toxicological data:
- WGK: 0

Safety:
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C1 III UN 3264
- IMDG: 8 III UN 3264
- IATA/ICAO: 8 III UN 3264
- PAX: 818
- CAO: 820
- LGK: 8 B

1 ml = 1000±5 mg/l

B1002-0, Barium standard solution 1000mg/l for AA (barium nitrate in nitric acid 0.5 mol/l)

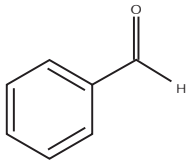
HS-No: 3822 00 00 00

composition ..... 1000±5 mg/l

Code	Capacity
B1002-0-0500	500 ml

BENZALDEHYDE

Xn



Benzoic aldehyde,
Bitter almond oil

- C_7H_6O
- M = 106.13 g/mol
- CAS [100-52-7]
- EC number: 202-860-4

Physical data:
- Density: 1,05 g/cm³
- Solub. in water (20°C): 3,3 g/l
- Melting point: -56°C
- Boiling point: 179°C
- Flash point: 64°C
- Ignition temp.: 190°C
- Vapour pressure: (20°C) 1,3 hPa
- Refraction index: (n 20°C/D) 1,5450
- Expl. limit (upper): 8,5 Vol%
- Expl. limit (lower): 1,4 Vol%
- pH (1 g/l H_2o, 20°C) ~ 5,9

Toxicological data:
- LD 50 (oral, rat): 1300 mg/kg
- WGK: 2

Safety:
- EC Index no.: 605-012-00-5
- R: 22
- S: 24-46
- VbF class: AIII
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 9 M11 III UN 1990
- IMDG: 9 III UN 1990
- IATA/ICAO: 9 III UN 1990
- PAX: 907
- CAO: 907
- LGK: 3 B
- Disposal: 1

B2005-2, Benzaldehyde, synthesis grade

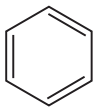
HS-No: 2912 21 00 00

Assay (G.C)	min. 99 %
Water	max. 0.1 %

Code	Capacity
B2005-2-1000	1L
B2005-2-2500	2.5L

BENZENE

F T



Cyclohexatriene

- C_6H_6
- M = 78.11 g/mol
- CAS [71-43-2]
- EC number: 200-753-7

Physical data:
- Density: 0,88 g/cm³
- Solub. in water (20 °C): 1,77 g/l
- Melting point: 5,5°C
- Boiling point: 80,1°C
- Flash point: -11°C
- Ignition temp.: 555°C
- Vapour presssure: (20 °C) 101 hPa
- Refraction index: (n 20 °C/D) 1,5011
- Viscosity: (20 °C) 0,66 mPas
- Dielectric const.: (20 °C) 2,3
- Evap. heat: (80 °C) 550 KJ/kg
- Saturation conc.: (20 °C) 319 g/m³
- Expl. limit (upper): 8,0 Vol%
- Expl. limit (lower): 1,4 Vol%

Toxicological data:
- LD 50 (oral, rat): 930 mg/kg
- WGK: 3

Safety:
- EC Index no.: 601-020-00-8
- R: 45-11-E48/23/24/25
- S: 53-36/37-45
- VbF class: AI
- Poison class CH (Swiss): 1*

Transport/storage:
- ADR: 3 F1 II UN 1114
- IMDG: 3 II UN 1114
- IATA/ICAO: 3 II UN 1114
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 9

B2027-1, Benzene, reagent grade

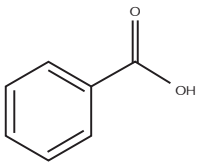
HS-No: 2902 20 00 00

Assay	min. 99 %	Thiophene	passes test ~ 1 ppm
Colour	max. 10 APHA	Sulphur compounds (as S)	max. 0.005 %
Residue After Evaporation	max. 0.001 %	Water	max. 0.05 %
Substances Darkened by Sulphuric Acid	passes test		

Code	Capacity
B2027-1-2501	2.5L

BENZOIC ACID

Xn



Benzenecarboxylic acid, Phenylformic acid

- $C_7H_6O_2$
- M = 122.12 g/mol
- CAS [65-85-0]
- EC number: 200-618-2

Physical data:
- Spec. density: 1,321 g/cm³
- Bulk density: ~500 kg/m³
- Solub. in water (20°C): 3,4 g/l
- Melting point: 121,5 - 123,0 °C
- Boiling point: ~ 249 °C
- Flash point: 121,1°C
- Ignition temp.: 532 °C
- Vapour pressure: (20°C) 1,3 hPa
- pH (10 g/l H_2O) 3

Toxicological data:
- LD 50 (oral, rat): 1700 mg/kg
- WGK: 1

Safety:
- R: 22-36
- S: 24-46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 4

B2042-1, Bezoic acid, reagent grade

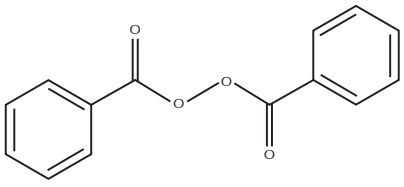
HS-No: 2916 31 00 00

Assay (acidimetric)	min. 99.9 %	Copper (Cu)	max. 0.0005 %
insoluble in methanol	max. 0.005 %	Iron (Fe)	max. 0.0002 %
Halogen compounds (as Cl)	max. 0.005 %	Heavy metals (as Pb)	max. 0.0005 %
Oxidizable impurities	passes test	Lead (Pb)	max. 0.0002 %
S compounds (as S)	max. 0.002 %	Zinc (Zn)	max. 0.0005 %
Sulfates (SO_4)	max. 0.002 %	Sulfated ash	max. 0.005 %

Code	Capacity
B2042-1-0500	500 g

BENZOYL PEROXIDE

E Xi



Dibenzoyl peroxide

- $C_{14}H_{10}O_4$
- M = 242.23 g/mol
- CAS [94-36-0]
- EC number: 202-327-6

Physical data:
- Form: Solid
- Spec Density: 0,53 g/cm³
- Bulk Density: ~500 - 600 g/cm³
- Solub. in water (20 °C): almost insoluble
- Melting point: 100 - 105°C (decomposes)

Toxicological data:
- LD 50 (oral, rat): >5000 mg/kg
- MAK: 5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 617-008-00-0
- R: 2-36-43
- S: 3/7-14.9-24-36/37/39
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 5.2 P1 - UN 3104
- IMDG: 5.2 II UN 3104
- IATA/ICAO: 5.2 II UN 3104
- PAX: 510
- CAO: 513
- LGK: 5.2
- Disposal: 10

B2055-1, Benzoyl peroxide, reagent grade

HS-No: 2916 32 10 00

Assay (as dring)	min. 99 %	Loss on drying	30 ~ 40 %
Melting range (as drying), °C	102 ~ 106 °C	Phophate (PO_4)	max. 0.5 %
Solubility test in benzene (as drying)	passes test	Acidity and alkalinity	passes test

Code	Capacity
B2055-1-0500	500 g

BISMUTH OXIDE

- Bi_2O_3
- M = 465.96 g/mol
- CAS [1304-76-3]
- EC number: 215-134-7

Physical data:
- Spec. density: 8,93 g/cm³
- Bulk density: ~1000 kg/m³
- Solub. in water (20°C): almost insoluble
- Melting point: 817 °C
- Boiling point: 1890 °C

Toxicological data:
- LD 50 (oral, rat): 5000 mg/kg
- WGK: 1

Transport/storage:
- LGK: 10-13

B3012-1, Bismuth oxide, reagent grade

HS-No: 2825 90 80 00

Assay (complexometric)	min. 99.5 %	Copper (Cu)	max. 0.005 %
Nitrates (NO_3)	max. 0.05 %	Calcination residue (1000°C)	max. 0.5 %
Arsenic (As)	max. 0.0005 %		

Code	Capacity
B3012-1-0500	500 g

B3012-2, Bismuth oxide, synthesis grade

HS-No: 2825 90 80 00

Assay (complexometric)	min. 99.5 %	Copper (Cu)	max. 0.005 %
Nitrates (NO_3)	max. 0.05 %	Calcination residue (1000°C)	max. 0.5 %
Arsenic (As)	max. 0.0005 %		

Code	Capacity
B3012-2-0500	500 g

BORIC ACID

Ortoboric acid

- H_3BO_3
- M = 61.84 g/mol
- CAS [10043-35-3]
- EC number: 233-139-2

Physical data:
- Spec. density: 1,51 g/cm³
- Bulk density: ~ 400 - 600 kg/m³
- Solub. in water (20°C): 46,5 g/l
- Melting point: 185 °C (decomposes)
- Vapour pressure: (20 °C) 2,7 hPa
- pH (33 g/l H_2O, 20 °C) 3,8 - 4,8

Toxicological data:
- LD 50 (oral, rat): 2660 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 28

B5010-1, Boric acid, reagent grade

HS-No: 2810 00 90 00

Assay (acidimetric)	min. 99.8 %	Calcium (Ca)	max. 0.002 %
pH (4%, H_2O)	3.6 - 4.0	Cadmium (Cd)	max. 0.0005 %
Insoluble in methanol	max. 0.005 %	Copper (Cu)	max. 0.0005 %
With Methanol-HCL		Heavy Metals (as Pb)	max. 0.0005 %
non-volatile matter	max. 0.05 %	Iron (Fe)	max. 0.0001 %
Chloride (Cl)	max. 0.0003 %	Lead (Pb)	max. 0.0005 %
Phosphates (PO_4)	max. 0.0005 %	Magnesium (Mg)	max. 0.0005 %
Sulfates (SO_4)	max. 0.0005 %	Zinc (Zn)	max. 0.0005 %
Arsenic (As)	max. 0.00005 %		

Code	Capacity
B5010-1-1000	1 kg
B5010-1-0500	500 g

BROMINE WATER


T

N

- Br_2
- M = 159.92 g/mol
- CAS [7726-95-6]
- EC number: 231-778-1

Physical data:
- Form: Solid
- Density: ~1,008 g/cm³

Safety:
- EC Index no.: 035-001-00-5
- R: 23-36/38-51
- S: 23.2-51-26-37-45-61

Transport/storage:
- ADR: 8 CT1 II UN 2922
- IMDG: 8 II UN 2922
- IATA/ICAO: 8 II UN 2922
- PAX: 808
- CAO: 812

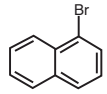
B6007-0, Bromine water, saturated solution

HS-No: 2801 30 90 00

Assay (bromometric)	approx. 3 %

Code	Capacity
B6007-0-0500	500 ml
B6007-0-1000	1L

1-BROMONAPHTHALENE



α-Naphthyl bromide

- $C_{10}H_7Br$
- M = 207.08 g/mol
- CAS [90-11-9]
- EC number: 201-965-2

Physical data:
- Refractive index 1.6576 (20 °C, 589 nm)
- Spec. density: 1.48 g/cm³ (20°C)
- Flash point 66°C
- Solub. in water (20°C): insoluble
- Melting point: 0 - 2 °C
- Boiling point 280 - 282°C
- VbF-class. AIII

Safety:
- EC Index No.: 201-965-2

Transport/storage:
- LGK: 3 B
- Disposal: 2

B6000-3, 1-Bromonaphthalene, extra pure

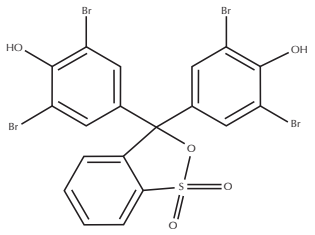
HS-No: 2903 69 90 00

Assay	min. 96 %
Density (d 20°/4°)	1.484 – 1.489 °C
Identity (IR)	conforms

Code	Capacity
B6000-3-0100	100 ml

BROMOPHENOL BLUE

BPB, 3, 3',5,5',-Tetrabromophenolsulfonphthalein



- $C_{19}H_{10}Br_4O_5S$
- M = 669.96 g/mol
- CAS [115-39-9]
- EC number: 204-086-2

Physical data:
- Form: Solid
- Bulk density: ~730 kg/m³
- Solub. in water (20°C): almost insoluble
- Melting point: 273°C (decomposes)

Transport/storage:
- LGK: 10-13

B6030-0, Bromophenol blue, indicator

HS-No: 2934 99 90 90

pH range (greenish-yellow to blue-violet)	3.1 – 4.4
Absorption maximum λ 1 (pH 3.0)	434 – 439 nm
Absorption maximum λ 2 (pH 4.6)	590 – 593 nm
Absorptivity (A1%/1cm; λ 1 (pH 3.0 on dried material)	350 – 385
Absorptivity (A1%/1cm; λ 2 (pH 4.6 on dried material)	940 – 1000
Transition range acc. ACS	passes test
Loss on drying (110ºC)	max. 1 %

Code	Capacity
B6030-0-0010	100 g

BUFFER SOLUTION

Xi

A7009-0, Buffer solution pH1.00 (hydrochloric acid/potassium chloride)

Physical data:
- Density: 1 g/cm³
- Solub. in water (20°C): miscible
- pH (20 °C) 1,0

Toxicological data:
- WGK: 0

Safety:
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

pH = 1,00 ± 0,02 at 20°C
Certified traceable to N.I.S.T buffers

HS-No: 3822 00 00 00

Code	Capacity
A7009-0-1000	1L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	- 0.04	- 25°C	+ 0.01
- 5°C	- 0.01	- 30°C	+ 0.01
- 10°C	- 0.01	- 35°C	+ 0.01
- 15°C	- 0.01	- 40°C	+ 0.01
- 20°C	+/- 0	- 50°C	+ 0.01

A7011-0, Buffer solution pH 10.00 (Sodium carbonate/sodium hydrogen carbonate)

Physical data:
- Form: Solid
- Density: 1,00 g/cm³
- Solub. in water (20°C): miscible
- Melting Point: -6°C
- Boiling Point: 110°C
- pH (H_2O, 20 °C) 10,0

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

pH = 10.00 ± 0.02 at 20 °C

HS-No: 3822 00 00 00

Code	Capacity
A7011-0-1000	1.0 L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	10.25	- 30°C	9.93
- 5°C	10.18	- 35°C	9.91
- 10°C	10.12	- 40°C	9.89
- 15°C	10.06	- 45°C	9.83
- 20°C	10.00	- 50°C	9.78
- 25°C	9.97		

A7013-0, Buffer solution pH10.00 (boric acid/potassium chloride/sodium hydroxide)

Physical data:
- Density: 1,00 g/cm³
- Solub. in water (20°C): miscible
- Melting point: -6°C
- Boiling point: 110°C
- pH (H_2O, 20°C) 10,0

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

pH = 10,00 ± 0,02 at 20°C
Certified traceable to N.I.S.T buffers

HS-No: 3822 00 00 00

Code	Capacity
A7013-0-1000	1L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	+ 0.26	- 20°C	+/- 0
- 5°C	+ 0.17	- 25°C	- 0.06
- 10°C	+ 0.11	- 30°C	- 0.11
- 15°C	+ 0.05	- 35°C	- 0.16

A7018-0, Buffer solution pH 11.00

HS-No: 3822 00 00 00

Physical data:
- Spec. density 1.01 g/cm³ (20°C)
- Solub. in water (20°C): soluble
- pH value 11.0 (20 °C)

Safety:
- Poison class CH F
- WGK nwg

Transport/storage:
- LGK: 10-13

pH =11.00 ± 0.02 at 20 °C

Code	Capacity
A7018-0-1000	1.0 L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	+ 0.45	- 25°C	- 0.10
- 5°C	+ 0.32	- 30°C	- 0.19
- 10°C	+ 0.20	- 35°C	- 0.28
- 15°C	+ 0.10	- 40°C	- 0.36
- 20°C	+/- 0	- 50°C	- 0.52

A7020-0, Buffer solution pH 12.00

HS-No: 3822 00 00 00

Physical data:
- Form: Solid
- Density: ~1,01 g/cm³
- Solub. in water (20°C): miscible
- pH (20 °C) 11,0

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

pH =12.00 ± 0.02 at 20 °C

Code	Capacity
A7020-0-1000	1.0 L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	12.58	- 30°C	11.72
- 5°C	12.41	- 35°C	11.67
- 10°C	12.26	- 40°C	11.54
- 15°C	12.10	- 45°C	11.41
- 20°C	12.00	- 50°C	11.33
- 25°C	11.88		

A7023-0, solution pH 13 (potassium chloride/sodium hydroxide)

HS-No: 3822 00 00 00

Physical data:
- Form: Solid
- Solub. in water (20°C): miscible

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

pH =13.00 ± 0.02 at 20 °C

Code	Capacity
A7023-0-1000	1.0 L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	13.80	- 30°C	12.67
- 5°C	13.59	- 35°C	12.59
- 10°C	13.37	- 40°C	12.41
- 15°C	13.18	- 45°C	12.28
- 20°C	13.00	- 50°C	12.15
- 25°C	12.83		

A7024-0, Buffer solution pH2.00 (citrate/hydrochloric acid)

HS-No: 3822 00 00 00

Physical data:
- Spec. density 1.00 g/cm³ (20 °C)
- Solub. in water (20°C): solube
- pH value 2.0 (20 °C)

Toxicological data:
- WGK: 1

Safety:
- Poison class CH: F

Transport/storage:
- LGK: 10-13

PH = 2.00±0.02 at 20°C

Code	Capacity
A7024-0-1000	1L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	+ 0.01	- 25°C	+/- 0
- 5°C	+ 0.01	- 30°C	+/- 0
- 10°C	+ 0.01	- 35°C	+/- 0
- 15°C	+/- 0	- 40°C	+/- 0
- 20°C	+/- 0	- 45°C	+/- 0

A7026-0, Buffer solution pH3.00 (citrate/hydrochloric acid)

HS-No: 3822 00 00 00

Physical data:
- Vapour pressure 23 hPa (20 °C)
- Spec. density 1.0 g/cm³ (20 °C)
- Solub. in water (20°C): solube
- pH value 3.0 (20 °C)
- Melting point - 1 °C
- Boiling point 101 °C

Toxicological data:
- WGK: 1

Safety:
- Poison class CH: F

Transport/storage:
- LGK: 10-13

PH = 3.00±0.02 at 20°C

Code	Capacity
A7026-0-1000	1L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	+ 0.05	- 25°C	+/- 0
- 5°C	+ 0.05	- 30°C	+/- 0
- 10°C	+ 0.03	- 35°C	+/- 0
- 15°C	+ 0.01	- 40°C	- 0.02
- 20°C	+/- 0	- 50°C	- 0.03

A7029-0, Buffer solution pH4.00 (potassium hydrogen phthalate)

Physical data:
- Density: 1,01 g/cm³
- Solub. in water (20°C): miscible
- pH (20°C) 4,00

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

pH = 4,00 ± 0,02 at 20°C
Certified traceable to N.I.S.T buffers

HS-No: 3822 00 00 00

Code	Capacity
A7029-0-1000	1L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	+ 0.05	- 20C	+/- 0
- 5°C	+ 0.04	- 25°C	+ 0.01
- 10°C	+ 0.02	- 30°C	+ 0.01
- 15°C	+ 0.01	- 35°C	+ 0.01

A7034-0, Buffer solution pH 4.01 (potassium hydrogen phthalate)

Physical data:
- Form: Solid
- Density: 1 g/cm³
- Solub. in water (20°C): miscible
- pH (20 °C) 4,01

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

pH = 4.01 ± 0.02 at 20 °C

HS-No: 3822 00 00 00

Code	Capacity
A7034-0-1000	1.0 L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	+/- 0	- 30°C	+ 0.02
- 5°C	+/- 0	- 35°C	+ 0.02
- 10°C	+/- 0	- 40°C	+ 0.03
- 15°C	+/- 0	- 45°C	+ 0.05
- 20C	+ 0.01	- 50°C	+ 0.05
- 25°C	+ 0.01		

A7035-0, Buffer solution pH 5.00 (citrate/sodium hydroxide)

Physical data:
- Spec. density 1.01 g/cm³ (20°C)
- Solub. in water (20°C): soluble
- pH value 5.0 (20 °C)

Toxicological data:
- WGK: 1

Safety:
- Poison class CH : F

Transport/storage:
- LGK: 10-13

pH = 5.00 ± 0.02 at 20 °C

HS-No: 3822 00 00 00

Code	Capacity
A7035-0-1000	1.0 L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	+ 0.06	- 25°C	+/- 0
- 5°C	+ 0.05	- 30°C	+/- 0
- 10°C	+ 0.02	- 35°C	+/- 0
- 15°C	+ 0.01	- 40°C	+/- 0
- 20°C	+/- 0	- 50°C	+ 0.01

A7036-0, Buffer solution pH6.00 (potassium dihydrogen phosphate/sodium hydroxide)

Physical data:
- Solub. in water (20°C): miscible

Toxicological data:
- WGK: 0

Transport/storage:
- LGK: 10-13

pH = 6,00 ± 0,02 at 20°C
microfiltered

HS-No: 3822 00 00 00

Code	Capacity
A7036-0-1000	1L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	+ 0.04	- 25°C	+ 0.02
- 5°C	+ 0.02	- 30°C	+ 0.03
- 10°C	+ 0.01	- 35°C	+ 0.03
- 15°C	+/- 0	- 40°C	+ 0.04
- 20°C	+/- 0	- 50°C	+ 0.06

A7037-0, Buffer solution pH 6.86 (potassium dihydrogen phosphate/sodium hydroxide)

Physical data:
- Spec. density 1.00 g/cm³
- pH value 7.00
- Boiling point 100 °C

Toxicological data:
- WGK: 1

Transport/storage:
- LGK: 10-13

pH = 6.86 ± 0.02 at 20 °C

HS-No: 3822 00 00 00

Code	Capacity
A7037-0-1000	1.0 L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	6.96	- 30°C	6.84
- 5°C	6.93	- 35°C	6.83
- 10°C	6.90	- 40°C	6.82
- 15°C	6.88	- 45°C	6.82
- 20°C	6.86	- 50°C	6.82
- 25°C	6.84		

A7037-0, Buffer solution pH 9.2 (boric acid/potassium chloride)

HS-No: 3822 00 00 00

Physical data:
- Density: 1.00 g/cm³ (20°C)
- Solub. in water (20°C): soluble
- pH value ~ 9.2 (20 °C)
- Boiling point: 100 °C

Toxicological data:
- WGK: nwg

Safety:
- Poison class CH : F

Transport/storage:
- LGK: 10-13
- Disposal: 28

pH = 9.2 ± 0.02 at 20 °C

Code	Capacity
A7037-0-1000	1.0 L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	9.44	- 30°C	9.12
- 5°C	9.38	- 35°C	9.08
- 10°C	9.31	- 40°C	9.05
- 15°C	9.26	- 45°C	8.99
- 20°C	9.20	- 50°C	8.99
- 25°C	9.16		

A7039-0, Buffer solution pH7.00 (potassium dihydrogen phosphate/di-sodium hydrogen phosphate)

HS-No: 3822 00 00 00

Physical data:
- Density: 1,01 g/cm³
- Solub. in water (20°C): miscible
- Melting point: -5 °C
- Boiling point: 109 °C)
- pH (20 °C) 7,00

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

pH = 7,00 ± 0,02 at 20°C
Certified traceable to N.I.S.T buffers

Code	Capacity
A7039-0-1000	1L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	+ 0.13	- 25°C	- 0.02
- 5°C	+ 0.07	- 30°C	- 0.02
- 10°C	+ 0.05	- 35°C	- 0.04
- 15°C	+ 0.02	- 40°C	- 0.05
- 20°C	+/- 0		

A7047-0, Buffer solution pH8.00

HS-No: 3822 00 00 00

Physical data:
- Density: 1,00 g/cm³
- Solub. in water (20°C): miscible
- pH (H_2O, 20 °C) 8,0

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

pH = 8,00 ± 0,02 at 20°C
Certified traceable to N.I.S.T buffers

Code	Capacity
A7047-0-1000	1L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	+ 0.15	- 25°C	- 0.04
- 5°C	+ 0.10	- 30°C	- 0.06
- 10°C	+ 0.07	- 35°C	- 0.08
- 15°C	+ 0.04	- 40°C	- 0.10
- 20°C	+/- 0	- 50°C	- 0.15

A7049-0, Buffer solution pH9.00 (boric acid/potassium chloride/sodium hydroxide)

HS-No: 3822 00 00 00

Physical data:
- Density: ~ 1,00 g/cm³
- Solub. in water (20°C): miscible
- pH (H_2O, 20°C) 9,0

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

pH = 9,00 ± 0,02 at 20°C
Certified traceable to N.I.S.T buffers

Code	Capacity
A7049-0-1000	1L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	9.24	- 30°C	8.91
- 5°C	9.16	- 35°C	8.88
- 10°C	9.11	- 40°C	8.85
- 15°C	9.05	- 45°C	8.82
- 20°C	9.00	- 50°C	8.79
- 25°C	8.95		

A7049-6, Buffer solution pH 9.00 EC grade

HS-No: 3822 00 00 00

Physical data:
- Density: ~ 1,00 g/cm³
- Solub. in water (20°C): miscible
- pH (H_2O, 20°C) 9,0

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

pH = 9,00 ± 0,02 at 20°C
Certified traceable to N.I.S.T buffers

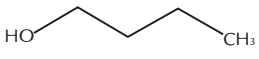
Code	Capacity
A7049-6-1000	1.0 L

Deviations of pH (ΔpH) at various temperatures:

- 0°C	9.23	- 50°C	8.78
- 10°C	9.10	- 60°C	8.73
- 20°C	9.00	- 70°C	8.69
- 30°C	8.91	- 80°C	8.66
- 40°C	8.84	- 90°C	8.62

1-BUTANOL

Xn



n-Butyl alcohol, Propylcarbinol

- $C_4H_{10}O$
- M = 74.12 g/mol
- CAS [71-36-3]
- EC number: 200-751-6

Physical data:
- Density: 0,81 g/cm³
- Solub. in water (20 °C): 79 g/l
- Melting point: -89,5 °C
- Boiling point: 118 °C
- Flash point: 30 °C
- Ignition temp.: 340 °C
- Vapour pressure: (20 °C) 6,7 hPa
- Refraction index: (n 20 °C/D) 1,3993
- Viscosity: (20 °C) 2,95 mPas
- Dipolar moment: (20 °C) 1,66 Debye
- Dielectric const.: (20 °C) 17,8
- Saturation conc.: (20 °C) 20 g/m³
- Expl. limit (upper): 11,3 Vol%
- Expl. limit (lower): 1,4 Vol%
- pH (70 g/l H_2O, 20 °C) 7

Toxicological data:
- LD 50 (oral, rat): 790 mg/kg
- MAK: 100ml/m³ , 310 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-004-00-6 [1]
- R: 10-22-37/38-41-67
- S: 7/9-13-26-37/39-46
- VbF class: AII
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 III UN 1120
- IMDG: 3 III UN 1120
- IATA/ICAO: 3 III UN 1120
- PAX: 309
- CAO: 310
- LGK: 3 A
- Disposal: 1

BU103-1, 1-Butanol, reagent grade

HS-No: 2905 13 00 00

Assay	min. 99.5 %	Lead (Pb)	max. 0.00001 %
Colour	max. 10 Hazen	Magnesium (Mg)	max. 0.00001 %
Free Acid (as C_3H_7COOH)	max. 0.005 %	Manganese (Mn)	max. 0.000002 %
Aldehydes	passes test	Nickel (Ni)	max. 0.000002 %
Carbonyl Compounds (as CO)	max. 0.01 %	Tin (Sn)	max. 0.00001 %
Aluminium (Al)	max. 0.00005 %	Zinc (Zn)	max. 0.00001 %
Barium (Ba)	max. 0.00001 %	Dibutyl Ether (G.C)	max. 0.1 %
Boron (B)	max. 0.000002 %	2-Butanol (G.C)	max. 0.05 %
Cadmium (Cd)	max. 0.000005 %	Isobutanol (G.C)	max. 0.15 %
Calcium (Ca)	max. 0.00005 %	Butyraldehyde (G.C)	max. 0.01 %
Cobalt (Co)	max. 0.000002 %	Substances Darkened by H_2SO_4	passes test
Copper (Cu)	max. 0.000002 %	Non-volatile matter	max. 0.0005 %
Chromium (Cr)	max. 0.000002 %	Water	max. 0.1 %
Iron (Fe)	max. 0.0001 %		

Code	Capacity
BU103-1-2500	2.5L

BU103-3, 1-Butanol, extra pure

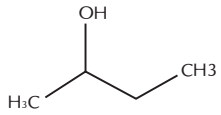
HS-No: 2905 13 00 00

Assay(G.C)	min. 99.5 %	Nickel (Ni)	max. 0.00002 %
Identity (IR-spectrum)	passes test	Acetone (G.C)	max. 0.02 %
Density (20°/4°)	0.809 – 0.810	Butyraldehyde (G.C)	max. 0.03 %
Acidity	max. 0.0008 meq/g	di-n-Butylether (G.C)	max. 0.2 %
Alkalinity	max. 0.001 meq/g	Iso-Butanol (G.C)	max. 0.25 %
Copper (Cu)	max. 0.00002 %	Non-volatile Matter	max. 0.004 %
Iron (Fe)	max. 0.00005 %	Water (K.F)	max. 0.1 %
Lead (Pb)	max. 0.00002 %		

Code	Capacity
BU103-3-2500	2.5L

2-BUTANOL

Xi



sec-Butyl alcohol, Butyl alcohol secondary, Ethyl methyl carbinol

- $C_4H_{10}O$
- M = 74.12 g/mol
- CAS [78-92-2]
- EC number: 201-158-5

Physical data:
- Density: 0,81 g/cm³
- Solub. in water (20 °C): 240 - 250 g/l
- Melting point: -114 °C
- Boiling point: 98,5 - 100,5 °C
- Flash point: 24 °C
- Ignition temp.: 390 °C
- Vapour pressure: (20 °C) 16,5 hPa
- Viscosity: (20 °C) 4,21 mPas
- Dielectric const.: (20 °C) 15,8
- Saturation conc.: (20 °C) 52 g/m³
- Expl. limit (upper): 9,8 Vol%
- Expl. limit (lower): 1,4 Vol%

Toxicological data:
- LD 50 (oral, rat): 6480 mg/kg
- MAK: 100ml/m³ , 310 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-004-01-3 [1]
- R: 10-36/37-67
- S: 7/9-13-24/25-26-46
- VbF class: AII
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 III UN 1120
- IMDG: 3 III UN 1120
- IATA/ICAO: 3 III UN 1120
- PAX: 309
- CAO: 310
- LGK: 3 A
- Disposal: 1

BU117-1, 2-Butanol, reagent grade

HS-No: 2905 14 90 00

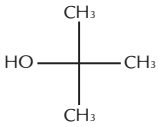
Assay	min. 99.5 %	Lead (Pb)	max. 0.00001 %
Colour	max. 10 Hazen	Magnesium (Mg)	max. 0.00001 %
Acidity	max. 0.0005 meq/g	Manganese (Mn)	max. 0.000002 %
Alkalinity	max. 0.0002 meq/g	Nickel (Ni)	max. 0.000002 %
Aluminium (Al)	max. 0.00005 %	Tin (Sn)	max. 0.00001 %
Barium (Ba)	max. 0.00001 %	Zinc (Zn)	max. 0.00001 %
Boron (B)	max. 0.000002 %	Tert-butanol (G.C)	max. 0.1 %
Cadmium (Cd)	max. 0.000005 %	Dibutyl Ether (G.C)	max. 0.2 %
Calcium (Ca)	max. 0.00005 %	Methyl Ethyl Ketone (G.C)	max. 0.1 %
Cobalt (Co)	max. 0.000002 %	2-Propanol (G.C)	max. 0.2 %
Copper (Cu)	max. 0.000002 %	Substances Darkened by H_2SO_4	passes test
Chromium (Cr)	max. 0.000002 %	Non-volatile matter	max. 0.0005 %
Iron (Fe)	max. 0.00001 %	Water	max. 0.1 %

Code	Capacity
BU117-1-2500	2.5L
BU117-1-2501	2.5L

TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)

F Xn

2-Methyl-2-propanol, Trimethylcarbinol, tert-Butyl alcohol



- $(CH_3)_3COH$
- M = 74.12 g/mol
- CAS [75-65-0]
- EC number:

Physical data:
- Form: Semisolid
- Density: 0,78 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: 25,3 °C
- Boiling point: 82 - 83 °C
- Flash point: 14 °C
- Ignition temp.: 490 °C
- Vapour pressure: (20 °C) 40,7 hPa
- Viscosity: (30 °C) 3,35 mPas
- Dipolar moment: (20 °C) 1,7 Debye
- Dielectric const.: (30 °C) 10,9
- Saturation conc.: (20 °C) 122 g/m³
- Expl. limit (upper): 8,0 Vol%
- Expl. limit (lower): 2,3 Vol%
- pH (20 °C) 7

Toxicological data:
- LD 50 (oral, rat): 2733 mg/kg
- MAK: 20ml/m³ , 62 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-005-00-1
- R: 11-20
- S: 9-16
- VbF class: B
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 II UN 1120
- IMDG: 3 III UN 1120
- IATA/ICAO: 3 II UN 1120
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

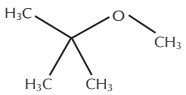
BU122-1, tert-Butyl alcohol (2-Methyl-2-Propanol), reagent grade

Assay	min. 99.0 %	Titrable acid	max. 0.001 meq/g
Colour	20 APHA	Water (coulometric KF)	max. 0.1 %
Residue after evaporation	max. 0.003 %		

Code	Capacity
BU122-1-2500	2.5 L

TERT-BUTYL METHYL ETHER

Methyl tert-butyl ether, MTBE



- $C_5H_{12}O$
- M = 88.15 g/mol
- CAS [1634-04-4]
- EC number: 216-653-1

Physical data:
- Form: Liquid
- Density: 0,74 g/cm³
- Solub. in water (10 °C): ~26 g/l
- Melting point: -108,6 °C
- Boiling point: 55 °C
- Flash point: -28 °C
- Ignition temp.: 460 °C
- Vapour pressure: (20 °C) 268 hPa
- Viscosity: (20 °C) 0,27 mPas
- Evap. heat: (55 °C) 342 KJ/kg
- Expl. limit (upper): 8,4 Vol%
- Expl. limit (lower): 1,65 Vol%

Toxicological data:
- LD 50 (oral, rat): 3870 mg/kg
- MAK: 50ml/m³ , 180 mg/m³
- WGK: 1

Safety:
- R: 11-66
- S: 16-23.2-51-29-33
- VbF class: AI

Transport/storage:
- ADR: 3 F1 II UN 2398
- IMDG: 3 II UN 2398
- IATA/ICAO: 3 II UN 2398
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

B7000-1, Tert-butyl Methyl Ether, reagent grade

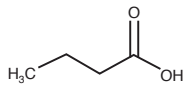
HS-No: 2909 19 00 90

Assay (G.C)	min. 99.5 %	Iron (Fe)	max. 0.00001 %
Acidity	max. 0.0005 meq/g	Lead (Pb)	max. 0.00001 %
Aluminium (A)	max. 0.00005 %	Magnesium (Mg)	max. 0.00001 %
Barium (Ba)	max. 0.00001 %	Manganese (Mn)	max. 0.000002 %
Boron (B)	max. 0.000002 %	Nickel (Ni)	max. 0.000002 %
Calcium (Ca)	max. 0.00005 %	Tin (Sn)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Zinc (Zn)	max. 0.00001 %
Chromium (Cr)	max. 0.000002 %	Peroxides (as H_2O_2)	max. 0.0005 %
Cobalt (Co)	max. 0.000002 %	Non-volatile matter	max. 0.0005 %
Copper (Cu)	max. 0.000002 %	Water (K.F)	max. 0.03 %

Code	Capacity
B7000-1-2501	2.5 L

BUTYRIC ACID

C



- $C_4H_8O_2$
- M = 88.11 g/mol
- CAS [107-92-6]
- EC number: 203-532-3

Physical data:
- Refractive index 1.3969 (20 °C, 589 nm)
- Vapour pressure: 0.9 hPa (20 °C)
- Spec.Density: 0,96 g/cm³ (20 °C)
- Explosive limits 2.35 - 12.3 Vol%
- Flash point: 75 °C
- Solub. in water (20 °C): soluble
- M = 88.11 g/mol
- pH value 3 (10 g/l, H_2O, 20 °C)
- Melting point: -8 - -6 °C
- Boiling point: 162 - 165 °C

Toxicological data:
- LD 50 (oral, rat): 2940 mg/kg
- WGK: 1

Safety:
- Corrosive
- EC-Index-No. 607-135-00-X

Transport/storage:
- LGK: 8 A
- Packing-cat A
- Disposal: 4
- Road/Rail 8/32 c
- IMDG-Code : 8 III UN 2820
- IATA/DGR: 8 III UN 2820 CAO 820 PAX 818
- SAX: 6,606

B7001-1, Butyric acid, reagent grade

HS-No: 2915 60 19 00

Assay	max. 99 %
Density (d 20°/4°)	0.956 – 0.958
Water	max. 0.2
Identity (IR)	conforms

Code	Capacity
B7001-1-0500	500 ml

CADMIUM STANDARD SOLUTION 1000MG/L FOR AA

Xn

Physical data:
- Form: Liquid
- Density: ~1,01 g/cm³
- Solub. in water (20°C): miscible
- pH (20°C) < 1

Toxicological data:
- WGK: 1

Safety:
- R: 20/21/22-36/38-52
- S: 26-36/37-46
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 T4 III UN 3287
- IMDG: 6.1 III UN 3287
- IATA/ICAO: 6.1 III UN 3287
- PAX: 611
- CAO: 618
- LGK: 8B

1 ml = 1000±5 mg/l

C

C1005-0, Cadmium standard solution 1000mg/l for AA (cadmium nitrate in nitric acid 0.5 mol/l)

HS-No: 3822 00 00 00

Code	Capacity
C1005-0-0500	500 ml

CALCIUM CARBONATE PRECIPITATED

Lime, Chalk, Marble

- $CaCO_3$
- M = 100.09 g/mol
- CAS [471-34-1]
- EC number: 207-439-9

Physical data:
- Spec. density: 2,71 g/cm³
- Bulk density: ~ 400 - 700 kg/m³
- Solub. in water (20 °C): 14 mg/l
- Melting point: 825 °C (decomposes)
- pH (100 g/l H_2O, 20 °C) ~ 9,5 - 10,5

Toxicological data:
- LD 50 (oral, rat): 6450 mg/kg
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

C1041-1, Calcium carbonate precipitated, reagent grade

HS-No: 2836 50 00 00

Assay	min. 99 %	Iron (Fe)	max. 0.001 %
Chloride (Cl)	max. 0.01 %	Lead (Pb)	max. 5 ppm
Phosphorus (P)	max. 0.005 %	Magnesium (Mg)	max. 0.02 %
Silicon (Si)	max. 0.002 %	Potassium (K)	max. 0.01 %
Sulfur (S)	max. 0.01 %	Sodium (Na)	max. 0.02 %
Nitrogen Compounds (N)	max. 0.01 %	Zinc (Zn)	max. 0.001 %
Copper (Cu)	max. 5 ppm		

Code	Capacity
C1041-1-0500	500 g

C1041-3, Calcium carbonate precipitated, extra pure

HS-No: 2836 50 00 00

Assay(complexometric, on dried subs.)	min. 98.5 %	Cadmium (Cd)	max. 0.0001 %
Insoluble in acetic acid	max. 0.2 %	Chromium (Cr)	max. 0.002 %
Insoluble in hydrochloric acid	max. 0.2 %	Copper (Cu)	max. 0.001 %
Chloride (Cl)	max. 0.025 %	Iron (Fe)	max. 0.02 %
Fluorides (F)	max. 0.005 %	Lead (Pb)	max. 0.0003 %
Sulfates (SO_4)	max. 0.025 %	Mercury (Hg)	max. 0.00005 %
Heavy metals (as Pb)	max. 0.002 %	Zinc (Zn)	max. 0.001 %
Antimony (Sb)	max. 0.002 %	Non precipitable with $(NH_4)_2C_2O_4$	max. 1 %
Arsenic (As)	max. 0.0003 %	Loss on drying (200 °C, 4 h)	max. 2 %
Barium (Ba)	max. 0.002 %		

Code	Capacity
C1041-3-0500	500 g

CALCIUM CHLORIDE ANHYDROUS

Xi

Chloro calcium

- $CaCl_2$
- M = 110.99 g/mol
- CAS [10043-52-4]
- EC number: 233-140-8

Physical data:
- Spec. density: 2,15 g/cm³
- Solub. in water (20 °C): 740 mg/l
- Melting point: 772 °C
- Boiling point: > 1600 °C
- pH (100 g/l H_2O, 20 °C) ~ 8 - 10

Toxicological data:
- LD 50 (oral, rat): 1000 mg/kg
- WGK: 1

Safety:
- EC Index no.: 017-013-00-2
- R: 36
- S: 22-24
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

C1051-1, Calcium chloride anhydrous, reagent grade

HS-No: 2827 20 00 00

Assay(complexometric)	min. 95 %	Copper (Cu)	max. 0.0005 %
Acidity (as Hcl)	max. 0.005 %	Iron (Fe)	max. 0.0025 %
Alkalinity (as $Ca(OH)_2$)	max. 0.5 %	Lead (Pb)	max. 0.0005 %
Nitrates (NO_3)	max. 0.01 %	Magnesium (Mg)	max. 0.1 %
Phosphates (PO_4)	max. 0.001 %	Manganese (Mn)	max. 0.0005 %
Sulfates (SO_4)	max. 0.02 %	Potassium (K)	max. 0.1 %
Ammonium (NH_4)	max. 0.005 %	Nickel (Ni)	max. 0.0005 %
Arsenic (As)	max. 0.0001 %	Sodium (Na)	max. 0.1 %
Barium (Ba)	max. 0.02 %	Zinc (Zn)	max. 0.01 %

Code	Capacity
C1051-1-0500	500 g
C1051-1-1000	1 kg

CALCIUM CHLORIDE DIHYDRATE

Xi

- $CaCl_2 \cdot 2H_2O$
- M = 147.02 g/mol
- CAS [10035-04-8]
- EC number: 233-140-8

Physical data:
- Spec. density: 1,85 g/cm³
- Melting point: ~176 °C
- pH (100 g/l H_2O, 20 °C) ~ 4,5 - 6,5

Toxicological data:
- LD 50 (oral, rat): 1000 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- EC Index no.: 017-013-00-2
- R: 36
- S: 22-24
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

C1060-1, Calcium chloride dihydrate, reagent grade

HS-No: 2827 20 00 00

Assay (as $CaCl_2$) (complexometric)	74 - 78 %	Copper (Cu)	max. 0.0005 %
Insoluble in water	max. 0.01 %	Iron (Fe)	max. 0.0025 %
Acidity (as Hcl)	max. 0.002 %	Lead (Pb)	max. 0.0005 %
Alkalinity (as $Ca(OH)_2$)	max. 0.01 %	Magnesium (Mg)	max. 0.01 %
Nitrates (NO_3)	max. 0.003 %	Manganese (Mn)	max. 0.0005 %
Phosphates (PO_4)	max. 0.001 %	Nickel (Ni)	max. 0.0005 %
Sulfates (SO_4)	max. 0.01 %	Potassium (K)	max. 0.01 %
Ammonium (NH_4)	max. 0.005 %	Sodium (Na)	max. 0.02 %
Arsenic (As)	max. 0.0001 %	Zinc (Zn)	max. 0.001 %
Barium (Ba)	max. 0.005 %		

Code	Capacity
C1060-1-0500	500 g
C1060-1-1000	1 kg

CALCIUM FLUORIDE

- CaF_2
- M = 78.07 g/mol
- CAS [7789-75-5]
- EC number: 233-140-8

Physical data:
- Spec. density: 3,18 g/cm³ (20 °C)
- Solub. in water 0,016 (18 °C) almost insolube
- M = 78,08 g/mol
- pH value ~ 4 (100 g/l H_2O, 20 °C) (slurry)
- Melting point: ~1418 °C
- Bulk density ~ 350 - 450 kg/m³
- Boiling point 2513 °C

Transport/storage:
- LGK: 10-13

Toxicological data:
- MAK: 2.5mg/m³
- RTECS EW: 1760000
- LD 50 oral rat: 4250 mg/kg
- WGK: nwg

C1062-1, Calcium fluoride, reagent grade

HS-No: 2826 19 00 00

Assay	min. 98.5 %	Silicon (Si)	max. 0.01 %
Sulfate (SO_4)	max. 0.05 %	Total nitrogen (N)	max. 0.005 %
Chloride (Cl)	max. 0.01 %	Loss on drying	max. 0.4 %
Iron (Fe)	max. 0.003 %	Heavy metals (as Pb)	max. 0.003 %

Code	Capacity
C1062-1-0500	500 g

CALCIUM HYDROGEN PHOSPHATE ANHYDROUS

Calcium orthophosphate, Calcium phophate dibasic

- $CaHO_4P$
- M = 136.06 g/mol
- CAS [7757-93-9]
- EC number: 231-826-1

Physical data:
- Solub. in water 0,1 g/l (25 °C)
- M = 136,06 g/mol
- Bulk density: ~ 900 kg/m³

Toxicological data:
- WGK: 1

Safety:
- Poison class CH : 4F

Transport/storage:
- LGK: 10-13

C1065-3, Calcium hydrogen phosphate anhydrous, extra pure

HS-No: 2835 25 10 00

Assay	min. 98.0 %	Barium (Ba)	passes test
Carbonate (as CO_2)	passes test	Iron (Fe)	max. 0.04 %
Chloride (Cl)	max. 0.03 %	Mercury (Hg)	max. 0.0001 %
Fluoride (F)	max. 0.005 %	Lead (Pb)	max. 0.0005 %
Sulphate (SO_4)	max. 0.5 %	Loss on ignition (800ºC)	7.0 – 8.5 %
Heavy metals	max. 0.001 %	Loss on dring	max. 2.0 %
Arsenic (As)	max. 0.0001 %		

Code	Capacity
C1065-3-0250	250 g

CALCIUM HYDROXIDE

Xi

- $Ca(OH)_2$
- M = 74.09 g/mol
- CAS [1305-62-0]
- EC number: 215-137-3

Physical data:
- pH (20 °C) 12,1-12,5

Safety:
- R: 41
- S: 22-24-26-39
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 14

C1073-1, Calcium hydroxide, reagent grade AR

HS-No: 2825 90 19 00

Assay (acidimetric)	min. 96 %	Heavy metals (as Pb)	max. 0.005 %
Insoluble in Hcl	max. 0.1 %	Iron (Fe)	max. 0.05 %
Carbonates (as $CaCO_3$)	max. 3.0 %	Substances not precipitated by	
Chlorides (C1)	max. 0.005 %	ammonium oxalate (as Sulphate)	max. 2.5 %
Sulfates (SO_4)	max. 0.2 %		

Code	Capacity
C1073-1-0500	500 g

C1073-3, Calcium hydroxide, extra pure

HS-No: 2825 90 19 00

Assay (acidimetric)	min. 95 %	Sulfates (SO_4)	max. 0.4 %
Insoluble in Hc1	max. 0.5 %	Arsenic (As)	max. 0.0004 %
Carbonates (as $CaCO_3$)	max. 5 %	Heavy metals (as Pb)	max. 0.002 %
Chlorides (Cl)	max. 0.033 %	Magnesium and alkali metals	max. 4 %

Code	Capacity
C1073-3-0500	500 g
C1073-3-1000	1 kg

CALCIUM NITRATE TETRAHYDRATE

 O  Xi

Nitric acid calcium salt tetrahydrate

- $Ca(NO_3)_2 \cdot 4H_2O$
- M = 236.15 g/mol
- CAS [13477-34-4]
- EC number: 233-332-1

Physical data:
- Spec. density: 1,82 g/cm³
- Bulk density: ~ 1000 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 42 °C
- pH (50 g/l H_2O, 20 °C) 6,0 (anhydrous substance)

Toxicological data:
- LD 50 (oral, rat): 3900 mg/kg
- WGK: 1

Safety:
- R: 8-36
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 5.1 O2 III UN 1454
- IMDG: 5.1 III UN 1454
- IATA/ICAO: 5.1 III UN 1454
- PAX: 516
- CAO: 518
- LGK: 5.1 B
- Disposal: 14

C1081-1, Calcium nitrate tetrahydrate, reagent grade

HS-No: 2834 29 80 00

Assay (complexometric)	min. 99 %	Heavy metals (as Pb)	max. 0.0005 %
pH (5%, H_2O)	4.5 - 7 %	Iron (Fe)	max. 0.0005 %
Chlorides (Cl)	max. 0.002 %	Lead (Pb)	max. 0.0005 %
Nitrites (NO_2)	max. 0.001 %	Magnesium (Mg)	max. 0.015 %
Phosphates (PO_4)	max. 0.001 %	Magnesium and alkali salts (as SO_4)	max. 0.2 %
Sulfates (SO_4)	max. 0.002 %	Potassium (K)	max. 0.005 %
Ammonium (NH_4)	max. 0.005 %	Sodium (Na)	max. 0.02 %
Barium (Ba)	max. 0.005 %	Strontium (Sr)	max. 0.01 %
Copper (Cu)	max. 0.0005 %		

Code	Capacity
C1081-1-1000	1 kg

CALCIUM OXIDE

 Xi

Lime, caustic; Quicklime

- CaO
- M = 566.08 g/mol
- CAS [1305-78.8]
- EC number: 215-138-9

Physical data:
- Form: Solid
- Spec density: ~3,37 g/cm³
- Bulk density: ~800 - 1200 kg/m³
- Solub. in water (20°C): 1,65 g/l (exothermic reaction)
- Melting point: 2580°C
- Boiling point: 2850°C
- pH (saturation solution H_2o, 20°C) 12,6

Toxicological data:
- MAK: 5 mg/m³
- WGK: 1

Safety:
- R: 41
- S: 22-24-26-39
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 5.1 O2 III UN 1454
- IMDG: 5.1 III UN 1454
- IATA/ICAO: 5.1 III UN 1454
- PAX: 516
- CAO: 5.1B
- Disposal: 14

C1089-1, Calcium oxide, reagent grade

HS-No: 2825 90 19 00

Assay	min. 90.0 %	Iron (Fe)	max. 0.1 %
Chloride (C1)	max. 0.05 %	Lead (Pb)	max. 0.01 %
Sulfate (SO_4)	max. 0.1 %	Nickel (Ni)	max. 0.01 %
Copper (Cu)	max. 0.01 %		

Code	Capacity
C1089-1-0500	500 g

CALCIUM SULFATE DIHYDRATE

- $CaSO_4 \cdot 2H_2O$
- M = 172.17 g/mol
- CAS [10101-41-4]
- EC number: 231-900-3

Physical data:
- Spec. density: 2,32 g/cm³
- Bulk density: ~ 400 - 600 kg/m³
- Solub. in water (20 °C): ~ 2 g/l
- pH (50 g/l H_2O, 20 °C) 7,0

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

C1100-1, Calcium sulfate dihydrate, reagent grade

HS-No: 2833 29 90 00

Assay (complexometric)	min. 99 %	Chlorides (Cl)	max. 0.005 %
Insoluble in Hcl	max. 0.01 %	Total N	max. 0.001 %
Appearance of solution		Iron (Fe)	max. 0.001 %
(2.5% in Hcl 10%)	passes test	Heavy metals (Pb)	max. 0.002 %
Free Acid (as H_2SO_4)	max. 0.01 %	Magnesium (Mg)	max. 0.01 %
Free Alkali (as $Ca(OH)_2$)	max. 0.01 %	Potassium (K)	max. 0.01 %
Carbonates (CO_3)	passes test	Sodium (Na)	max. 0.1 %

Code	Capacity
C1100-1-0500	500 g
C1100-1-1000	1 kg

C1100-3, Calcium sulfate dihydrate, extra pure

HS-No: 2833 29 90 00

Assay (complexometric)	min. 98 %	Total N	max. 0.001 %
Appearance of solution		Iron (Fe)	max. 0.001 %
(2.5% in Hcl 10%)	passes test	Heavy metals (Pb)	max. 0.002 %
Acidity/Alcalinity	max. 0.01 %	Magnesium (Mg)	max. 0.01 %
Free Alkali (as $Ca(OH)_2$)	max. 0.01 %	Potassium (K)	max. 0.01 %
Carbonates (CO_3)	passes test	Sodium (Na)	max. 0.1 %
Chlorides (Cl)	max. 0.005 %		

Code	Capacity
C1100-3-0500	500 kg
C1100-3-1000	1 kg

CARBON DISULFIDE

F T

Carbon disulfide, Dithiocarbonic anhydride

- CS_2
- M = 76.14 g/mol
- CAS [75-15-0]
- EC number: 200-843-6

Physical data:
- Density: 1,26 g/cm³
- Solub. in water (20 °C): 2,1 g/l
- Melting point: -111,6 °C
- Boiling point: 46,5 °C
- Flash point: -30 °C
- Ignition temp.: 100 °C
- Vapour pressure: (20 °C) 398 hPa
- Viscosity: (20 °C) 0,36 mPas
- Dielectric const.: (20 °C) 2,6
- Saturation conc.: (20 °C) 1244 g/m³
- Expl. limit (upper): 60 Vol%
- Expl. limit (lower): 1 Vol%

Toxicological data:
- LD 50 (oral, rat): 3188 mg/kg
- MAK: 5 ml/m³ , 16 mg/m³
- WGK: 2

Safety:
- EC Index no.: 006-003-00-3
- R: 11-36/38-48/23-62-63
- S: 16-33-36/37-45
- VbF class: AI
- Poison class CH (Swiss): 1

Transport/storage:
- ADR: 3 FT1 I UN 1131
- IMDG: 3 I UN 1131
- IATA/ICAO: Forbidden 3 I UN 1131
- PAX: F
- CAO: F
- LGK: 3A
- Disposal: 9

C1116-3, Carbon disulfide, extra pure

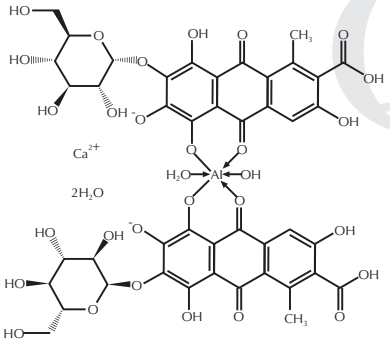
HS-No: 2813 10 00 00

Assay (G.C)	min. 99.5 %	Iron (Fe)	max. 0.00005 %
Benzene (G.C)	max. 0.005 %	Nickel (Ni)	max. 0.00002 %
Toluene (G.C)	max. 0.005 %	Lead (Pb)	max. 0.00002 %
Sulfates (SO_4)	max. 0.0005 %	Non-volatile matter	max. 0.002 %
Sulfites (as SO_2)	max. 0.002 %	Water	max. 0.02 %
Copper (Cu)	max. 0.00002 %		

Code	Capacity
C1116-3-2500	2.5L

CARMINE, C.I. 75470

Alum lacquer of carminic acid



- $C_{44}H_{37}AlCaO_{29}•3H_2O$
- M = 492.38 g/mol
- CAS [1390-65-4]
- EC number: 215-724-4

Physical data:
- Form: Solid
- Bulk density: ~ 290 kg/m³
- Solub. in water (20 °C): insoluble

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

C1120-0, Carmine, C.I. 75470, for microscopy

HS-No: 3203 00 90 00

Absorption maximum λ_1 in DMSO	563 – 571 nm	Absorptivity (E1%/1cm; λ_2 max)	100 – 150
Absorption maximum λ_2 in DMSO	525 – 533 nm	Calcination residue	9 – 17 %
Absorptivity (E1%/1cm; λ_1 max)	70 – 110	Loss on drying (110ºC)	max. 15 %

Code	Capacity
C1120-0-0010	10 g

CERIUM (IV) SULFATE

C2009-0, Cerium (IV) sulfate, solution 0.1 mol/l (0.1N)

HS-No: 2846 10 00 90

- $Ce(SO_4)_2•4H_2O$
- M = 404.30 g/mol
- CAS [10294-42-5]
- EC number: 237-029-5

Physical data:
- Density: 1,06 g/cm³
- pH (20 °C) 0,4

Toxicological data:
- WGK: 1

Transport/storage:
- LGK: 10-13
- Disposal: 28

1ml = 0,04043 g $Ce(SO_4)_2•4H_2O$

Code	Capacity
C2009-0-1000	1L

CERIUM (IV) SULFATE TETRAHYDRATE

Xi

- $Ce(SO_4)_2•4H_2O$
- M = 404.30 g/mol
- CAS [10294-42-5]
- EC number: 237-029-5

Physical data:
- Form: Solid
- Spec density: 5,02 g/cm³
- Bulk density: ~ 650 - 850 kg/m³
- Solub. in water (20 °C): 38 g/l
- Melting Point: 180 - 200 °C (release of crystalline water)
- pH (10 g/l H_2O, 20 °C) ~1,6

Toxicological data:
- WGK: 3*

Safety:
- R: 36/38
- S: 26
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 28

C2007-3, Cerium (IV) sulfate tetrahydrate, extra pure

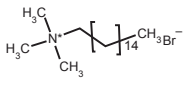
HS-No: 2846 10 00 90

Assay (iodometric)	min. 98 %	Iron (Fe)	max. 0.01 %
Chlorides (Cl)	max. 0.003 %	Lead (Pb)	max. 0.01 %
Copper (Cu)	max.0.01 %	Nickel (Ni)	max. 0.01 %
Heavy metals (as Pb)	max. 0.008 %		

Code	Capacity
C2007-3-0101	100 g

CETYLTRIMETHYLAMMONIUM BROMIDE

Xn N



- $C_{19}H_{42}BrN$
- M = 364.46 g/mol
- CAS [57-09-0]
- EC number: 200-311-3

Physical data:
- Solub. in water: 0,192 g/l (20 °C)
- pH value: 5-7 (50 g/l H_2O, 20 °C)
- Melting point: 237-243 °C
- Bulk density: ~ 390 kg/m³

Toxicological data:
- LD 50 (oral, rat): 410 mg/kg
- WGK: 3

Safety:
- Poison class CH : 3
- R: 22-36/38-50/53
- S: 26-39-61

Transport/storage:
- Packing-cat: A
- Disposal: 3
- Road/Rail: 9/12 c
- IMDG-Code: 9/III UN 3077
- IATA/DGR: 9 III UN 3077 CAO 911 PAX 911
- LGK: 10-13

C2050-1, Cetyltrimethylammonium bromide, reagent grade

HS-No: 2923 90 00 00

Assay	min. 99 %	Iron (Fe)	max. 0.001 %
Acidity and alkalinity	passes test	Heavy metals (as Pb)	max. 0.0005 %
Solubility test in ethanol	passes test	Residue after ignition (as sulfate)	max. 0.1 %
Water (H_2O)	max. 0.5 %		

Code	Capacity
C2050-1-0100	100 g

CHARCOAL ACTIVATED

- C
- M = 12.01 g/mol
- CAS [7440-44-0]
- EC number: 231-153-3

Physical data:
- Form: Solid
- Spec density: ~1,8 - 2,1 g/cm³
- Bulk density: ~ 250 - 350 kg/m³
- Solub. in water (20 °C): insoluble
- pH (50 g/l H_2O, 20 °C) ~ 4 - 7

Toxicological data:
- MAK: 1,5 mg/m³
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

C3000-1, Charcoal activated, granulated

HS-No: 3802 10 00 20

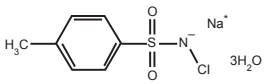
Ash content	max. 3 %	Methylene bue adsorption	min. 21 g/100g
Acid – extractable matter	0.8 %	Calcium (Ca)	max. 0.02 %
pH (5%, H_2O)	4 - 7	Iron (Fe)	max. 0.02 %
Iodine adsorption	1050 mg/g	Moisture	max. 2 %

Code	Capacity
C3000-1-1000	1 Kg

CHLORAMINE T TRIHYDRATE

C

N-Chloro-4-methylbenzenesulfonamide sodium salt, N-Chloro-p-toluenesulfonamide sodium salt, Tosylchloramide sodium, N-Chloro-4-toluenesulfonamide sodium salt



- $C_7H_7ClNaNO_2S \bullet 3H_2O$
- M = 281.69 g/mol
- CAS [7080-50-4]
- EC number: 204-854-7

Physical data:
- Form: Crystals
- Bulk density: ~ 500 - 600 kg/m³
- Solub. in water (25 °C): 150 g/l
- Melting point: > 70 °C (decomposes)
- Fresh point: 192 °C
- pH (50 g/l H_2O, 20 °C) ~ 8 - 10

Toxicological data:
- LD 50 (oral, rat): ~1000 mg/kg
- WGK: 2

Safety:
- EC Index no.: 616-010-00-9
- R: 22-31-34-42
- S: 7-22-26-36/37/39-45
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 8 C8 III UN 3263
- IMDG: 8 III UN 3263
- IATA/ICAO: 8 III UN 3263
- PAX: 822
- CAO: 823
- LGK: 8 A
- Disposal: 3

C3060-1, Chloramine T Trihydrate, reagent grade

HS-No: 2935 00 90 90

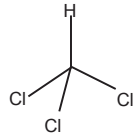
Assay	99 – 103 %	Insoluble in ethanol	max. 1.5 %
Identity (IR-spectrum)	passes test	pH (5%, H_2O)	8 – 10
Appearance of aqueous solution	passes test	Suitability for determination of bromide (Br)	passes test

Code	Capacity
C3060-1-0250	250 g

CHLOROFORM

Xn

Trichloromethane, Formyl trichloride



- $CHCl_3$
- M = 119.38 g/mol
- CAS [67-66-3]
- EC number: 200-663-8

Physical data:
- Density: 1,47 g/cm³
- Solub. in water (20 °C): 8 g/l
- Melting point: -63 °C
- Boiling point: 61 °C
- Ignition temp.: 982 °C
- Vapour pressure: (20 °C) 213 hPa
- Viscosity : (20 °C) 0,56 mPas
- Dipolar moment: (20 °C) 1,01 Debye
- Dielectric const.: (20 °C) 4,8
- Saturation conc.: (20 °C) 1027 g/m³

Toxicological data:
- LD 50 (oral, rat): 908 mg/kg
- MAK: 0,5 ml/m³ , 2,5 mg/m³
- WGK: 3

Safety:
- EC Index no.: 602-006-00-4
- R: 22-38-40-48/20/22
- S: 36/37-46
- Poison class CH (Swiss): 1*

Transport/storage:
- ADR: 6.1 T1 III UN 1888
- IMDG: 6.1 III UN 1888
- IATA/ICAO: 6.1 III UN 1888
- PAX: 610
- CAO: 612
- LGK: 10-13
- Disposal: 2

C3059-1, Chloroform, reagent grade AR

HS-No: 2903 13 00 00

Assay (G.C)	min. 99.8 %	Acetone and Aldehyde	passes test
Color	max. 10 APHA	Acid and Chloride	passes test
Water (by Coulometry)	max. 0.004 %	Lead (Pb)	max. 0.05 ppm
Acidity	max. 0.0005 meq./g	Substance darkened by sulfuric acid	passes test
Residue on Evaporation	max. 0.001 %	Sultability for use in dithizone tests	passes test
Free Chlorine (Cl_2)	max. 0.0005 %		

Code	Capacity
C3059-1-2501	2.5L

Stabilised with about 1% Ethanol.

C3059-4, Chloroform, HPLC grade

HS-No: 2903 13 00 00

Assay (GC)	min. 99 %	Lead (Pb)	max. 0.000005 %
Color	max.10 Hazen	Non-volatile matter	max. 0.0003 %
Acetone and Aldehyde	max. 0.005 %	Water	max. 0.02 %
Acid and Chloride	passes test	Suitability for use in dithizone test	passes test
Free Chloride (as Cl)	passes test		

Code	Capacity
C3059-4-2501	2.5L

CHLOROPLATINIC ACID

- $H_2PtCl_6 \bullet 6H_2O$
- M= 517.92 g/mol
- CAS [18497-13-7]

C4000-1, Chloroplatinic acid, reagent grade

Assay (as Pt)	min. 37.0 %	Nitrate (NO_3)	max.0.04 %
Solubility test in water	passes test	Soluble matter in nitric acid	max. 0.2 %

Code	Capacity
C4000-1-0001	1 g

CHROMIUM (III) CHLORIDE HEXAHYDRATE

 Xn

- $CrCl_3 \cdot 6H_2O$
- M = 266.45 g/mol
- CAS [10060-12-5]
- EC number: 233-038-3

Physical data:
- Spec. density: 2,76 g/cm³
- Bulk density: ~ 700 kg/m³
- Solub. in water (20 °C): 590 g/l
- Melting point: 95 °C
- pH (50 g/l H_2O, 20 °C) 2 - 3

Toxicological data:
- LD 50 (oral, rat): 1790 mg/kg
- WGK: 2

Safety:
- R: 22
- S: 24/25-46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

C3089-3, Chromium (III) chloride hexahydrate, extra pure

HS-No: 2827 39 80 90

Assay (iodometric)	min. 97 %	Iron (Fe)	max. 0.01 %
pH (5%, H_2O)	2 - 3	Lead (Pb)	max. 0.005 %
Sulfates (SO_4)	max. 0.02 %	Non precipitable with ammonia	
Copper (Cu)	max. 0.001 %	(as SO_4)	max. 0.2 %

Code	Capacity
C3089-3-0500	500 g
C3089-3-1000	1 kg

CHROMIUM (III) NITRATE NONAHYDRATE

 O  Xn

Chromic nitrate nonahydrate

- $Cr(NO_3)_3 \cdot 9H_2O$
- M = 400.15 g/mol
- CAS [7789-02-8]
- EC number: 236-921-1

Safety:
- R: 8-22
- S: 26-36/37/39-45

Transport/storage:
- ADR: 5.1 O2 III UN 2720
- IMDG: 5.1 III UN 2720
- PAX: 516
- CAO: 518

C3070-1, Chromium (III) nitrate nonahydrate, reagent grade

HS-No: 2834 29 80 00

Assay	min. 98.0 %	Iron (Fe)	max. 0.005 %
pH (5%, H_2O)	2.0 – 3.0	Ammonium (NH_4)	max. 0.002 %
Chloride (Cl)	max. 0.002 %	Substances not precipitated by ammonia	
Sulfates (SO_4)	max. 0.005 %	(as sulphate)	max. 0.05 %
Copper (Cu)	max. 0.001 %		

Code	Capacity
C3070-1-0500	500 g

C3070-3, Chromium (III) nitrate nonahydrate, extra pure

HS-No: 2834 29 80 00

Assay	min. 97 %	Sulfates (SO_4)	max. 0.05 %
pH (5%, H_2O)	2.0 – 3.0	Ammonium (NH_4)	max. 0.01 %
Chloride (Cl)	max. 0.01 %	Iron (Fe)	max. 0.05 %

Code	Capacity
C3070-3-0500	500 g

CHROMIUM (VI) OXIDE

 O  T  C  N

Chromium trioxide, Chromic anhydride

- CrO_3
- M = 99.99 g/mol
- CAS [1333-82-0]
- EC number: 215-607-8

Physical data:
- Spec. density: 2,7 g/cm³
- Bulk density: ~ 900 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 197 °C
- pH (100 g/l H_2O, 20 °C) < 1

Toxicological data:
- LD 50 (oral, rat): 50 mg/kg
- WGK: 3

Safety:
- EC Index no.: 024-001-00-0
- R: 49-8-25-35-43-50/53
- S: 53-26-36/37/39-45-60-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 5.1 OC2 II UN 1463
- IMDG: 5.1 II UN 1463
- IATA/ICAO: 5.1 II UN 1463
- PAX: 508
- CAO: 511
- LGK: 5.1 B
- Disposal: 15

C6002-3, Chromium (VI) oxide, extra pure

HS-No: 2819 10 00 00

Assay (Iodometric)	min. 99.0 %	Lead (Pb)	max. 0.01 %
Calcium (Ca)	max. 0.02 %	Magnesium (Mg)	max. 0.01 %
Iron (Fe)	max. 0.02 %	Zinc (Zn)	max. 0.01 %
Potassium (K)	max. 0.02 %	Total Sulfur (S)	max. 0.05 %
Sodium (Na)	max. 0.2 %	Total Phosphorus (P)	max. 0.02 %
Copper (Cu)	max. 0.02 %	Chloride (Cl)	max. 0.1 %

Code	Capacity
C6002-3-0500	500 g

CHROMIUM (III) POTASSIUM SULFATE DODECAHYDRATE

Alum chrome,
Potassium chromium (III) sulfate

- $KCr(SO_4)_2 \cdot 12H_2O$
- M = 499.41 g/mol
- CAS [7788-99-0]
- EC number: 233-401-6

Physical data:
- Spec. density: 1,83 g/cm³
- Bulk density: ~ 800 - 1000 kg/m³
- Solub. in water (25 °C): ~250 g/l
- Melting point: 89 °C
- pH (50 g/l H_2O, 20 °C) ~ 3

Toxicological data:
- WGK: 2

Safety:
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 15

C3091, Chromium (III) potassium sulfate dodecahydrate, reagent grade

HS-No: 2833 30 00 00

Assay (Iodometric)	min. 98 %	Ammonium (NH_4)	max. 0.02 %
Insoluble in water	max. 0.02 %	Copper (Cu)	max. 0.005 %
pH (5%, H_2O)	> 2.5	Iron (Fe)	max. 0.003 %
Chlorides (Cl)	max. 0.1 %	Lead (Pb)	max. 0.01 %
Aluminium (Al)	max. 0.02 %	Nickel (Ni)	max. 0.01 %

Code	Capacity
C3091-1-1000	1 kg

C3091-3, Chromium (III) potassium sulfate dodecahydrate, extra pure

HS-No: 2833 30 00 00

Assay (Iodometric)	min. 98 %	Ammonium (NH_4)	max. 0.03 %
Insoluble in water	max. 0.025 %	Copper (Cu)	max. 0.005 %
pH (5%, H_2O)	> 2.5	Iron (Fe)	max. 0.003 %
Chlorides (Cl)	max. 0.1 %	Lead (Pb)	max. 0.01 %
Aluminium (Al)	max. 0.02 %	Nickel (Ni)	max. 0.01 %

Code	Capacity
C3091-3-1000	1 kg

CHROMIUM STANDARD SOLUTION 1000MG/L FOR AA

Xi

Physical data:
- Density: ~1,01 g/cm³
- Solub. in water (20°C): miscible
- pH (20°C) < 1

Toxicological data:
- WGK: 1

Safety:
- R: 36/38
- S: 26-37

Transport/storage:
- ADR: 8 C1 III UN 3264
- IMDG: 8 III UN 3264
- IATA/ICAO: 8 III UN 3264
- PAX: 818

- CAO: 820
- LGK: 8B

1 ml = 1000±5 mg/l

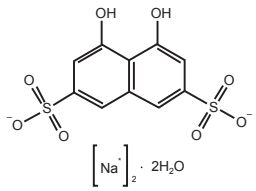
C1009-0, Chromium standard solution 1000mg/l for AA (chromium (III) nitrate in nitric acid 0.5 mol/l)

HS-No: 3822 00 00 00

Composition ..... 1000±5 mg/l

Code	Capacity
C1009-0-0500	500 ml

CHROMOTROPIC ACID, DISODIUM SALT DIHYDRATE



4,5-Dihydroxy-
2,7-naphthalenedisulfonic
acid disodium salt dihydrate

- $C_{10}H_6NaO_8S_2 \bullet 2H_2O$
- M = 400.30 g/mol
- CAS [5808-22-0]
- EC number: 204-972-9

Physical data:
- Form: Solid
- Bulk density: 780 kg/m³
- Solub. in water (20 °C): 170 g/l
- pH (10 g/l H_2O, 20 °C) ~ 3,6

Toxicological data:
- WGK: 3

Transport/storage:
- LGK: 10-13
- Disposal: 3

C5505-1, Chromotropic acid, disodium salt dehydrate, reagent grade

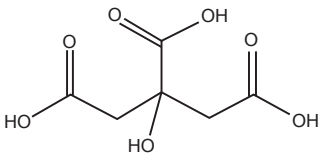
HS-No: 2908 20 00 90

Assay	min. 98.5 %	Suitability for determination of formaldehyde	passes test
Identity (IR-spectrum)	passes test	Suitability for determination of nitrates	passes test
Appearance	off-white powder	Water	8.5 – 9.5 %
Clarity of solution	passes test		
Sulfates (SO_4)	max. 0.002 %		

Code	Capacity
C5505-1-0025	25 g

CITRIC ACID ANHYDROUS

Xi



2-Hydroxy-1,2,3-
propanetricarboxylic acid,
b-Hydroxy tricarboxilic acid,
Hydroxytricarballylic acid

- $C_6H_8O_7$
- M = 192.13 g/mol
- CAS [77-92-9]
- EC number: 201-069-1

Physical data:
- Spec. density: (18°C) 1,67 g/cm³
- Bulk density: ~560 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: ~ 153 °C (decomposes)
- Ignition temp.: 345 °C
- Vapour pressure: (20 °C) < 0,1 hPa
- Expl. limit (upper): 8,0 Vol%
- Expl. limit (lower): 2,3 Vol%
- pH (100 g/l H_2O, 20 °C) ~1,7

Toxicological data:
- LD 50 (oral, rat): 3000 mg/kg
- WGK: 1

Safety:
- R: 36
- S: 26
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13

C3112-1, Citric acid anhydrous, reagent grade

HS-No: 2918 14 00 00

Assay (acidimetric)	min. 99.5 %	Copper (Cu)	max. 0.00005 %
Insoluble in water	max. 0.005 %	Heavy metals (as Pb)	max. 0.0005 %
Chlorides (Cl)	max. 0.001 %	Iron (Fe)	max. 0.0003 %
Oxalates (C_2O_4)	max. 0.03 %	Lead (Pb)	max. 0.0002 %
Phosphates (PO_4)	max. 0.001 %	Magnesium (Mg)	max. 0.0005 %
Sulfates (SO_4)	max. 0.002 %	Nickel (Ni)	max. 0.0002 %
Arsenic (As)	max. 0.00001 %	Substances darkened by H_2SO_4	passes test
Calcium (Ca)	max. 0.0025 %	Calcination residue (as SO_4)	max. 0.02 %

Code	Capacity
C3112-1-0500	500 g
C3112-1-1000	1 kg

C3112-3, Citric acid anhydrous, extra pure

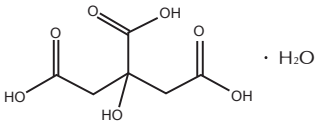
HS-No: 2918 14 00 00

Assay (acidimetric)	min. 99.5 %
Insoluble in water	max. 0.01 %
Chlorides (Cl)	max. 0.005 %
Oxalates (C_2O_4)	max. 0.01 %
Sulfates (SO_4)	max. 0.01 %
Tartrates ($C_4H_4O_6$)	passes test
Arsenic (As)	max. 0.0001 %
Barium (Ba)	max. 0.002 %
Calcium (Ca)	min. 0.02 %
Copper (Cu)	max. 0.001 %
Heavy metals (as Pb)	max. 0.001 %
Iron (Fe)	max. 0.001 %
Lead (Pb)	max. 0.001 %
Magnesium (Mg)	max. 0.005 %
Mercury (Hg)	max. 0.0001 %
Nickel (Ni)	max. 0.001 %
Zinc (Zn)	max. 0.001 %
Sulfated ash (800°C)	max. 0.05 %
Water	max. 0.5 %
Appearance of solution (20%,water)	passes test
Substances darkened by H_2SO_4	passes test

Code	Capacity
C3112-3-0500	500 g
C3112-3-1000	1 Kg

CITRIC ACID MONOHYDRATE

Xi



· H_2O

2-Hydroxy-1,2,3-propanetricarboxylic acid monohydrate

- $C_6H_8O_7 \cdot H_2O$
- M = 210.14 g/mol
- CAS [5949-29-1]
- EC number: 201-069-1

Physical data:
- Spec. density: 1,665 g/cm³
- Bulk density: ~800 - 1000 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 135 - 152 °C
- Boiling point: 135 - 152 °C (decomposes)
- Ignition temp.: 345 °C
- Vapour pressure: (20 °C) < 0,1 hPa
- Expl. limit (lower): 8,0 Vol%
- pH (50 g/l H_2O, 25 °C) ~1,85

Toxicological data:
- LD 50 (oral, rat): 3000 mg/kg
- WGK: 1

Safety:
- R: 36
- S: 24/25
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13

C3127-1, Citric acid monohydrate, reagent grade

HS-No: 2918 14 00 00

Assay (acidimetric)	min. 99.5 %
Insoluble in water	max. 0.005 %
Chlorides (Cl)	max. 0.0005 %
Oxalates (C_2O_4)	max. 0.005 %
Phosphates (PO_4)	max. 0.001 %
Sulfates (SO_4)	max. 0.002 %
Tartrates ($C_4H_4O_6$)	passes test
Arsenic (As)	max. 0.00001 %
Barium (Ba)	passes test
Calcium (Ca)	max. 0.001 %
Copper (Cu)	max. 0.0001 %
Heavy metals (as Pb)	max. 0.0005 %
Iron (Fe)	max. 0.0002 %
Lead (Pb)	max. 0.0005 %
Magnesium (Mg)	max. 0.001 %
Nickel (Ni)	max. 0.0001 %
Organic volatile impurities	passes test
Calcination residue (as SO_4)	max. 0.01 %
Water	7.5 - 8.8

Code	Capacity
C3127-1-0500	500 g
C3127-1-1000	1kg
C3127-1-5000	5kg

COBALT (II) ACETATE TETRAHYDRATE

Xn

- $CoC_4H_6O_4 \bullet 4H_2O$
- M= 249.08 g/mol
- CAS [6147-53-1]
- EC number: 200-755-8

Physical data:
- Spec. density: 1.70 g/cm³ (20°C)
- Solub. in water 380 g/l (25 °C)
- M = 249.08 g/mol
- pH value: ~ 7.2 (50 g/l H_2O, 25°C)
- Melting point: 140 °C (release of crystalline water)
- Bulk density: ~ 850 kg/m³

Toxicological data:
- LD 50 (oral, rat): 780 mg/kg
- WGK: 3*

Safety:
- harmful, sensitizing
- R: 22-40-42/43
- S: 22-36/37-45
- Poison class CH : 2

Transport/storage:
- LGK: 10-13
- Disposal: 15

C5000-3, Cobalt (II) acetate tetrahydrate, extra pure

HS-No: 2915 23 00 00

Assay	min. 99.0 %
Chloride (Cl)	max. 0.005 %
Sulfate (SO_4)	max. 0.01 %
Iron (Fe)	max. 0.01 %
Nickel (Ni)	max. 0.1 %
Lead (Pb)	max. 0.001 %

Code	Capacity
C5000-3-0500	500 g

COBALT (II) CHLORIDE HEXAHYDRATE

T N

- $CoCl_2 \cdot 6H_2O$
- M = 237.93 g/mol
- CAS [7791-13-1]
- EC number: 231-589-4

Physical data:
- Spec. density: (25°C) 1,92 g/cm³
- Bulk density: ~ 1250 kg/m³
- Solub. in water (20 °C): 76 g/l
- Melting point: 56 °C
- pH (50 g/l H_2O, 25°C) ~ 4,9

Toxicological data:
- LD 50 (oral, rat): 766 mg/kg
- WGK: 2

Safety:
- EC Index no.: 027-004-00-5
- R: 49-E22-42/43-50/53
- S: 53-22-24-37-45-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 T5 III UN 3288
- IMDG: 6.1 III UN 3288
- IATA/ICAO: 6.1 III UN 3288
- PAX: 619
- CAO: 619
- LGK: 6.1 B
- Disposal: 15

C5002-1, Cobalt (II) chloride hexahydrate, reagent grade

HS-No: 2827 34 00 00

Assay (complexometric)	min. 99.0 %
Insoluble in water	max. 0.01 %
Nitrates (NO_3)	max. 0.01 %
Sulfates (SO_4)	max. 0.005 %
Ammonium (NH_4)	max. 0.005 %
Calcium (Ca)	max. 0.005 %
Copper (Cu)	max. 0.0005 %
Iron (Fe)	max. 0.001 %
Lead (Pb)	max. 0.0005 %
Magnesium (Mg)	max. 0.001 %
Manganese (Mn)	max. 0.001 %
Nickel (Ni)	max. 0.005 %
Potassium (K)	max. 0.005 %
Sodium (Na)	max. 0.01 %
Zinc (Zn)	max. 0.002 %
Non precipitable with $(NH_4)_2S$ (as SO_4)	max. 0.2 %

Code	Capacity
C5002-1-0250	250 g
C5002-1-0500	500 g

COBALT (II) NITRATE HEXAHYDRATE

Nitric acid cobalt salt hexahydrate

- $Co(NO_3)_2 \cdot 6H_2O$
- M = 291.04 g/mol
- CAS [10026-22-9]
- EC number: 233-402-1

Physical data:
- Spec. density: 1,87 g/cm³
- Bulk density: ~ 800 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 57 °C
- pH (100 g/l H_2O, 20°C) ~ 4,0

Toxicological data:
- LD 50 (oral, rat): 434 mg/kg (anhydrous substance)
- WGK: 2

Safety:
- R: 22-40-43
- S: 36/37-46
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 5.1 O2 II UN 1477
- IMDG: 5.1 II UN 1477
- IATA/ICAO: 5.1 II UN 1477
- PAX: 508
- CAO: 511
- LGK: 5.1 B
- Disposal: 15

C5009-1, Cobalt (II) nitrate hexahydrate, reagent grade

HS-No: 2834 29 20 00

Assay (complexometric)	min. 99 %	Magnesium (Mg)	max. 0.005 %
Insoluble in water	max. 0.005 %	Manganese (Mn)	max. 0.002 %
Chlorides (Cl)	max. 0.001 %	Nickel (Ni)	max. 0.001 %
Sulfates (SO_4)	max. 0.005 %	Potassium (K)	max. 0.01 %
Ammonium (NH_4)	max. 0.05 %	Sodium (Na)	max. 0.05 %
Calcium (Ca)	max. 0.005 %	Zinc (Zn)	max. 0.005 %
Copper (Cu)	max. 0.001 %	Non precipitable with $(NH_4)_2S$ (as SO_4)	max. 0.2 %
Iron (Fe)	max. 0.001 %		
Lead (Pb)	max. 0.001 %		

Code	Capacity
C5009-1-0250	250 g

COBALT (II) SULFATE HEPTAHYDRATE

- $CoSO_4 \cdot 7H_2O$
- M = 281.10 g/mol
- CAS [10026-24-1]
- EC number: 233-334-2

Physical data:
- Spec. density: (25 °C) 1,95 g/cm³
- Bulk density: ~ 900 kg/m³
- Solub. in water (20 °C): 260 g/l
- Melting point: 98 °C
- pH (100 g/l H_2O, 20°C) ~ 4

Toxicological data:
- LD 50 (oral, rat): 582 mg/kg
- WGK: 2

Safety:
- EC Index no.: 027-005-00-0
- R: 49-22-42/43-50/53
- S: 53-22-24/37-45-60-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 9 M7 III UN 3077
- IMDG: 9 III UN 3077
- IATA/ICAO: 9 III UN 3077
- PAX: 911
- CAO: 911
- LGK: 6.1 B
- Disposal: 15

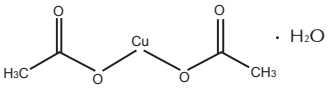
C5016-1, Cobalt (II) sulfate hexahydrate, reagent grade

HS-No: 2833 29 30 00

Assay (complexometric)	min. 99 %	Lead (Pb)	max. 0.001 %
Chlorides (Cl)	max. 0.001 %	Magnesium (Mg)	max. 0.01 %
Total (N)	max. 0.002 %	Nickel (Ni)	max. 0.005 %
Calcium (Ca)	max. 0.005 %	Potassium (K)	max. 0.005 %
Copper (Cu)	max. 0.001 %	Sodium (Na)	max. 0.01 %
Iron (Fe)	max. 0.0005 %	Zinc (Zn)	max. 0.005 %

Code	Capacity
C5016-1-0500	500 g

COPPER (II) ACETATE MONOHYDRATE



Cupric acetate

- $Cu(CH_3COO)_2 \cdot H_2O$
- M = 199.65 g/mol
- CAS [6046-93-1]
- EC number: 205-553-3

Physical data:
- Spec. density: 1,88 g/cm³
- Bulk density: ~ 1100 kg/m³
- Solub. in water (20 °C): 72 g/l
- Melting point: 115 °C
- Boiling point: 240 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) ~5,5

Toxicological data:
- LD 50 (oral, rat): 710 mg/kg
- MAK: 1mg/m³
- WGK: 3*

Safety:
- R: 22
- S: 46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 15

C5044-1, Copper (II) acetate monohydrate, reagent grade

HS-No: 2915 29 00 90

Assay (iodometric)	min. 99 %	Lead (Pb)	max. 0.004 %
Insoluble in dil. CH_3COOH	max. 0.01 %	Magnesium (Mg)	max. 0.001 %
Chlorides (Cl)	max. 0.001 %	Nickel (Ni)	max. 0.002 %
Sulfates (SO_4)	max. 0.01 %	Potassium (K)	max. 0.01 %
Total N	max. 0.01 %	Sodium (Na)	max. 0.01 %
Calcium (Ca)	max. 0.005 %	Zinc (Zn)	max. 0.002 %
Iron (Fe)	max. 0.002 %		

Code	Capacity
C5044-1-0500	500 g

C5044-3, Copper (II) acetate monohydrate, extra pure

HS-No: 2915 29 00 90

Assay (iodometric)	min. 98 %	Iron (Fe)	max. 0.005 %
Insoluble in water	max. 0.02 %	Lead (Pb)	max. 0.002 %
pH (5%, H_2O)	5 - 6	Nickel (Ni)	max. 0.02 %
Chlorides (Cl)	max. 0.01 %	Potassium (K)	max. 0.01 %
Sulfates (SO_4)	max. 0.01 %	Sodium (Na)	max. 0.01 %
Total N	max. 0.01 %	Zinc (Zn)	max. 0.002 %
Calcium (Ca)	max. 0.005 %		

Code	Capacity
C5044-3-0500	500 g

COPPER (I) CHLORIDE


Xn

N

Copper monochloride

- CuCl
- M = 98.99 g/mol
- CAS [7758-89-6]
- EC number: 231-842-9

Physical data:
- Spec. density: 3,53 g/cm³
- Bulk density: ~ 1600 - 1800 kg/m³
- Solub. in water (25 °C): 0,06 g/l
- Melting point: 422 °C
- Boiling point: 1366 °C
- pH (50 g/l H_2O, 20 °C) ~5

Toxicological data:
- LD 50 (oral, rat): 140 mg/kg
- MAK: 1 mg/m³
- WGK: 2

Safety:
- EC Index no.: 029-001-00-4
- R: 22-50/53
- S: 22-46-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C2 III UN 2802
- IMDG: 8 III UN 2802
- IATA/ICAO: 8 III UN 2802
- PAX: 822
- CAO: 823
- LGK: 8 B
- Disposal: 15

C5040-1, Copper (I) chloride, reagent grade

HS-No: 2827 39 80 10

Assay (cerimetric)	min. 98 %	Iron (Fe)	max. 0.005 %
Insoluble in HCl-HNO_3	max. 0.02 %	Lead (Pb)	max. 0.02 %
Sulfates (SO_4)	max. 0.04 %	Potassium (K)	max. 0.02 %
Arsenic (As)	max. 0.0001 %	Sodium (Na)	max. 0.05 %
Calcium (Ca)	max. 0.01 %	Non precipitable with H_2S (as SO_4)	max. 0.2 %

Code	Capacity
C5040-1-0500	500 g

C5040-3, Copper (I) chloride, extra pure

HS-No: 2827 39 80 10

Assay (iodometric)	min. 98.5 %	Iron (Fe)	max. 0.01 %
Insoluble in HCl-HNO_3	max. 0.02 %	Lead (Pb)	max. 0.02 %
Sulfates (SO_4)	max. 0.04 %	Potassium (K)	max. 0.02 %
Arsenic (As)	max. 0.0005 %	Sodium (Na)	max. 0.05 %
Calcium (Ca)	max. 0.01 %	Non precipitable with H_2S (as SO_4)	max. 0.2 %

Code	Capacity
C5040-3-0500	500 g

COPPER (II) CHLORIDE DIHYDRATE


Xn

Copper dichloride dihydrate

- $CuCl_2 \cdot 2H_2O$
- M = 170.48 g/mol
- CAS [10125-13-0]
- EC number: 231-210-2

Physical data:
- Spec. density: 2,54 g/cm³
- Bulk density: ~ 950 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: ~ 100 °C
- pH (50 g/l H_2O, 20 °C) 3,0 - 3,8

Toxicological data:
- LD 50 (oral, rat): 584 mg/kg (anhydrous substance)
- MAK: 1 mg/m³
- WGK: 2

Safety:
- R: 22-36/37/38
- S: 26-46
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C2 III UN 2802
- IMDG: 8 III UN 2802
- IATA/ICAO: 8 III UN 2802
- PAX: 822
- CAO: 823
- LGK: 8 B
- Disposal: 15

C5057-1, Copper (II) chloride dihydrate, reagent grade

HS-No: 2827 39 80 90

Assay (iodometric)	min. 99 %	Iron (Fe)	max. 0.001 %
Insoluble in matter	max. 0.01 %	Lead (Pb)	max. 0.004 %
pH (5%, H_2O)	3.0 - 3.8	Nickel (Ni)	max. 0.001 %
Sulfates (SO_4)	max. 0.005 %	Potassium (K)	max. 0.01 %
Total N	max. 0.003 %	Sodium (Na)	max. 0.02 %
Arsenic (As)	max. 0.0001 %	Non precipitable with H_2S (as SO_4)	max. 0.1 %
Calcium (Ca)	max. 0.005 %		

Code	Capacity
C5057-1-0500	500 g
C5057-1-1000	1 kg

COPPER (II) HYDROXIDE CARBONATE


Xn

Copper(II) carbonate hydroxide, Copper(II) carbonate basic

- $CuCO_3CU(OH)_2$
- M= 221.20 g/mol
- CAS [12069-69-1]
- EC number: 235-113-6

Physical data:
- Form: Solid
- Spec. density: ~ 4,0 g/cm³
- Bulk density: ~ 350 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: 200 °C
- pH (50 g/l H_2O, 20 °C) ~ 8 - 9

Toxicological data:
- LD 50 (oral, rat): 1350 mg/kg
- MAK: 0,1 mg/m³
- WGK: 1

Safety:
- R: 22
- S: 46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10 - 13

C5045-1, Copper (II) hydroxide carbonate, reagent grade

HS-No: 2836 99 11 00

Assay (iodometry)	min. 95 %	Iron (Fe)	max. 0.005 %
Insoluble matter in H_2SO_4	max. 0.01 %	Lead (Pb)	max. 0.005 %
Chlorides (Cl)	max. 0.002 %	Potassium (K)	max. 0.05 %
Sulfates (SO_4)	max. 0.01 %	Sodium (Na)	max. 0.05 %

Code	Capacity
C5045-1-0500	500 g

C5045-3, Copper (II) hydroxide carbonate, extra pure

HS-No: 2836 99 11 00

Assay (iodometric)	min. 95 %	Nickel (Ni)	max. 0.05 %
Chlorides (Cl)	max. 0.01 %	Sodium (Na)	max. 0.5 %
Sulfates (SO_4)	max. 0.05 %	Zinc (Zn)	max. 0.01 %
Iron (Fe)	max. 0.02 %	Non precipitable with H_2S (as SO_4)	max. 1 %
Lead (Pb)	max. 0.005 %		

Code	Capacity
C5045-3-0500	500 g

COPPER (II) NITRATE TRIHYDRATE

Xn

Copper dinitrate dihydrate

- $Cu(NO_3)_2 \cdot 3H_2O$
- M = 241.60 g/mol
- CAS [10031-43-3]
- EC number: 221-838-5

Physical data:
- Spec. density: 2,32 g/cm³
- Bulk density: ~ 1050 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: ~ 114 °C
- pH (50 g/l H_2O, 20 °C) ~ 3 - 4

Toxicological data:
- LD 50 (oral, rat): 940 mg/kg
- MAK: 1,5 mg/m³
- WGK: 2

Safety:
- R: 22-36/38
- S: 46
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 O2 II UN 1477
- IMDG: 5.1 II UN 1477
- IATA/ICAO: 5.1 II UN 1477
- PAX: 508
- CAO: 511
- LGK: 5.1 B
- Disposal: 15

C5064-1, Copper (II) nitrate trihydrate, reagent grade

HS-No: 2834 29 30 00

Assay (iodometric)	min. 99.5 %	Lead (Pb)	max. 0.001 %
Chlorides (Cl)	max. 0.0005 %	Nickel (Ni)	max. 0.001 %
Sulfates (SO_4)	max. 0.005 %	Potassium (K)	max. 0.01 %
Calcium (Ca)	max. 0.005 %	Sodium (Na)	max. 0.01 %
Iron (Fe)	max. 0.002 %	Zinc (Zn)	max. 0.001 %

Code	Capacity
C5064-1-0500	500 g

C5064-3, Copper (II) nitrate trihydrate, extra pure

HS-No: 2834 29 30 00

Assay (iodometric)	min. 99 %	Iron (Fe)	max. 0.01 %
Chlorides (Cl)	max. 0.003 %	Lead (Pb)	max. 0.005 %
Sulfates (SO_4)	max. 0.01 %	Magnesium (Mg)	max. 0.01 %
Arsenic (As)	max. 0.0001 %	Nickel (Ni)	max. 0.05 %
Calcium (Ca)	max. 0.05 %	Non precipitable with H_2S (as SO_4)	max. 0.01 %

Code	Capacity
C5064-3-0500	500 g

COPPER (II) OXIDE

Xn

Copper monoxide

- CuO
- M = 79.55 g/mol
- CAS [1317-38-0]
- EC number: 215-269-1

Physical data:
- Spec. density: 6,45 g/cm³
- Bulk density: ~ 1600 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: 1336 °C
- pH (50 g/l H_2O, 20 °C) ~ 7

Toxicological data:
- MAK: 1 mg/m³
- WGK: 1

Safety:
- R: 22
- S: 22-46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 27

C5072-3, Copper (II) oxide, extra pure

HS-No: 2825 50 00 10

Assay (iodometric)	min. 96 %	Iron (Fe)	max. 0.05 %
Insoluble in HCl	max. 0.05 %	Total S (as SO_4)	max. 0.1 %
Nitrogen compounds (as N)	max. 0.005 %	Non precipitable with H_2S (as SO_4)	max. 1 %
Chlorides (Cl)	max. 0.01 %		

Code	Capacity
C5072-3-0500	500 g

COPPER, POWDER

- Cu
- M = 63.55 g/mol
- CAS [7440-50-8]
- EC number: 231-159-6

Physical data:
- Solub. in water insoluble
- M = 63.55 g/mol
- Melting point: 1083 °C
- Bulk density: 1290 kg/m³

Toxicological data:
- WGK: nwg
- MAK: 1 mg/m³

Safety:
- Poison class CH: F

Transport/storage:
- Packing-cat: A
- Road/Rail: 9/12 c
- IMDG-Code 9/III UN 3077
- IATA/DGR: 9 III UN 3077
- PAX: 911
- CAO: 911
- LGK: 10-13
- Disposal: 27

C5071-3, Copper, powder, extra pure

HS-No: 7406 10 00 00

Assay (Iodometric)	min. 99.5 %	Lead (Pb)	max. 0.05 %
Insoluble in HNO_3	max. 0.05 %	Manganese (Mn)	max. 0.002 %
Antimony (Sb)	max. 0.005 %	Nickel (N)	max. 0.005 %
Arsenic (As)	max. 0.0002 %	Silver (Ag)	max. 0.005 %
Iron (Fe)	max. 0.005 %	Tin (Sn)	max. 0.005 %

Code	Capacity
C5071-3-0500	500 g

COPPER (II) SULFATE ANHYDROUS

Xn N

Copper monosulfate anhydrous, Copper vitriol anhydrous

- $CuSO_4$
- M = 159.60 g/mol
- CAS [7758-98-7]
- EC number: 231-847-6

Physical data:
- Spec. density: 3,61 g/cm³
- Bulk density: ~ 800 kg/m³
- Solub. in water (20 °C): 203 g/l
- pH (50 g/l H_2O, 20 °C) 3,5 - 4,5

Toxicological data:
- LD 50 (oral, rat): 300 mg/kg
- MAK: 1 mg/m³
- WGK: 2

Safety:
- EC Index no.: 029-004-00-0
- R: 22-36/38-50/53
- S: 22-46-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 9 M7 III UN 3077
- IMDG: 9 III UN 3077
- IATA/ICAO: 9 III UN 3077
- PAX: 911
- CAO: 911
- LGK: 10-13
- Disposal: 15

C5076-3, Copper (II) sulfate anhydrous, extra pure

HS-No: 2833 25 00 00

Assay (iodometric)	min. 99 %	Lead (Pb)	max. 0.008 %
Insoluble in water	passes test	Magnesium (Mg)	max. 0.01 %
Chloride (Cl)	max. 0.01 %	Nickel (Ni)	max. 0.01 %
Arsenic (As)	max. 0.0005 %	Potassium (K)	max. 0.01 %
Calcium (Ca)	max. 0.02 %	Non precipitable with H_2S	max. 0.3 %
Iron (Fe)	max. 0.01 %	Loss on drying (250°C)	max. 1 %

Code	Capacity
C5076-3-0500	500 g

COPPER (II) SULFATE PENTAHYDRATE

Xn N

Copper monosulfate pentahydrate, Copper vitriol pentahydrate

- $CuSO_4 \cdot 5H_2O$
- M = 249.68 g/mol
- CAS [7758-99-8]
- EC number: 231-847-6

Physical data:
- Spec. density: 2,29 g/cm³
- Bulk density: ~ 900 - 1200 kg/m³
- Solub. in water (20 °C): ~317 g/l
- pH (50 g/l H_2O, 20 °C) ~ 3,5 - 4,5

Toxicological data:
- LD 50 (oral, rat): 300 mg/kg (anhydrous substance)
- MAK: 1 mg/m³
- WGK: 2

Safety:
- EC Index no.: 029-004-00-0
- R: 22-36/38-50/53
- S: 22-46-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 9 M7 III UN 3077
- IMDG: 9 III UN 3077
- IATA/ICAO: 9 III UN 3077
- PAX: 911
- CAO: 911
- LGK: 10-13
- Disposal: 15

C5083-1, Copper (II) sulfate pentahydrate, reagent grade

HS-No: 2833 25 00 00

Assay (Iodometric)	min. 99 %	Potassium (K)	max. 0.001 %
Insoluble matter	max. 0.005 %	Sodium (Na)	max. 0.005 %
pH (5%, H_2O)	3.7 - 4.5	Nickel (Ni)	max. 0.005 %
Arsenic (As)	max. 0.00005 %	Lead (Pb)	max. 0.005 %
Calcium (Ca)	max. 0.005 %	Zinc (Zn)	max. 0.03 %
Iron (Fe)	max. 0.003 %	Non precipitable with H_2S (as SO_4)	max. 0.1 %

Code	Capacity
C5083-1-0500	500 g
C5083-1-1000	1 kg

COPPER STANDARD SOLUTION 1000MG/L FOR AA

Xi

Physical data:
- Form: Liquid
- Density: ~1,01 g/cm³
- Solub. in water (20°C): miscible
- pH (20°C) < 1

Toxicological data:
- WGK: 1

Safety:
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C1 III UN 3264
- IMDG: 8 III UN 3264
- IATA/ICAO: 8 III UN 3264
- PAX: 818
- CAO: 820
- LGK: 8B

1 ml = 1000±5 mg/l

C1007-0, Copper standard solution 1000mg/l for AA (copper (II) nitrate in nitric acid 0.5 mol/l)

HS-No: 3822 00 00 00

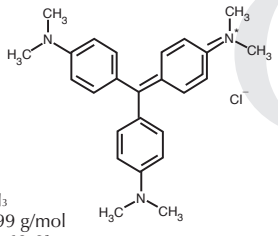
Composition ..... 1000±5 mg/l

Code	Capacity
C1007-0-0500	500 ml

CRYSTAL VIOLET

Xn N

Hexamethylenepararosaniline chloride, Hexamethyl-p-rosanilinium chloride, Methyl violet 10 B



- $C_{25}H_{30}ClN_3$
- M = 407.99 g/mol
- CAS [548-62-9]
- EC number: 208-953-6

Physical data:
- Spec. density: 1.19 g/cm³ (20 °C)
- Solub. in water 10 g/l (20 °C)
- M = 407.99 g/mol
- pH value: 2.5 - 3.5 (10 g/l H_2O, 20 °C)
- Melting point: 189 - 194 °C
- Bulk density: ~ 220 - 400 kg/m³

Toxicological data:
- LD 50 (oral, rat): 420 mg/kg

Safety:
- harmful, irritant, dangerous for the environment
- R: 22-40-41-50/53
- S: 22-26-36/37/39-61
- WGK: 3
- Poison class CH: 2

Transport/storage:
- Packing-cat: A
- Road/Rail 9/12c
- IATA/DGR: 9 III UN 3077
- PAX: 911
- CAO: 911
- LGK: 10-13

C6009-0, Crystal Violet

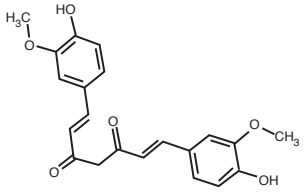
HS-No: 3204 13 00 00

Assay	min. 96 %
Loss on drying	max. 10 %
Residue on ignition (as SO_4)	max. 3 %

Code	Capacity
C6009-0-0025	25 g
C6009-0-0250	250 g

CURCUMIN

1,7-Bis(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione,Turmeric yellow, Diferuloylmethane



- $C_{21}H_{20}O_6$
- M = 368.39 g/mol
- CAS [458-37-7]
- EC number: 207-280-5

Physical data:
- Solub. in water (20 °C) insoluble
- M = 368.39 g/mol
- Melting point: 170 - 175 °C

Transport/storage:
- Beilstein: 8,554, I 757, III 4312, IV 3697
- LGK: 10-13
- Disposal: 3

C6010-1, Curcumin, reagent grade

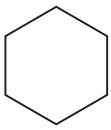
HS-No: 2914 50 00 00

Melting point	181 – 185 °C	Solubility test in alcohols	passes test
Sensitivity test	passes test	Residue after ignition (as sulfate)	max. 0.5 %

Code	Capacity
C6010-1-0005	5 g

CYCLOHEXANE

F Xn N



Hexahydrobenzene, Hexamethylene, Napthene

- C_6H_{12}
- M = 84.16 g/mol
- CAS [110-82-7]
- EC number: 203-806-2

Physical data:
- Density: 0,78 g/cm³
- Solub. in water (20 °C): 55 mg/l
- Melting point: 6 °C
- Boiling point: 80,7 - 81 °C
- Flash point: -18 °C
- Ignition temp.: 260 °C
- Vapour pressure: (20 °C) 103 hPa
- Refraction index: (n 20 °C/D) 1,4264
- Viscosity: (kinetic, 20 °C) 1,26 mm²/s
- Dielectric const.: (20 °C) 2,0
- Evap. heat: (81 °C) 389 KJ/kg
- Saturation conc.: (20 °C) 357 g/m³
- Expl. limit (upper): 8,3 Vol%
- Expl. limit (lower): 1,2 Vol%

Toxicological data:
- LD 50 (oral, rat): 12705 mg/kg
- MAK: 200 ml/m³ , 700 mg/m³
- WGK: 1

Safety:
- EC Index no.: 601-017-00-1
- R: 11-38-50/53-65-67
- S: 9-16-33-60-61-62
- VbF class: AI
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 II UN 1145
- IMDG: 3 II UN 1145
- IATA/ICAO: 3 II UN 1145
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

C6033-1, Cyclohexane, reagent grade AR

HS-No: 2902 11 00 00

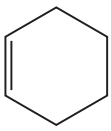
Assay (GC)	min. 99.7 %	Iron (Fe)	max. 0.00001 %
Color	max. 10 Hazen	Magnesium (Mg)	max. 0.00001 %
Acidity	max. 0.0003 meq/g	Manganese (Mn)	max. 0.000002 %
Aluminium (Al)	max. 0.00005 %	Nickel (Ni)	max. 0.000002 %
Barium (Ba)	max. 0.00001 %	Lead (Pb)	max. 0.00001 %
Boron (B)	max. 0.000002 %	Tin (Sn)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Aromatics (as benzene)	max. 0.001 %
Calcium (Ca)	max. 0.00005 %	Cyclohexene (G.C)	max. 0.05 %
Zinc (Zn)	max. 0.00001 %	Ethanol (G.C)	max. 0.01 %
Cobalt (Co)	max. 0.000002 %	Substances Darkened by H_2SO_4	passes test
Copper (Cu)	max. 0.000002 %	Non-Volatile Matter	max. 0.0005 %
Chromium (Cr)	max. 0.000002 %	Water (K.F)	max. 0.01 %

Code	Capacity
C6033-1-2501	2.5 L

CYCLOHEXENE

F Xn

1,2,3,4-Tetrahydrobenzene



- C_6H_{10}
- M = 82.15 g/mol
- CAS [110-83-8]
- EC number: 203-807-8

Physical data:
- Form: Liquid
- Density: 0,81g/cm³
- Solub. in water (20 °C): 0,21 g/l
- Melting point: -104 °C
- Boiling point: 83 °C
- Flash point: -17 °C
- Ignition temp.: 310 °C
- Vapour pressure: (20 °C) 90 hPa
- Refraction index: (n 20 °C/D) 1,446
- Expl. limit (upper): 7,7% Vol
- Expl. limit (lower): 1,2% Vol
- pH (0,2 g/l H_2O, 20 °C) 7 - 8

Toxicological data:
- LD 50 (oral, rat): 1940 mg/kg
- MAK: 300 ml/m³ , 1000 mg/m³
- WGK: 1

Safety:
- R: 11-21/22
- S: 16-23.2-51-33-36/37-46
- VbF class: AI
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 II UN 2256
- IMDG: 3 II UN 2256
- IATA/ICAO: 3 II UN 2256
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

C6040-2, Cyclohexene, synthesis grade

HS-No: 2902 19 90 00

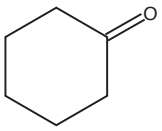
Assay (G.C)	min. 99 %	Density (20°/4°)	0.810 – 0.811
Identity (IR-Spectrum)	passes test	Water	max. 0.03 %

Code	Capacity
C6040-2-1001	1.0 L

CYCLOHEXANONE

Xn

Pimelic ketone



- $C_6H_{10}O$
- M = 98.15 g/mol
- CAS [108-94-1]
- EC number: 203-637-1

Physical data:
- Form: Liquid
- Density: 0,95 g/cm³
- Solub. in water (20 °C): ~ 80 g/l
- Melting point: -31 °C
- Boiling point: ~ 156 °C
- Flash point: 43 °C
- Ignition temp.: 430 °C
- Vapour pressure: (20 °C) 4,0 hPa
- Dipolar moment: (20 °C) 2,9 Debye
- Dielectric const.: (25 °C) 18,3
- Saturation conc.: (20 °C) 19 g/m³
- Expl. limit (upper): 9,4 Vol%
- Expl. limit (lower): 1,3 Vol%
- pH (50 g/l H_2O) ~ 5

Toxicological data:
- LD 50 (oral, rat): 1300 - 1840 mg/kg
- WGK: 1

Safety:
- EC Index no.: 606-010-00-7
- R: 10-20
- S: 25
- VbF class: AII
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 III UN 1915
- IMDG: 3 III UN 1915
- IATA/ICAO: 3 III UN 1915
- PAX: 309
- CAO: 310
- LGK: 3 A
- Disposal: 1

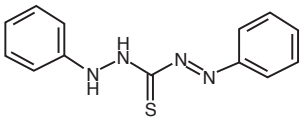
C6043-1, Cyclohexanone, reagent grade

HS-No: 2914 22 00 00

Assay	min. 99.5 %	Mixing test with water	passes test
Refractive index	1.4500 – 1.4510	Non-volatile matter	max. 0.05 %

Code	Capacity
C6043-1-2501	2.5 L

DITHIZONE



Diphenylthiocarbazone

- $C_{13}H_{12}N_4S$
- M = 256.33 g/mol
- CAS [60-10-6]
- EC number: 200-454-1

Physical data:
- Solub. in water insoluble
- Melting point: ~ 168 °C (decomposition)
- Bulk density: ~ 250 kg/m³

Toxicological data:
- WGK: 3*

Safety:
- Poison class CH: 3

Transport/storage:
- LGK: 10-13
- Disposal: 3

D

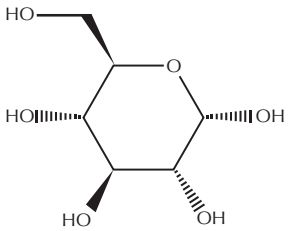
D3700-1, Dithizone, reagent grade

HS-No: 2930 90 70 00

Assay (spectrophotometry)	min. 75.0 %	Residue after ignition (as sulfate)	max. 0.1 %
Sensitivity test	passes test	Solubility test in chloroform	passes test
Loss on drying	max. 5.0 %	Heavy metals (as Pb)	max. 0.0005 %

Code	Capacity
D3700-1-0005	5 g

D(+)-GLUCOSE ANHYDROUS



Dextrose

- $C_6H_{12}O_6$
- M = 180.16 g/mol
- CAS [50-99-7]
- EC number: 200-075-1

Physical data:
- Bulk density: ~ 630 kg/m³
- Solub. in water (20 °C): ~ 470 g/l
- Melting point: ~ 146 °C
- Ignition temp.: ~ 500 °C
- pH (100 g/l H_2O, 20 °C) 6 - 7

Toxicological data:
- LD 50 (oral, rat): 25800 mg/kg
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

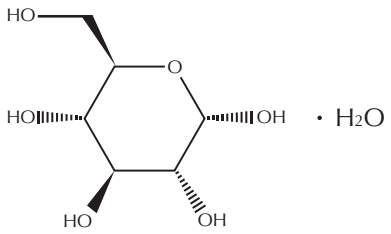
D1019-3, D(+)-Glucose anhydrous, extra pure

HS-No: 1702 30 51 00

Specific rotation ([ ]20°/D, c=10, H_2O)	+52.6 - +53.2 °	Calcium (Ca)	max. 0.02 %
Acidity/Alkalinity	passes test	Heavy metals (as Pb)	max. 0.0005 %
Insoluble in water	max. 0.01 %	Iron (Fe)	max. 0.0005 %
Chlorides (Cl)	max. 0.01 %	Lead (Pb)	max. 0.00005 %
Arsenic (As)	max. 0.02 %	Sulfated ash	max. 0.1 %
Sulfates (SO_4)	max. 0.001 %	Water	max. 1 %
Sulfite (SO_2)	max. 0.0001 %	Foreign sugars, starch and dextrines	passes test

Code	Capacity
D1019-3-1000	1 kg

D(+)-GLUCOSE MONOHYDRATE



Dextrose

- $C_6H_{12}O_6 \cdot H_2O$
- M = 198.17 g/mol
- CAS [5996-10-1]
- EC number: 200-075-1

Physical data:
- Bulk density: ~ 630 kg/m³
- Solub. in water (20 °C): ~ 470 g/l
- Melting point: ~ 83 °C
- Ignition temp.: ~ 500 °C
- pH (100 g/l H_2O, 20 °C) 6 - 7

Toxicological data:
- LD 50 (oral, rat): 25800 mg/kg (anhydrous substance)
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

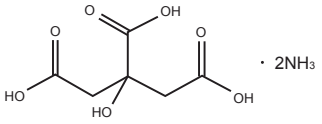
D1015-3, D(+)-Glucose monohydrate, extra pure

HS-No: 1702 30 51 00

Specific rotation ([ ]20°/D, c=10, H_2O)	+52.6 - +53.2 °	Sulfite (as SO_2)	max. 0.001 %
Acidity/Alkalinity	passes test	Calcium (Ca)	max. 0.02 %
Insoluble in water	max. 0.01 %	Heavy metals (as Pb)	max. 0.0005 %
Chlorides (Cl)	max. 0.005 %	Lead (Pb)	max. 0.00005 %
Arsenic (As)	max. 0.0001 %	Sulfated ash	max. 0.1 %
Sulfates (SO_4)	max. 0.01 %	Water	max. 1 %
		Foreign sugars, starch and dextrines	passes test

Code	Capacity
D1015-3-0500	500 g
D1015-3-1000	1 kg

DI-AMMONIUM HYDROGEN CITRATE



Ammonium citrate dibasic

- $C_6H_8O_7 \cdot 2NH_3$
- M = 226.19 g/mol
- CAS [3012-65-5]
- EC number: 221-146-3

Physical data:
- Spec. density: 1,48 g/cm³
- Bulk density: ~ 400 - 600 kg/m³
- Solub. in water (20 °C): freely soluble
- pH (50 g/l H_2O, 20 °C) ~ 5,2

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 14

D3004-1, di-Ammonium hydrogen citrate, reagent grade

HS-No: 2918 15 00 00

Assay (acidimetric)	min. 99 %	Phosphates (PO_4)	max. 0.001 %
Insoluble matter	max. 0.005 %	Sulfates (SO_4)	max. 0.005 %
pH (5%, H_2O)	4.7 - 5.3	Heavy metals (as Pb)	max. 0.0005 %
Chlorides (Cl)	max. 0.0005 %	Iron (Fe)	max. 0.0005 %
Oxalates (C_2O_4)	max. 0.05 %	Sulfated ash	max. 0.02 %

Code	Capacity
D3004-1-0500	500 g
D3004-1-1000	1 Kg

DI-AMMONIUM HYDROGEN PHOSPHATE

Ammonium biphosphate, Diammonium hydrogen phosphate, Ammonium phosphate dibasic, Fyrex

- $(NH_4)_2HPO_4$
- M = 132.06 g/mol
- CAS [7783-28-0]
- EC number: 231-987-8

Physical data:
- Spec. density: 1,62 g/cm³
- Bulk density: ~ 800 - 1000 kg/m³
- Solub. in water (20°C): 690 g/l
- Melting point: 155°C (decomposes)
- pH (50 g/l H_2O) (20°C) 7,8 - 8,5

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 14

D3008-1, di-Ammonium hydrogen phosphate, reagent grade

HS-No: 3105 30 00 00

Assay (acidimetric)	min. 99 %	Sulfates (SO_4)	max. 0.002 %
Insoluble in water	max. 0.005 %	Arsenic (As)	max. 0.00005 %
Total sulfur (as SO_4)	max. 0.004 %	Heavy metals (as Pb)	max. 0.0005 %
pH (5%, H_2O)	7.8 - 8.2	Iron (Fe)	max. 0.005 %
Chlorides (Cl)	max. 0.0005 %	Potassium (K)	max. 0.001 %
Nitrates (NO_3)	max. 0.001 %	Sodium (Na)	max. 0.002 %

Code	Capacity
D3008-1-0500	500 g

D3008-3, di-Ammonium hydrogen phosphate, extra pure

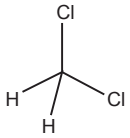
HS-No: 3105 30 00 00

Assay (acidimetric)	min. 99 %	Sulfates (SO_4)	max. 0.02 %
Insoluble in water	max. 0.01 %	Arsenic (As)	max. 0.0001 %
pH (1%, H_2O)	7.8 - 8.2	Heavy metals (as Pb)	max. 0.001 %
Chlorides (Cl)	max. 0.002 %	Iron (Fe)	max. 0.001 %
Nitrates (NO_3)	max. 0.01 %		

Code	Capacity
D3008-3-0500	500 g
D3008-3-1000	1 kg

DICHLOROMETHANE

Xn



Methylene chloride

- CH_2Cl_2
- M = 84.93 g/mol
- CAS [75-09-2]
- EC number: 200-838-9

Physical data:
- Density: 1,32 g/cm³
- Solub. in water (20 °C): 20 g/l
- Melting point: ~ -95 °C
- Boiling point: 40 °C
- Ignition temp.: 605 °C
- Vapour pressure: (20 °C) 475 hPa
- Viscosity: (20 °C) 0,43 mPas
- Dipolar moment: (20 °C) 1,6 Debye
- Dielectric const.: (20 °C) 9,1
- Evap. heat: (40 °C) 329 KJ/kg
- Saturation conc.: (20°C) 1549 g/m³
- Expl. limit (upper): 22 Vol%
- Expl. limit (lower): 13 Vol%
- pH (20 °C) 7

Toxicological data:
- LD 50 (oral, rat): 2388 mg/kg
- MAK: 100 ml/m³ , 350 mg/m³
- WGK: 2

Safety:
- EC Index no.: 602-004-00-3
- R: 40
- S: 23.2-51-25-36/37
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 6.1 T1 III UN 1593
- IMDG: 6.1 III UN 1593
- IATA/ICAO: 6.1 III UN 1593
- PAX: 605
- CAO: 612
- LGK: 10-13
- Disposal: 2

D3056-1, Dichloromethane, reagent grade AR (Stabilized with approx. 50 ppm of amylene)

Assay	min. 99.5 %	Titrable acid	max. 0.0003 meq/g
Appearance	clear	Water	max. 0.02 %
Colour	max 10 APHA	Free Halogens	passes test
Residue After Evaporation	max. 0.002 %		

HS-No: 2903 12 00 00

Code	Capacity
D3056-1-2501	2.5L

D3056-4, Dichloromethane, HPLC grade

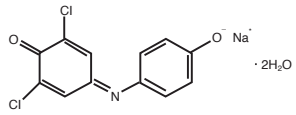
Assay (G.C)	min. 99.9 %	Free Halogens	passes test
Appearance	clear	Non-volatile matter	max. 0.0003 %
Colour	max. 10 Hazen	Water (K.F)	max. 0.01 %
Titrable Acid	max. 0.0003 meq/g		

HS-No: 2903 12 00 00

Code	Capacity
D3056-4-2501	2.5L

Maximum absorbance in a 1.0cm cell at wavelength:	Absorbance:
233 nm	1.00
240 nm	0.20
260 nm	0.02
300 nm	0.01
3500 nm	0.005

2,6-DICHLOROPHENOL-INDOPHENOL, SODIUM SALT DIHYDRATE



- $C_{12}H_6Cl_2NNaO_2 \bullet 2H_2O$
- M = 326.11 g/mol
- CAS [620-45-1]
- EC number: 210-640-4

Physical data:
- Form: Solid
- Solub. in water (20 °C): slightly soluble
- Bulk density: 320 kg/m³

Transport/storage:
- LGK: 10-13
- Disposal: 3

D3020-1, 2,6-Dichlorophenol-indophenol, sodium salt dehydrate, indicator, reagent grade

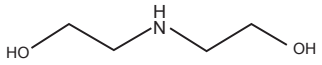
Assay (titr. With $HClO_4$, referred to dried substance)	min. 98 %	TLC-test	passes test
		Interfering dyes	passes test
Identity (IR-spectrum)	passes test	Loss on drying (120ºC)	max. 12.0 %

HS-No: 2925 20 00 90

Code	Capacity
D3020-1-0025	25 g

DIETHANOLAMINE

Xn



2,2'-Iminodiethanol,
Bis(b-hydroxyethyl) anime,
2,2'-Dihydroxydiethylamine

- $C_4H_{11}NO_2$
- M = 105.14 g/mol
- CAS [111-42-2]
- EC number: 203-868-0

Physical data:
- Density: 1,09 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: 28 °C
- Boiling point: 269 - 271 °C
- Flash point: 177 °C
- Ignition temp.: 370 °C
- Vapour pressure: (20 °C) < 0,01 hPa
- Viscosity: (30 °C) 352 mPas
- Expl. limit (upper): 6,4 Vol%
- Expl. limit (lower): 1,7 Vol%
- pH (10 g/l H_2O, 20 °C) ~ 11

Toxicological data:
- LD 50 (oral, rat): 676 mg/kg
- WGK: 1

Safety:
- EC Index no.: 603-071-00-1
- R: 22-38-41-48/22
- S: 26-36/37/39-46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposai: 1

D3083-1, Diethanolamine, reagent grade AR

Assay (acidimetric)	min. 99 %	Triethanolamine	max. 1 %
Chloride (Cl)	max. 0.0005 %	Orgamoc volatile impurities	passes test
Sulfate (SO_4)	max. 0.002 %	Sulfated ash	max. 0.005 %
Heavy Metas (as Pb)	max. 0.0001 %	Water	max. 0.15 %
Iron (Fe)	max. 0.0001 %		

HS-No: 2922 12 00 10

Code	Capacity
D3083-1-0500	500 ml

D3083-2, Diethanolamine, synthesis grade

Assay (acidimetric)	min. 98 %
Sulfated ash	max. 0.01 %
Water	max. 0.5 %

HS-No: 2922 12 00 10

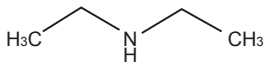
Code	Capacity
D3083-2-2500	2.5L

D

DIETHYLAMINE


F

C



N-Ethylethanamine

- $C_4H_{11}N$
- M = 73.14 g/mol
- CAS [109-89-7]
- EC number: 203-716-3

Physical data:
- Density: 0,71 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -48 °C
- Boiling point: 56 °C
- Flash point: -25 °C
- Ignition temp.: 310 °C
- Vapour pressure: (20 °C) 260 hPa
- Refraction index: (n 20 °C/D) 1,3861
- Expl. limit (upper): 10,1 Vol%
- Expl. limit (lower): 1,7 Vol%
- pH (100 g/l H_2O, 20 °C) > 12

Toxicological data:
- LD 50 (oral, rat): 540 mg/kg
- MAK: 5 ml/m³ , 15 mg/m³
- WGK: 1

Safety:
- EC Index no.: 612-003-00-X
- R: 11-20/21/22-35
- S: 3-16-26-29-36/37/39-45
- VbF class: B
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 3 FC II UN 1154
- IMDG: 3 II UN 1154
- IATA/ICAO: 3 II UN 1154
- PAX: 306
- CAO: 308
- LGK: 3 A
- Disposal: 5

D3123-1, Diethylamine, reagent grade

Assay	min. 99.5 %	Heavy metals (as Pb)	max. 0.00005 %
Chlorides (Cl)	max 0.0005 %	Non-volatile matter	max. 0.0005 %
Ammonium (NH_4)	max 0.02 %	Water	max. 0.1 %

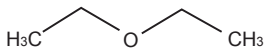
HS-No: 2921 12 00 00

Code	Capacity
D3123-1-1000	1L

DIETHYL ETHER


F+

Xn



Ethyl ether, Ethyl oxide, Ether

- $C_4H_{10}O$
- M = 74.12 g/mol
- CAS [60-29-7]
- EC number: 200-467-2

Physical data:
- Density: 0,71 g/cm³
- Solub. in water (20 °C): 69 g/l
- Melting point: -116,3 °C
- Boiling point: 34,6 °C
- Flash point: -40 °C
- Ignition temp.: 170 °C
- Vapour pressure: (20 °C) 587 hPa
- Viscosity: (20 °C) 0,23 mPas
- Dipolar moment: (20 °C) 1,25 Debye
- Dielectric const.: (20 °C) 4,3
- Evap. heat: (35 °C) 392 KJ/kg
- Saturation conc.: (20°C) 1776 g/m³
- Expl. limit (upper): 36 Vol%
- Expl. limit (lower): 1,7 Vol%

Toxicological data:
- LD 50 (oral, rat): 1215 mg/kg
- MAK: 400 ml/m³ , 1200 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-022-00-4
- R: 12-19-22-66-67
- S: 9-16-29-33-46
- VbF class: AI
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 I UN 1155
- IMDG: 3 I UN 1155
- IATA/ICAO: 3 I UN 1155
- PAX: 302
- CAO: 303
- LGK: 3 A
- Disposal: 1

D3103-1, Diethyl ether, reagent grade

Assay	min. 98 %	Titrable acid	max. 0.0002 meq/g
Colour	max 10 APHA	Carbonyl (as HCHO)	max. 0.001 %
Peroxide (as H_2O_2)	max 1 ppm	Substances Darkened by Sulphuric	
Residue After Evaporation	max. 0.001 %	Acid	passes test

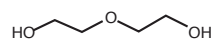
HS-No: 2909 11 00 00

Code	Capacity
D3103-1-2501	2.5L

DIETHYLENE GLYCOL


Xn

2,2'-Oxydiethanol,
2,2'-Dihydroxydiethyl ether,
Diglycol



- $C_4H_{10}O_3$
- M = 106.12 g/mol
- CAS [111-46-6]
- EC number: 203-872-2

Physical data:
- Form: Liquid
- Density: 1,12 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ -10 °C
- Boiling point: 244 - 252 °C
- Flash point: > 135 °C
- Ignition temp.: ~ 230 °C
- Vapour pressure: (20 °C) 0,013 hPa
- Refraction index: (n 20 °C/D) 1,4475
- Dielectric const.: (20 °C) 32
- Saturation conc.: (20°C) 0,12 g/m³
- Expl. limit (upper): 22 Vol%
- Expl. limit (lower): 0,7 Vol%
- pH (H2O) 7

Toxicological data:
- LD 50 (oral, rat): 12565 mg/kg
- MAK: 10 ml/m³ , 44 mg/m³
- WGK: 1

Safety:
- R: 22
- S: 46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 1

D3129-1, Diethylene Glycol, reagent grade

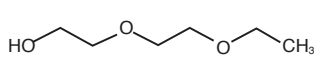
Assay (G.C)	min. 99 %	Sulfated Ash	max. 0.005 %
Identity (IR-spectrum)	passes test	Water	max. 0.3 %
Density (20°/4°)	1.115 – 1.117		

HS-No: 2909 41 00 00

Code	Capacity
D3129-1-2500	2.5 L

DIETHYLENE GLYCOL MONOETHYL ETHER

Ethyl diglycol,
2-(2-Ethoxyethoxy)-ethanol, Carbitol



- $C_6H_{14}O_3$
- M = 134.18 g/mol
- CAS [111-90-0]
- EC number: 203-919-7

Physical data:
- Form: Liquid
- Density: 0,99 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -80 °C
- Boiling point: 207 °C
- Flash point: 94 °C
- Ignition temp.: 190 °C
- Vapour pressure: (20 °C) 0,13 hPa
- Refraction index: (n 20 °C/D) 1,427
- Viscosity: (20 °C) 4,95 mPas
- Dielectric const.: (20 °C) 12,6
- Evap. heat: (202 °C) 403 KJ/kg
- Expl. limit (upper): 12,2 Vol%
- Expl. limit (lower): 1,8 Vol%

Toxicological data:
- LD 50 (oral, rat): 8690 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 1

D3130-1, Diethylene glycol monoethyl ether, reagent grade

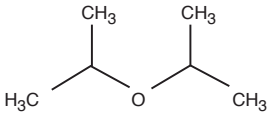
HS-No: 2909 43 00 90

Distillation range (95%)	200 – 203 °C	Residue after ignition	max. 0.01 %
Density (20°C)	0.987 – 0.990 g/ml	Free acid (as H+), mmol/100g	max. 0.15 %
Solubility test in water	passes test	Water	max. 0.1 %
Solubility test in ethanol	passes test		

Code	Capacity
D3130-1-1000	1.0 L

DIISOPROPYL ETHER

Isopropyl ether, 2,2'-Oxybis[propane],
2,2-Propoxypropane



- $C_6H_{14}O$
- M = 102.18 g/mol
- CAS [108-20-3]
- EC number: 203-560-6

Physical data:
- Form: Liquid
- Density: 0,72 g/cm³
- Solub. in water (20 °C): 12g/l
- Melting point: -86 °C
- Boiling point: 67 - 70 °C
- Flash point: -28 °C
- Ignition temp.: 405 °C
- Vapour pressure: (20 °C) 175 hPa
- Viscosity: (25 °C) 0,37 mPas
- Dipolar moment: (20 C) 1,3 Debye
- Dielectric const.: (25 °C) 3,8
- Evap. heat: (68 °C) 285 KJ/kg
- Saturation conc.: (20 °C) 751 g/m³
- Expl. limit (upper): 21 Vol%
- Expl. limit (lower): 1,0 Vol%
- pH (20 °C) ~ 7

Toxicological data:
- LD 50 (oral, rat): 8470 mg/kg
- MAK: 200 ml/m³, 850 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-045-00-X [2]
- R: 11-19-66-67
- S: 9-16-29-33
- VbF class: AI
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 II UN 1159
- IMDG: 3 II UN 1159
- IATA/ICAO: 3 II UN 1159
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

D3150-2, Diisopropyl Ether, synthesis grade

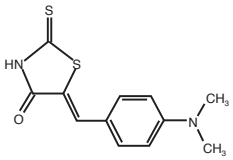
HS-No: 2909 19 00 90

Assay (G.C)	min. 99 %	Peroxides (as H_2O_2)	max. 0.005 %
Identity (IR-spectrum)	passes test	Non-volatile matter	max. 0.005 %
Density (20°/4°)	0.722 – 0.724		

Code	Capacity
D3150-2-2501	2.5 Lit

P-DIMETHYLAMINOBENZALRHODANINE

p-Dimethylaminobenzalrhosanine



- $C_{12}H_{12}N_2OS_2$
- M = 264.37 g/mol
- CAS [536-17-4]
- EC number: 208-625-2

Physical data:
- Form: Solid
- Bulk density: ~ 225 g/cm³
- Solub. in water (20 °C): almost insoluble

Safety:
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 3

D3100-1, p-Dimethylaminobenzalrhodanine, reagent grade

HS-No: 2934 10 00 90

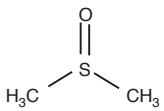
Assay (of S)	min. 98 %	Sulfated Ash	max. 0.1 %
Identity (IR-spectrum)	passes test	Suitability for determination of Ag	passes test
Insoluble in acetone	passes test		

Code	Capacity
D3100-1-0025	25 g

DIMETHYL SULPHOXIDE

Xi

DMSO, Sulfinyl bis (methane),
Methylsulfoxide, Methysufinylmethane



- C_2H_6SO
- M = 78.13 g/mol
- CAS [67-68-5]
- EC number: 200-664-3

Physical data:
- Form: Liquid
- Density: 1,10 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: 18,5 °C
- Boiling point: (33 hPa) 85 - 87 °C
- Flash point: 95 °C
- Ignition temp.: 300 - 302 °C
- Vapour pressure: (20 °C) 0,6 hPa
- Refraction index: (n 20 °C/D) 1,48
- Viscosity: (25 °C) 1,98 mPas
- Saturation conc.: (20 °C) 8,0 g/m³
- Expl. limit (upper): 63,0 Vol%
- Expl. limit (lower): 1,8 Vol%

Toxicological data:
- LD 50 (oral, rat): 14500 mg/kg
- WGK: 1

Safety:
- R: 36/38
- S: 26
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 1

D3161-1, Dimethyl sulphoxide, reagent grade

HS-No: 2930 90 70 90

Assay	min. 99.9 %	Titrable acid	max. 0.001 meq/g
Appearance	clear & colourless	Water (coulometric KF)	max. 0.1 %
Residue after evaporation	max. 0.01 %		

Code	Capacity
D3161-1-2501	2.5 L

2,4-DINITROPHENYLHYDRAZINE

DNP

- $C_{10}H_8O$
- M = 144.17 g/mol
- CAS [135-19-3]

Physical data:
- Solub. in water (20 °C): almost insoluble
- Melting point: ~ 203 °C
- Bulk density:~ 680 kg/m³
- Decomposition point above melting point

Toxicological data:
- LD 50 (oral, rat): 654 mg/kg
- WGK: 3*

Safety:
- Harmful, irritant
- R: 2-22-36/38
- S: 35

Transport/storage:
- Packing-cat R
- Road/Rail: 4.1/21 a
- IATA/DGR
- CAO: F
- PAX: F
- LGK: 4.1 A
- Disposal: 3

D3000-1, 2,4-Dinitrophenylhydrazine, reagent grade

HS-No: 2928 00 90 00

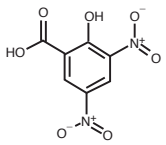
Assay(HPLC, referred to anhydrous substance)	min. 99 %	Chloro-2,4-dinitribenzene (HPLC)	max. 0.05 %
Identity (IR-spectrum)	passes test	1,3-Dinitrobenzene (HPLC)	max. 0.05 %
Insoluble in acid	passes test	Related Substance (TLC)	passes test
Iron (Fe)	max. 0.003 %	Sulfated Ash	max. 0.1 %
		Water	30 – 35 %

Code	Capacity
D3000-1-0025	25 g

3,5-DINITROSALICYLIC ACID

Xn

3,5-Dinitro-2-hydroxybenzoic acid, 3,5-Dinitrosalicylic acid



- $C_7H_4N_2O_7$
- M = 228.12 g/mol
- CAS [609-99-4]
- EC number: 210-204-3

Physical data:
- Solub. in water (20 °C): soluble
- M = 228.12 g/mol
- pH value: ~ 1.3 - 1.8 (10 g/l, H_2O, 20 °C)
- Melting point: 170 - 174 °C
- Bulk density:~ 400 kg/m³
- Decomposition point above melting point

Toxicological data:
- LD 50 (oral, rat): 860 mg/kg
- WGK: 3*

Safety:
- Harmful
- R: 22
- S: 24/25

Transport/storage:
- Packing-cat G
- Road/Rail: 6.1/25 b
- IMDG-Code: 6.1/II UN 2811
- IATA/DGR: 6.1 II UN 2811
- CAO: 615
- PAX: 613
- LGK: 10-13
- Disposal: 4

D3001-3, 3,5-Dinitrosalicylic acid, extra pure

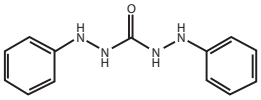
HS-No: 2918 29 90 00

Assay (Acidimetric)	min. 98 %	Performance test (Suitability as reagent for Amylase-and Diastase-determinations)	passes test
Identity (IR-spectrum)	passes test		
Melting point	170 – 174 °C		
Absorption maximum λ max (Ethanol)	334 – 336 nm		
Spec. Absorptivity A 1%/1cm (λmax; 0.001%, ethanol abs.)	400 – 440		

Code	Capacity
D3001-3-0025	25 g

1,5-DIPHENYLCARBAZIDE

1,5 Diphenylcarbonic dihydrazide



- $C_{13}H_{14}N_4O$
- M = 242.28 g/mol
- CAS [140-22-7]
- EC number: 205-403-7

Physical data:
- Form: Solid
- Bulk density: ~ 420 kg/m³
- Solub. in water (20 °C): slightly soluble
- Melting point: 170 - 172 °C

Toxicological data:
- WGK: 3*

Transport/storage:
- LGK: 10-13
- Disposal: 3

D3140-1, 1,5-Diphenylcarbazide, reagent grade

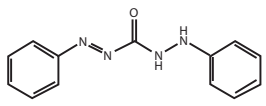
HS-No: 2928 00 90 90

Assay (HPLC)	min. 98 %	Diphenylcarbazone	passes test
Identity (IR-spectrum)	passes test	Sensitivity to Chromates	passes test
Melting point	173 – 176 °C	Suitability for determination of Hg	passes test
Solubility in Aqueous Acetone	passes test	Sulfated Ash	max. 0.05 %
Insoluble in Ethanol	passes test		

Code	Capacity
D3140-1-0025	25 g

1,5-DIPHENYLCARBAZONE

Phenyldiazenecarboxylic acid 2-phenylhydrazide, Phenylazoformic acid 2-phenylhydrazide



- $C_{13}H_{12}N_4O$
- M = 240.27 g/mol
- CAS [538-62-5]
- EC number: 208-698-0

Physical data:
- Form: Solid
- Solub. in water (20 °C): insoluble
- Melting point: 153 - 158 °C (decomposes)

Toxicological data:
- WGK: 2

Transport/storage:
- LGK: 10-13
- Disposal: 3

D3142-1, 1,5-Diphenylcarbazone, reagent grade

HS-No: 2928 00 90 90

Assay (HPLC)	35 – 40 %	Insoluble in Ethanol	passes test
Identity (IR-spectrum)	passes test	Sulfated Ash	max. 0.1 %
Melting point	153 – 158 °C	Suitability for determination of Hg	passes test
Solubility In Acetone	passes test		

Code	Capacity
D3142-1-0025	25 g

DI-POTASSIUM HYDROGEN PHOSPHATE ANHYDROUS

Dipotassium hydrogen phoshpate, Potassium phosphate dibasic

- K_2HPO_4
- M = 174.18 g/mol
- CAS [7758-11-4]
- EC number: 231-834-5

Physical data:
- Spec. density: 2,44 g/cm³
- Bulk density:~ 700 - 1000 kg/m³
- Solub. in water (20 °C): soluble
- pH (10 g/l H_2O, 20 °C) 8,7 - 9,4

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

D

D3203-1, di-Potassium hydrogen phosphate anhydrous, reagent grade

HS-No: 2835 24 00 00

Assay (acidimetric, on dried substance)	min. 99 %	Sulfates (SO_4)	max. 0.005%
pH (5%, H_2O)	8.7 - 9.3	Heavy metals (as Pb)	max. 0.0005 %
Total N	max 0.001 %	Iron (Fe)	max. 0.001 %
Chlorides (Cl)	max. 0.003 %	Sodium (Na)	max. 0.5 %
		Loss on drying (105 °C)	max. 1 %

Code	Capacity
D3203-1-0500	500 g

DI-POTASSIUM HYDROGEN PHOSPHATE TRIHYDRATE

Secondary potassium phosphate, Potassium phosphate dibasic

- $K_2HPO_4 \cdot 3H_2O$
- M = 228.23 g/mol
- CAS [16788-57-1]
- EC number: 231-834-5

Physical data:
- Bulk density:~ 800 kg/m³
- Solub. in water (20 °C): freely soluble
- pH (50 g/l H_2O, 20 °C) 9,2 - 9,4

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

D3211-1, di-Potassium hydrogen phosphate trihydrate, reagent grade

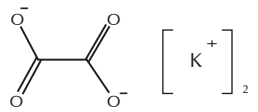
HS-No: 2835 24 00 00

Assay (acidimetric)	min. 99 %	Arsenic (As)	max. 0.00005 %
Insoluble in water	max. 0.01 %	Copper (Cu)	max. 0.003 %
pH (5%, H_2O)	9.1 - 9.3	Iron (Fe)	max. 0.0005 %
Chlorides (Cl)	max. 0.001 %	Lead (Pb)	max. 0.003 %
Sulfates (SO_4)	max. 0.005 %	Nickel (Ni)	max. 0.001 %
Total N (as N)	max. 0.001 %	Sodium (Na)	max. 0.1 %

Code	Capacity
D3211-1-0250	250 g

DI-POTASSIUM OXALATE MONOHYDRATE

Xn



Oxalic acid dipotassium salt monohydrate

- $C_2K_2O_4 \cdot H_2O$
- M = 184.24 g/mol
- CAS [6487-48-5]
- EC number: 209-506-8

Physical data:
- Spec. density: 2,13 g/cm³
- Bulk density: ~ 700 - 1100 kg/m³
- Solub. in water (20 °C): 360 g/l
- pH (50 g/l H_2O, 20 °C) ~ 7,0 - 8,5

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 607-007-00-3
- R: 21/22
- S: 24/25-37-46
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T3 III UN 3282
- IMDG: 6.1 III UN 3282
- IATA/ICAO: 6.1 III UN 3282
- PAX: 619
- CAO: 619
- LGK: 10-13
- Disposal: 3

D3214-1, di-Potassium oxalate monohydrate, reagent grade

HS-No: 2917 11 00 90

Assay	min. 99.8 %	Copper (Cu)	max. 0.0001 %
Insoluble in water	max. 0.005 %	Iron (Fe)	max. 0.0005 %
Substances Darkened by H_2SO_4	passes test	Ammonium (NH_4)	max. 0.001 %
Chlorides (Cl)	max. 0.002 %	Sodium (Na)	max. 0.002 %
Sulfates (SO_4)	max. 0.002 %	Nickel (Ni)	max. 0.0001 %
Heavy metals (Pb)	max. 0.001 %	Loss on drying (105 °C)	max. 0.01 %

Code	Capacity
D3214-1-0500	500 g

DI-SODIUM HYDROGEN PHOSPHATE ANHYDROUS

Disodium hydrogen phosphate, Sodium phosphate dibasic, Sodium monohydrogen phosphate

- Na_2HPO_4
- M = 141.96 g/mol
- CAS [7558-79-4]
- EC number: 231-448-7

Physical data:
- Spec. density: 1,53 g/cm³
- Bulk density: ~ 880 kg/m³
- Solub. in water (20°C): 77 g/l
- Melting point: ~ 250°C (decomposes)
- pH (20 g/l H_2O, 20°C) 8,7 - 9,3

Toxicological data:
- LD 50 (oral, rat): 17000 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

D3235-1, di-Sodium hydrogen phosphate anhydrous, reagent grade AR

HS-No: 2835 22 00 00

Assay	min. 99 %	Copper (Cu)	max. 0.0003 %
Insoluble in water	max. 0.01 %	Heavy metals (as Pb)	max. 0.001 %
pH (5%, H_2O)	8.7 - 9.3	Iron (Fe)	max. 0.0005 %
Chlorides (Cl)	max. 0.001 %	Lead (Pb)	max. 0.001 %
Flourides (F)	max. 0.001 %	Potassium (K)	max. 0.005 %
Sulfates (SO_4)	max. 0.005 %	Zinc (Zn)	max. 0.0005 %
Total N	max. 0.001 %	Loss on drying (105 °C)	max. 0.2 %
Arsenic (As)	max. 0.00005 %		

Code	Capacity
D3235-1-0500	500 g
D3235-1-1000	1 kg

DI-SODIUM HYDROGEN PHOSPHATE DIHYDRATE

Sodium monohydrogen phosphate, Sodium phosphate dibasic

- $Na_2HPO_4 \cdot 2H_2O$
- M = 177.99 g/mol
- CAS [10028-24-7]
- EC number: 231-448-7

Physical data:
- Spec. density: 2,1 g/cm³
- Bulk density: ~ 850 - 1000 kg/m³
- Solub. in water (20°C): 93 g/l
- Melting point: 92,5 °C (release of crystalline water)
- pH (50 g/l H_2O, 20°C) ~ 9,1 - 9-4

Toxicological data:
- LD 50 (oral, rat): 17000 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

D3243-1, di-Sodium hydrogen phosphate dihydrate, reagent grade

HS-No: 2835 22 00 00

Assay	min. 99.5 %	Arsenic (As)	max. 0.0001 %
pH (5%, H_2O)	9.0 - 9.2	Copper (Cu)	max. 0.0003 %
Chlorides (Cl)	max. 0.001 %	Heavy metals (as Pb)	max. 0.001 %
Sulfates (SO_4)	max. 0.005 %	Iron (Fe)	max. 0.0005 %
Total N	max. 0.001 %	Potassium (K)	max. 0.005 %
Ammonium (NH_4)	max. 0.001 %	Loss on drying (105°C)	20.0 - 20.4 %

Code	Capacity
D3243-1-0500	500 g
D3243-1-1000	1 kg

D3243-3, di-Sodium hydrogen phosphate dihydrate, extra pure

HS-No: 2835 22 00 00

Assay	min. 98.5 %	Iron (Fe)	max. 0.001 %
pH (5%, H_2O)	9.0 - 9.2	Sodium dihydrogen phosphate (NaH_2PO_4)	< 1.7 %
Chlorides (Cl)	max. 0.005 %	$KMnO_4$ red. Matter (as O)	max. 0.04 %
Sulfates (SO_4)	max. 0.01 %	Loss on drying (130°C)	19.5 - 21.0 %
Arsenic (As)	max. 0.0002 %		
Heavy metals (as Pb)	max. 0.001 %		

Code	Capacity
D3243-3-0500	500 g
D3243-3-1000	1 kg

DI-SODIUM HYDROGEN PHOSPHATE DODECAHYDRATE

Sodium monohydrogen phosphate, Sodium phosphate dibasic, Secondary sodium phosphate

- $Na_2HPO_4 \cdot 12H_2O$
- M = 358.14 g/mol
- CAS [10039-32-4]
- EC number: 231-448-7

Physical data:
- Spec. density: 1,52 g/cm³
- Bulk density: ~ 800 - 900 kg/m³
- Solub. in water (20°C): ~ 218 g/l
- Melting point: 35 °C
- pH (50 g/l H_2O, 20°C) ~ 9,0 - 9-4

Toxicological data:
- LD 50 (oral, rat): 17000 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

D3244-1, di-Sodium hydrogen phosphate dodecahydrate, reagent grade

HS-No: 2835 22 00 00

Assay (acidimetric)	99 – 102 %	Copper (Cu)	max. 0.0002 %
Identity	passes test	Heavy metals (as Pb)	max.0.0005 %
Appearance of solution	clear	Iron (Fe)	max. 0.0005 %
pH (5%, H_2O)	9.0 – 9.4	Lead (Pb)	max. 0.0005 %
Total N (as N)	max. 0.001 %	Potassium (K)	max. 0.005 %
Chlorides (Cl)	max. 0.0005 %	Sodium dihydrogen phosphate)	passes test
Sulfates (SO_4)	max. 0.005 %	Reducing substances	passes test
Arsenic (As)	max. 0.00005 %	Water	57 – 61 %

Code	Capacity
D3244-1-0500	500 g
D3244-1-1000	1 kg

D3244-3, di-Sodium hydrogen phosphate dodecahydrate, extra pure

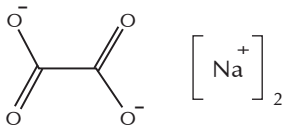
HS-No: 2835 22 00 00

Assay (acidimetric)	min. 98.5 %	Arsenic (As)	max. 0.0001 %
Appearence of solution	passes test	Copper (Cu)	max. 0.001 %
Insoluble in water	max. 0.15 %	Heavy metals (as Pb)	max. 0.0008 %
pH (5%, H_2O)	9.0 - 9.3	Iron (Fe)	max. 0.001 %
Chlorides (Cl)	max. 0.001 %	Lead (Pb)	max. 0.001 %
Flourides (F)	max. 0.001 %	Potassium (K)	max. 0.005 %
Sodium dihydrogenphosphate		Zinc (Zn)	max. 0.001 %
(NaH_2PO_4)	max. 0.8 %	$KMnO_4$ red. Matter (as O)	max. 0.02 %
Sulfates (SO_4)	max. 0.01 %	Loss on drying (130°C)	57 - 61 %

Code	Capacity
D3244-3-0500	500 g
D3244-3-1000	1 kg

DI-SODIUM OXALATE

Xn



Oxalic acid sodium salt, Soerensen's buffer substances

- $C_2Na_2O_4$
- M = 134.01 g/mol
- CAS [62-76-0]
- EC number: 200-550-3

Physical data:
- Bulk density: ~ 600 kg/m³
- Solub. in water (20 °C): 37 g/l
- Melting point: 250 - 270 °C (decomposes)
- pH (30 g/l H_2O, 20 °C) ~ 8

Toxicological data:
- LD 50 (oral, rat): 7500 mg/kg (oxalic acid)
- WGK: 1

Safety:
- EC Index no.: 607-007-00-3
- R: 21/22
- S: 24/25-37-46
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T3 III UN 3282
- IMDG: 6.1 III UN 3282
- IATA/ICAO: 6.1 III UN 3282
- PAX: 619
- CAO: 619
- LGK: 10-13
- Disposal: 3

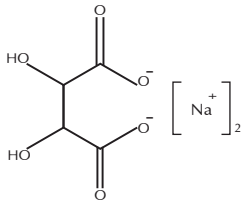
D3248-1, di-Sodium oxalate, reagent grade

HS-No: 2917 11 00 90

Assay (permanganometric)	min. 99.8 %	Heavy metals (as Pb)	max. 0.001 %
pH (3%, H_2O)	7.5 - 8.5	Lead (Pb)	max. 0.001 %
Chlorides (Cl)	max. 0.002 %	Iron (Fe)	max. 0.0005 %
Phosphates (PO_4)	max. 0.005 %	Nickel (Ni)	max. 0.001 %
Sulfates (SO_4)	max. 0.01 %	Potassium (K)	max. 0.005 %
Total N	max. 0.0005 %	Loss on drying	max. 0.05 %
Copper (Cu)	max. 0.001 %		

Code	Capacity
D3248-1-0500	500 g

DI-SODIUM TARTRATE ANHYDROUS



Tartaric acid disodium salt

- $C_4H_4Na_2O_6$
- M = 194.06 g/mol
- EC number: 212-773-3

Physical data:
- Solub. in water (20 °C): soluble
- pH (50 g/l H_2O, 20 °C) 7,0 - 9,0

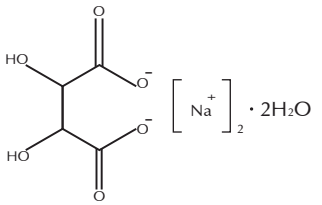
D3259-1, di-Sodium tartrate anhydrous, reagent grade

HS-No: 2918 13 00 90

Assay (acidimetric)	min. 99 %	Arsenic (As)	max. 0.00005 %
Insoluble in water	max. 0.005 %	Calcium (Ca)	max. 0.005 %
pH (5%, H_2O)	7 - 9	Copper (Cu)	max. 0.0005 %
Chlorides (Cl)	max. 0.005 %	Iron (Fe)	max. 0.001 %
Phosphates (PO_4)	max. 0.005 %	Lead (Pb)	max. 0.0005 %
Sulfates (SO_4)	max. 0.005 %	Nickel (Ni)	max. 0.0005 %
Ammonium (NH_4)	max. 0.003 %		

Code	Capacity
D3259-1-0500	500 g
D3259-1-1000	1 kg

DI-SODIUM TARTRATE DIHYDRATE



Tartaric acid sodium salt dihydrate

- $C_4H_4Na_2O_6{\cdot}2H_2O$
- M = 230.08 g/mol
- CAS [6106-24-7]
- EC number: 212-773-3

Physical data:
- Spec. density: ~ 1,82 g/cm³
- Bulk density: ~ 460 kg/m³
- Solub. in water (20 °C): 290 g/l
- Melting point: 154 °C
- pH (50 g/l H_2O, 25 °C) ~ 8

Toxicological data:
- LD 50 (oral, rat): 1290 mg/kg
- WGK: 1

Transport/storage:
- LGK: 10-13
- Disposal: 3

D3255-1, di-Sodium tartrate dihydrate, reagent grade

HS-No: 2918 13 00 90

Assay (acidimetric)	min. 99.5 %	Ammonium (NH_4)	max. 0.001 %
pH (5%, H_2O)	7 - 9	Calcium (Ca)	max. 0.0005 %
Total N	max. 0.002 %	Heavy metals (as Pb)	max. 0.0005 %
Chlorides (Cl)	max. 0.0005 %	Iron (Fe)	max. 0.0005 %
Phosphates (PO_4)	max. 0.0005 %	Loss on drying (150 °C, 4h)	15.61 - 15.71 %
Sulfates (SO_4)	max. 0.002 %		

Code	Capacity
D3255-1-0500	500 g

DI-SODIUM TETRABORATE ANHYDROUS

Sodium biborate, Sodium borate, Borax

- $Na_2B_4O_7$
- M = 201.22 g/mol
- CAS [1330-43-4]
- EC number: 215-540-4

Physical data:
- Spec. density: 2,37 g/cm³
- Bulk density: ~ 700 kg/m³
- Solub. in water (20 °C): 25,6 g/l
- Melting point: 742 °C
- Boiling point: 1575 °C (decomposes)
- Vapour pressure: (1200 °C) 7,3 hPa
- pH (25 g/l H_2O, 20 °C) 9,2

Toxicological data:
- LD 50 (oral, rat): 2660 mg/kg (decahydrate substance)
- WGK: 1

Safety:
- S: 24/25
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 28

D3263-3, di-Sodium tetraborate anhydrous, extra pure

HS-No: 2840 11 00 00

Assay (acidimetric)	min. 98 %	Heavy metals (as Pb)	max. 0.005 %
Insoluble in water	max. 0.05 %	Iron (Fe)	max. 0.005 %
Chlorides (Cl)	max. 0.05 %	Lead (Pb)	max. 0.02 %
Phosphates (PO_4)	max. 0.005 %	Magnesium (Mg)	max. 0.005 %
Sulfates (SO_4)	max. 0.05 %	Nickel (Ni)	max. 0.05 %
Calcium (Ca)	max. 0.02 %	Potassium (K)	max. 0.05 %
Copper (Cu)	max. 0.005 %		

Code	Capacity
D3263-3-1000	1 kg

DI-SODIUM TETRABORATE DECAHYDRATE

Xn

Borax, Sodium biborate decahydrate, Sodium borate decahydrate

- $Na_2B_4O_7{\cdot}10H_2O$
- M = 381.37 g/mol
- CAS [1303-96-4]
- EC number: 215-540-4

Physical data:
- Spec. density: 1,72 g/cm³
- Bulk density: ~ 750 kg/m³
- Solub. in water (20 °C): 51,4 g/l
- Melting point: 75 °C
- Boiling point: 1575 °C (anhydrous)
- Vapour pressure: (20 °C) 0,213 hPa
- pH (47 g/l H_2O, 20 °C) 9,2

Toxicological data:
- LD 50 (oral, rat): 2660 mg/kg
- WGK: 1

Safety:
- S: 24/25
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 28

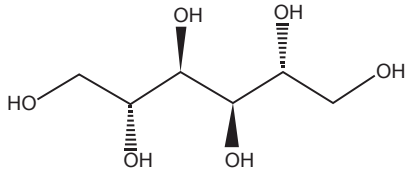
D3265-1, di-Sodium tetraborate decahydrate, reagent grade

HS-No: 2840 19 90 00

Assay (acidimetric)	min. 99.5 %	Arsenic (As)	max. 0.0001 %
Insoluble in water	max. 0.005 %	Calcium (Ca)	max. 0.005 %
pH (4%,H_2O)	9.15 - 9.20	Copper (Cu)	max. 0.0005 %
Chlorides (Cl)	max. 0.0005 %	Iron (Fe)	max. 0.0005 %
Phosphates (PO_4)	max. 0.001 %	Lead (Pb)	max. 0.0005 %
Sulfates (SO_4)	max. 0.005 %		

Code	Capacity
D3265-1-0500	500 g
D3265-1-1000	1 kg

D(-)-MANNITOL



Manna sugar

- $C_6H_{14}O_6$
- M = 182.17 g/mol
- CAS [69-65-8]
- EC number: 200-711-8

Physical data:
- Spec. density: 1,49 g/cm³
- Bulk density: ~ 400 - 500 kg/m³
- Solub. in water (25 °C): 213 g/l
- Melting point: 164 - 169 °C
- Boiling point: (4 hPa) 290 - 295 °C
- pH (100 g/l H_2O, 20 °C) 5 - 7

Toxicological data:
- LD 50 (oral, rat): 13500 mg/kg
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

D

D3110-1, D-(-)-Mannitol, reagent grade

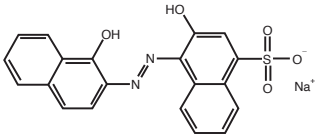
HS-No: 2905 43 00 00

Assay (Iodometric)	min. 98 %
Specific rotation ([a]20°/D, c=10, sodium borate)	+23 – +25 °
Red impurities (as glucose)	max. 0.05 %
Sulfated Ash	max. 0.1 %
Chlorides (Cl)	max. 0.005 %
Sulfates (SO_4)	max. 0.01 %
Arsenic (As)	max. 0.0001 %
Copper (Cu)	max. 0.001 %
Calcium (Ca)	max. 0.001 %
Heavy metals (as Pb)	max. 0.0005 %
Lead (Pb)	max. 0.00005 %
Nickel (Ni)	max. 0.0001 %
Zinc (Zn)	max. 0.0005 %

Code	Capacity
D3110-1-0500	500 g

ERIOCHROME BLUE-BLACK B

Xi



2-Hydroxy-1-(1-hydroxy-2-naphthylazo) -naphthalene-4-sulfonic acid sodium salt

- $C_{20}H_{13}N_2NaO_5S$
- M = 166.85 g/mol
- CAS [3564-14-5]
- EC number: 222-639-6

Physical data:
- Form: Solid
- Bulk density: 540 kg/cm³
- Solub. in water (20 °C): ~ 20 g/l
- pH (10 g/l H_2O, 20 °C) 9,5

Toxicological data:
- LD 50 (oral, rat): > 5000 mg/kg
- WGK: 1

Safety:
- R: 36
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 3

E5001-1, Eriochrome blue-black B, C.I. 14640

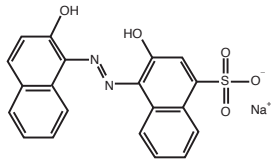
HS-No: 3204 19 00 90

Absorption maximum λ(pH 10.0) ..... 634 – 641 nm
Absorptivity (A1%/1cm; λ max; 0.0025%; pH10.0 on dried material) 220 – 230

Suitability as indicator for metal titration passes test
Loss on drying (110ºC) ..... max. 5 %

Code	Capacity
E5001-1-0025	25 g

ERIOCHROME BLUE-BLACK R



2-Hydroxy-1-(2-hydroxy-1-naphthylazo) -naphthalene-4-sulfonic acid sodium salt

- $C_{20}H_{13}N_2NaO_5S$
- M = 416.39 g/mol
- CAS [2538-85-4]
- EC number: 219-810-2

Physical data:
- Form: Solid
- Bulk density: 530 kg/cm³
- Solub. in water (20 °C): ~ 20 g/l
- pH (10 g/l H_2O, 20 °C) 9,4

Toxicological data:
- WGK: 1

Transport/storage:
- LGK: 10-13
- Disposal: 3

E5002-1, Eriochrome blue-black R, C.I. 15705

HS-No: 2927 00 00 90

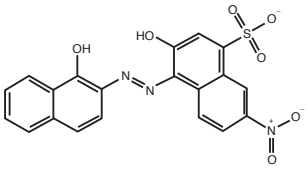
Absorption maximum λ(pH 12.2) ..... 632 – 636 nm
Absorptivity (A1%/1cm; λ max; 0.0015%; pH12.2 on dried material) 200 – 300

Suitability as indicator for metal titration passes test
Loss on drying (110ºC) ..... max. 10 %

Code	Capacity
E5002-1-0025	25 g

ERIOCHROME BLACK T

Xi N



Chrome black T, 2-Hydroxy-1-(1-hydroxy-2-naphthylazo) 6-nitronaphthalene-4-sulfonic acid sodium salt

- $C_{20}H_{12}N_3NaO_7S$
- M = 461.38 g/mol
- CAS [1787-61-7]
- EC number: 217-250-3

Physical data:
- Form: Solid
- Bulk density: ~ 400 - 600 kg/cm³
- Solub. in water (20 °C): ~ 50 g/l
- pH (10 g/l H_2O, 20 °C) 3,7

Toxicological data:
- LD 50 (oral, rat): 17590 mg/kg
- WGK: 3*

Safety:
- R: 36-51/53
- S: 26-61

Transport/storage:
- ADR: 9 M7 III UN 3077
- IMDG: 9 III UN 3077
- IATA/ICAO: 9 III UN 3077
- PAX: 911
- CAO: 911
- LGK: 10-13
- Disposal: 3

E5000-1, Eriochrome black T, C.I. 14645

HS-No: 3204 19 00 90

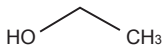
Absorption maximum λ(pH +10.0) ..... 612 – 616 nm
Absorptivity (A1%/1cm; λ max; pH 10.0; on dried material) ..... 320 – 420

Suitability as metal indicator ..... passes test
Loss on drying ..... max. 7 %

Code	Capacity
E5000-1-0025	25 g

ETHANOL ABSOLUTE

F



Ethyl alcohol, Methylcarbinol, Spirit, Spirit of wine

- C_2H_6O
- M = 46.07 g/mol
- CAS [64-17-5]
- EC number: 200-578-6

Physical data:
- Density: 0,79 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -114,5 °C
- Boiling point: 78,3 °C
- Flash point: 12 °C
- Ignition temp.: 425 °C
- Vapour pressure: (20 °C) 59 hPa
- Viscosity: (20 °C) 1,2 mPas
- Dipolar moment: (20 °C) 1,7 Debye
- Dielectric const.: (25 °C) 24,3
- Evap. heat: (78 °C) 855 KJ/kg
- Saturation conc.: (20 °C) 105 g/m³
- Expl. limit (upper): 15 Vol%
- Expl. limit (lower): 3,5 Vol%
- pH (10 g/l H_2O, 20 °C) 7,0

Toxicological data:
- LD 50 (oral, rat): 6200 mg/kg
- MAK: 500 ml/m³ , 960 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-002-00-5
- R: 11
- S: 7-16
- VbF class: B
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 3 F1 II UN 1170
- IMDG: 3 II UN 1170
- IATA/ICAO: 3 II UN 1170
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

E7025-1, Ethanol 99.8%, reagent grade

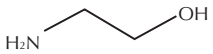
HS-No: 2207 10 00 90

Purity (GC)	min. 99.8 %	Indium (In)	max. 0.02 ppm
Identity (IR)	Conforms	Lithium (Li)	max. 0.02 ppm
Free Alkali (as NH_3)	max. 3 ppm	Potassium (K)	max. 0.2 ppm
Free Acid (as CH_3COOH)	max. 10 ppm	Magnesium (Mg)	max. 0.1 ppm
Spec. resistance	max. 1 M cm	Manganese (Mn)	max. 0.02 ppm
Heavy metals (as Pb)	max. 0.2 ppm	Molybdenum (Mo)	max. 0.05 ppm
Silver (Ag)	max. 0.02 ppm	Sodium (Na)	max. 0.5 ppm
A1 Aluminium (Al)	max. 0.2 ppm	Nickel (Ni)	max. 0.02 ppm
Arsenic (As)	max. 0.01 ppm	Lead (Pb)	max. 0.05 ppm
Gold (Au)	max. 0.1 ppm	Platinum (Pt)	max. 0.2 ppm
Barium (Ba)	max. 0.1 ppm	Antimony (Sb)	max. 0.01 ppm
Beryllium (Be)	max. 0.02 ppm	Tin (Sn)	max. 0.1 ppm
Bismuth (Bi)	max. 0.1 ppm	Strontium (Sr)	max. 0.02 ppm
Calcium (Ca)	max. 0.6 ppm	Titanium (Ti)	max. 0.1 ppm
Cadmium (Cd)	max. 0.05 ppm	Thallium (Tl)	max. 0.05 ppm
Cobalt (Co)	max. 0.05 ppm	Vanadium (V)	max. 0.05 ppm
Chromium (Cr)	max. 0.05 ppm	Zinc (Zn)	max. 0.1 ppm
Copper (Cu)	max. 0.02 ppm	Zirconium (Zr)	max. 0.2 ppm
Iron (Fe)	max. 0.1 ppm	Evaporation residue	max. 10 ppm
Gallium (Ga)	max. 0.02 ppm	Water	max. 0.20 %

Code	Capacity
E7025-1-1000	1.0L
E7025-1-2500	2.5L
E7025-1-4000	4.0L

ETHANOLAMINE

Xn



2-Aminoethanol,
2-Hydroxyethylamine,
Monoethanolamine

- C_2H_7NO
- M = 61.08 g/mol
- CAS [141-43-5]
- EC number: 205-483-3

Physical data:
- Density: 1,02 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: 10,5 °C
- Boiling point: 171 °C
- Flash point: 93 °C
- Ignition temp.: 410 °C
- Vapour pressure: (20 °C) 0,5 hPa
- Refraction index: (n 20 °C/D) 1,4539
- Viscosity: (20 °C) 23 mPas
- Evap. heat: (170 °C) 963 KJ/kg
- Expl. limit (upper): 13,1 Vol%
- Expl. limit (lower): 2,5 Vol%
- pH (100 g/l H_2O, 20 °C) 12,1

Toxicological data:
- LD 50 (oral, rat): 1720 mg/kg
- MAK: 2 ml/m³ , 5,1 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-030-00-8
- R: 20-36/37/38
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 8 C7 III UN 2491
- IMDG: 8 III UN 2491
- IATA/ICAO: 8 III UN 2491
- PAX: 818
- CAO: 820
- LGK: 8 A
- Disposal: 1

E7067-1, Ethanolamine, reagent grade

HS-No: 2922 11 00 10

Assay (GC)	min. 99.5 %	Chromium (Cr)	max. 10.0 %
Identity (IR-spectrum)	passes test	Copper (Cu)	max. 10.0 %
Aluminium (Al)	max. 0.00005 %	Iron (Fe)	max. 10.0 %
Boron (B)	max. 0.000002 %	Magnesium (Mg)	max. 10.0 %
Barium (Ba)	max. 0.00001 %	Manganese (Mn)	max. 10.0 %
Calcium (Ca)	max. 0.00005 %	Nickel (Ni)	max. 10.0 %
Cadmium (Cd)	max. 0.00005 %	Lead (Pb)	max. 10.0 %
Cobalt (Co)	max. 10.0 %	Tin (Sn)	max. 10.0 %

Code	Capacity
E7067-1-0500	500 ml
E7067-1-2500	2.5L

E7067-2, Ethanolamine, synthesis grade

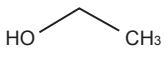
HS-No: 2922 11 00 10

Assay (GC)	min. 98 %	Sulfated Ash	max. 0.01 %
Identity (IR-spectrum)	passes test	Water (K.F)	max. 0.3 %
Density (20°/4°)	1.014 – 1.016		

Code	Capacity
E7067-2-1000	1.0L
E7067-2-2500	2.5L

ETHANOL, APPROX. 96%

F



Ethyl alcohol, Methylcarbinol,
Spirit, Spirit of wine

- C_2H_6O
- M = 46.07 g/mol
- CAS [64-17-5]
- EC number: 200-578-6

Physical data:
- Density: 0,81 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -117 °C
- Boiling point: 78 °C
- Flash point: 9 °C
- Ignition temp.: 425 °C
- Vapour pressure: (20 °C) ~59 hPa
- Viscosity: (20 °C) 1,2 mPas
- Dipolar moment: (20 °C) 1,7 Debye
- Dielectric const.: (25 °C) 24,3
- Saturation conc.: (20 °C) 105 g/m³
- Expl. limit (upper): 15 Vol%
- Expl. limit (lower): 3,5 Vol%
- pH (10 g/l H_2O, 20 °C) 7,0

Toxicological data:
- LD 50 (oral, rat): 6200 mg/kg (anhydrous substance)
- MAK: 500 ml/m³ , 960 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-002-00-5
- R: 11
- S: 7-16
- VbF class: B
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 3 F1 II UN 1170
- IMDG: 3 II UN 1170
- IATA/ICAO: 3 II UN 1170
- PAX: 305
- CAO: 307
- LGK: 3 A

E7045-1, Ethanol approx. 96%, reagent grade

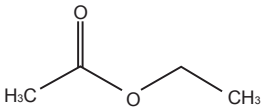
HS-No: 2207 10 00 90

Assay (GC)	95 - 96 %	Tin (Sn)	max. 0.00002 %
Colour	max. 10 Hazen	Zinc (Zn)	max. 0.00002 %
Acidity	max. 0.0005 meq/g	Acetone (G.C.)	max. 0.001 %
Alkalinity	max. 0.0002 meq/g	Iso-amyl alcohol (G.C.)	max. 0.05 %
Aluminium (Al)	max. 0.00005 %	Methanol (G.C.)	max. 0.05 %
Barium (Ba)	max. 0.00002 %	2-Propanol (G.C)	max. 0.003 %
Boron (B)	max. 0.000005 %	Aldehydes (as CH_3CHO)	max. 0.002 %
Cadmium (Cd)	max. 0.00001 %	Carbonyl compounds (as CO)	max. 0.003 %
Calcium (Ca)	max. 0.0001 %	$KMnO_4$ red. Matter (as O)	max. 0.0003 %
Chromium (Cr)	max. 0.000005 %	Substances darkened by H_2SO_4	passes test
Cobalt (Co)	max. 0.000005 %	Furtural	passes test
Copper (Cu)	max. 0.000005 %	Fusel oil	passes test
Iron (Fe)	max. 0.00002 %	Non-volatile matter	max. 0.001 %
Lead (Pb)	max. 0.00002 %	UV spectroscopy	passes test
Magnesium (Mg)	max. 0.00002 %	Water (K.F.)	approx. 5 %
Manganese (Mn)	max. 0.000005 %	Residual solvents (Ph Eur/ICH)	excluded by production process
Nickel (Ni)	max. 0.000005 %		

Code	Capacity
E7045-1-1000	1.0L
E7045-1-2500	2.5L
E7045-1-9025	25L

ETHYL ACETATE

F Xi



Acetic acid ethyl ester,
Acetic ether

- $C_4H_8O_2$
- M = 88.10 g/mol
- CAS [141-78-6]
- EC number: 205-500-4

Physical data:
- Density: 0,90 g/cm³
- Solub. in water (20 °C): 85,3 g/l
- Melting point: -83 °C
- Boiling point: 77 °C
- Flash point: -4 °C
- Ignition temp.: 460 °C
- Vapour pressure: (20 °C) 97hPa
- Refraction index: (n 20 °C/D) 1,3723
- Viscosity: (20 °C) 0,44 mPas
- Dipolar moment: (20 °C) 1,78 Debye
- Dielectric const.: (25 °C) 6,0
- Evap. heat: (77 °C) 427 KJ/kg
- Saturation conc.: (20 °C) 336 g/m³
- Expl. limit (upper): 11,5 Vol%
- Expl. limit (lower): 2,1 Vol%

Toxicological data:
- LD 50 (oral, rat): 5620 mg/kg
- MAK: 400 ml/m³ , 1500 mg/m³
- WGK: 1

Safety:
- EC Index no.: 607-022-00-5
- R: 11-36-66-67
- S: 16-26-33
- VbF class: AI
- Poison class CH (Swiss): 5

Transport/storage:
- ADR: 3 F1 II UN 1173
- IMDG: 3 II UN 1173
- IATA/ICAO: 3 II UN 1173
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

E7100-1, Ethyl acetate, reagent grade

HS-No: 2915 31 00 00

Assay	min. 99.5 %	Lead (Pb)	max. 0.00001 %
Colour	max. 10 Hazen	Magnesium (Mg)	max. 0.00001 %
Free Acid (as CH_3COOH)	max. 0.005 %	Manganese (Mn)	max. 0.000002 %
Aluminium (Al)	max. 0.00005 %	Nickel (Ni)	max. 0.000002 %
Barium (Ba)	max. 0.00001 %	Tin (Sn)	max. 0.00001 %
Boron (B)	max. 0.000002 %	Zinc (Zn)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Ethanol (G.C.)	max. 0.1 %
Calcium (Ca)	max. 0.00005 %	Methanol (G.C.)	max. 0.1 %
Chromium (Cr)	max. 0.000002%	Methyl Acetate (G.C.)	max. 0.1 %
Cobalt (Co)	max. 0.000002 %	Substances darkened by H_2SO_4	passes test
Copper (Cu)	max. 0.000002 %	Non-Volatile matter	max. 0.001 %
Iron (Fe)	max. 0.00001 %	Water	max. 0.05 %

Code	Capacity
E7100-1-1000	1.0 L
E7100-1-2500	2.5 L
E7100-1-2501	2.5 L
E7100-1-4000	4.0 L

E7100-4, Ethyl acetate, HPLC grade

HS-No: 2915 31 00 00

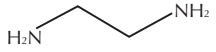
Assay (G.C.)	min. 99.8 %	Substances darkened by H_2SO_4	passes test
Colour	max. 10 Hazen	Non-volatile matter	max. 0.0003 %
Titrable acid	max. 0.0009 %	Water	max. 0.05 %

Maximum absorbance in a 1.0cm cell at wavelength:	Absorbance:
255 nm	1.00
260 nm	0.12
280 nm	0.05
300 nm	0.01
330 nm	0.01
350 nm	0.005

Code	Capacity
E7100-4-2501	2.5 L

ETHYLENEDIAMINE

C



1,2-Ethanediamine,
1,2-Diaminoethane

- $C_2H_8N_2$
- M = 60.10 g/mol
- CAS [107-15-3]
- EC number: 203-468-6

Physical data:
- Density: 0,90 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: 11 °C
- Boiling point: 116 - 118 °C
- Flash point: ~ 36 °C
- Ignition temp.: ~ 400 °C
- Vapour pressure: (20 °C) 12 hPa
- Refraction index: (n 20 °C/D) 1,4540
- Viscosity: (25 °C) 1,54 mPas
- Dielectric const.: (18 °C) 16
- Eva. heat: (116 °C) 700 KJ/kg
- Saturation conc.: (20 °C) 29 g/m³
- Expl. limit (upper): 16,3 Vol%
- Expl. limit (lower): 2,5 Vol%
- pH (250 g/l H_2O, 25 °C) ~ 12

Toxicological data:
- LD 50 (oral, rat): 76 mg/kg
- MAK: 10 ml/m³ , 25 mg/m³
- WGK: 2

Safety:
- EC Index no.: 612-006-00-6
- R: 10-21/22-34-42/43
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 CF1 II UN 1604
- IMDG: 8 II UN 1604
- IATA/ICAO: 8 II UN 1604
- PAX: 808
- CAO: 812
- LGK: 3 A
- Disposal: 5

E7160-2, Ethylenediamine, synthesis grade

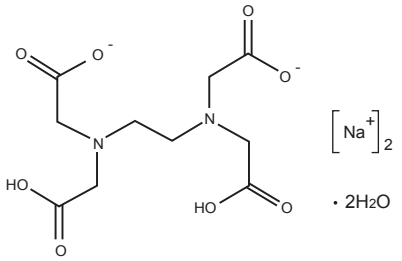
HS-No: 2921 21 00 00

Assay	min. 99 %
Non-volatile matter	max. 0.05 %
Water	max. 0.5 %

Code	Capacity
E7160-2-1000	1.0 L
E7160-2-2500	2.5 L

ETHYLENEDIAMINETETRAACETIC ACID, EDTA, DISODIUM SALT, DEHYDRATE

Xn



Edetic acid disodium salt,
Disodium dihydrogen ethylenediaminetetraacetate

- $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$
- M = 372.24 g/mol
- CAS [6381-92-6]
- EC number: 205-358-3

Physical data:
- Bulk density: ~ 400 - 500 kg/m³
- Solub. in water (20 °C): 100 g/l
- Melting point: 252 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) 4 - 5

Toxicological data:
- LD 50 (oral, rat): 2000 mg/kg
- WGK: 2

Safety:
- R: 22
- S: 46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 3

E7174-1, Ethylenediaminetetraacetic acid, EDTA, disodium salt, dehydrate, reagent grade

HS-No: 2922 49 95 90

Assay (complexometric, referred to anhydrous substance)	min. 99 %	Nitriltriacetic acid	max. 0.05 %
Insoluble in water	max. 0.003 %	Calcium (Ca)	passes test
pH (5%, H_2O)	4 - 5	Copper (Cu)	max. 0.0001 %
Chlorides (Cl)	max. 0.004 %	Iron (Fe)	max. 0.0005 %
Cyanides (Cn)	max. 0.001 %	Heavy metals (as Pb)	max. 0.0005 %
Sulfates (SO_4)	max. 0.01 %	Lead (Pb)	max. 0.001 %
		Loss on drying (150°C, 3h)	9 - 10 %

Code	Capacity
E7174-1-0250	250 g
E7174-1-0500	500 g
E7174-1-1000	1 kg

E7174-3, Ethylenediaminetetraacetic acid, EDTA, disodium salt, dehydrate, synthesis grade

HS-No: 2922 49 95 90

Assay (complexometric, referred to anhydrous substance)	min. 98 %	Sulfates (SO_4)	max. 0.1 %
pH (5%, H_2O)	4 – 5	Heavy metals (as Pb)	max. 0.005 %
Chlorides (Cl)	max. 0.02 %	Lead (Pb)	max. 0.005 %
		Water	9 – 10 %

Code	Capacity
E7174-3-0500	500 g

ETHYLENEDIAMINETETRAACETIC ACID, EDTA, DISODIUM SALT, VOLUMETRIC SOLUTIONS

E7178-0, Ethylenediaminetetraacetic acid, EDTA, disodium salt, solution 0.01 mol/l (0.02N)

HS-No: 2922 49 95 90

Edetic acid disodium salt, Disodium dihydrogen ethylenediaminetetraacetate

- $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$
- M = 372.24 g/mol
- CAS [6381-92-6]
- EC number: 205-358-3

Physical data:
- Density: 0,99 g/cm³

Toxicological data:
- WGK: 1

Transport/storage:
- LGK: 10-13

1 ml = 0.003362 g
$[CH_2N(CH_2COOH)CH_2COONA]_2$

1 ml = 0.003722 g
$[CH_2N(CH_2COOH)CH_2COONA]_2 \cdot 2H_2O$

Code	Capacity
E7178-0-1000	1.0L

E7181-0, Ethylenediaminetetraacetic acid, EDTA, disodium salt, solution 0.02 mol/l (0.04N)

HS-No: 2922 49 95 90

Edetic acid disodium salt, Disodium dihydrogen ethylenediaminetetraacetate

- $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$
- M = 372.24 g/mol
- CAS [6381-92-6]
- EC number: 205-358-3

Physical data:
- Density: 0,99 g/cm³

Toxicological data:
- WGK: 1

Transport/storage:
- LGK: 10-13

1 ml = 0.006724 g
$[CH_2N(CH_2COOH)CH_2COONA]_2$

1 ml = 0.007444 g
$[CH_2N(CH_2COOH)CH_2COONA]_2 \cdot 2H_2O$

Code	Capacity
E7181-0-1000	1.0L

E7182-0, Ethylenediaminetetraacetic acid, EDTA, disodium salt, solution 0.025 mol/l (0.05N)

HS-No: 2922 49 95 90

Edetic acid disodium salt, Disodium dihydrogen ethylenediaminetetraacetate

- $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$
- M = 372.24 g/mol
- CAS [6381-92-6]
- EC number: 205-358-3

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- WGK: 1

Transport/storage:
- LGK: 10-13

1 ml = 0.008405 g
$[CH_2N(CH_2COOH)CH_2COONA]_2$

1 ml = 0.009305 g
$[CH_2N(CH_2COOH)CH_2COONA]_2 \cdot 2H_2O$

Code	Capacity
E7182-0-1000	1.0L

E7183-0, Ethylenediaminetetraacetic acid, EDTA, disodium salt, solution 0.05 mol/l (0.1N)

HS-No: 2922 49 95 90

Edetic acid disodium salt, Disodium dihydrogen ethylenediaminetetraacetate

- $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$
- M = 372.24 g/mol
- CAS [6381-92-6]
- EC number: 205-358-3

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- WGK: 1

Transport/storage:
- LGK: 10-13

1 ml = 0.01681 g $[CH_2N(CH_2COOH)CH_2COONA]_2$

1 ml = 0.01861 g $[CH_2N(CH_2COOH)CH_2COONA]_2 \cdot 2H_2O$

Code	Capacity
E7183-0-1000	1.0L
E7183-0-2501	2.5L

E7185-0, Ethylenediaminetetraacetic acid, EDTA, disodium salt, solution 0.1 mol/l (0.2N)

HS-No: 2922 49 95 90

Edetic acid disodium salt, Disodium dihydrogen ethylenediaminetetraacetate

- $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$
- M = 372.24 g/mol
- CAS [6381-92-6]
- EC number: 205-358-3

Physical data:
- Density: ~ 1,02 g/cm³
- pH (20 °C) ~ 7,5

Toxicological data:
- LD 50 (oral, rat): 2000 mg/kg (EDTA disodium salt)
- WGK: 1

Safety:
- Poison class CH (Swiss): F

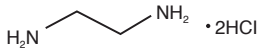
Transport/storage:
- LGK: 10-13

1 ml = 0.03362 g $[CH_2N(CH_2COOH)CH_2COONA]_2$

1 ml = 0.03722 g $[CH_2N(CH_2COOH)CH_2COONA]_2 \cdot 2H_2O$

Code	Capacity
E7185-0-1000	1.0L

ETHYLENEDIAMINE DIHYDROCHLORIDE



1,2-Diaminoethane dihydrochloride, Ethylenediammonium dichloride

- $C_2H_8N_2 \bullet 2HCl$
- M = 133.02 g/mol
- CAS [333-18-6]
- EC number: 206-369-6

Physical data:
- Form: Powder
- Spec. density: 1,11 g/cm³
- Bulk density: 650 kg/m³ ~ 650 kg/m³
- Solub. in water (20 °C): 300 g/l
- pH (100 g/l H_2O, 20 °C) 5

Toxicological data:
- WGK: 2

Safety:
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 3

E7156-1, Ethylenediamine dihydrochloride, reagent grade

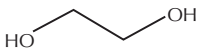
HS-No: 2921 21 00 00

Assay	min. 99.0 %
Solubility test in water	passes test
Residue after ignition (as sulfate)	max. 0.1 %
Heavy metals (as Pb)	max. 0.001 %

Code	Capacity
E7156-1-0100	100 g

ETHYLENE GLYCOL

Xn



1,2-Ethanediol, Glycol

- $C_2H_6O_2$
- M = 62.07 g/mol
- CAS [107-21-1]
- EC number: 203-473-3

Physical data:
- Density: 1,11 g/cm³
- Solub. in water (20 °C): 1000 g/l (miscible)
- Melting point: -13 °C
- Boiling point: (39 hPa) 117 °C
- Flash point: 111 °C
- Ignition temp.: 410 °C
- Vapour pressure: (20 °C) 0,053 hPa
- Viscosity: (20 °C) 21 mPas
- Dielectric const.: (25 °C) 37,7
- Saturation conc.: (20 °C) 0,15 g/m³
- Expl. limit (upper): 12,8 Vol%
- Expl. limit (lower): 1,8 Vol%

Toxicological data:
- LD 50 (oral, rat): 4700 mg/kg
- MAK: 10 ml/m³ , 26 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-027-00-1
- R: 22
- S: 46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 1

E7152-1, Ethylene glycol, reagent grade

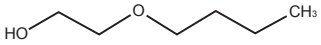
HS-No: 2905 31 00 00

Assay	min. 99.5 %	$KMnO_4$ red. matter (as O)	max. 0.0003 %
Acidity	max. 0.0002 meq/g	Substances darkened by H_2SO_4	passes test
Formaldehyde	max. 0.005 %	Sulfated ash	max. 0.005 %
Chlorides (Cl)	max. 0.00002 %	Water	max. 0.1 %
Iron (Fe)	max. 0.00002 %		

Code	Capacity
E7152-1-1000	1.0 L
E7152-1-2500	2.5 L

ETHYLENE GLYCOL MONOBUTYL ETHER

Xn



2-Butoxyethanol, Butyl glycol

- $C_6H_{14}O_2$
- M = 118.18 g/mol
- CAS [111-76-2]
- EC number: 203-905-0

Physical data:
- Density: 0,9 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -70 °C
- Boiling point: 170 - 172 °C
- Flash point: 63 - 64 °C
- Ignition temp.: 230 °C
- Vapour pressure: (20 °C) 0,8 hPa
- Reflection index: (n 20 °C/D) 1,4193
- Viscosity: (20 °C) 5,31 mPas
- Dielectric const.: (20 °C) 9,4
- Saturation conc.: (20 °C) 5 g/m³
- Expl. limit (upper): 10,3 Vol%
- Expl. limit (lower): 1,9 Vol%
- pH (20 °C) 7

Toxicological data:
- LD 50 (oral, rat): 1480 mg/kg
- MAK: 20 ml/m³ , 98 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-014-00-0
- R: 20/21/22-36/38
- S: 24/25-37-46
- Poison class CH (Swiss): 4

Transport/storage:
- PAX: 611
- CAO: 618
- LGK: 10-13
- Disposal: 1

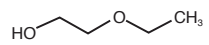
E7135-2, Ethylene glycol monobutyl ether, synthesis grade

HS-No: 2909 43 00 00

Assay	min. 99.0 %	Aluminium (Al)	max. 0.00005 %
Colour	max. 10 APHA	Calcium (Ca)	max. 0.00005 %
Sulfated ash	max. 0.01 %	Iron (Fe)	max. 0.00005 %
Acidity	max. 0.01 %	Magnesium (Mg)	max. 0.00005 %
Water (KF)	max. 0.1 %	Nickel (Ni)	max. 0.00005 %
Non-volatile matter	max. 0.05 %		

Code	Capacity
E7135-2-2500	2.5 L
E7135-2-9025	25 L

ETHYLENE GLYCOL MONOETHYL ETHER



2-Ethoxyethanol, Ethyl glycol, Ethyl cellosolve

- $C_4H_{10}O_2$
- M = 90.12 g/mol
- CAS [110-80-5]
- EC number: 203-804-1

Physical data:
- Form: Liquid
- Density: 0,93 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -100 °C
- Boiling point: 135 °C
- Flash point: 44 °C
- Ignition temp.: 235 °C
- Vapour pressure: (20 °C) ~ 5 hPa
- Refraction index: (n 20 °C/D) 1,4075
- Viscosity: (20 °C) 2,07 mPas
- Dielectric const.: (20 °C) 11,9
- Saturation conc.: (20 °C) 18 g/m³
- Expl. limit (upper): 15,7 Vol%
- Expl. limit (lower): 1,8 Vol%
- pH (20 °C) 7

Toxicological data:
- LD 50 (oral, rat): 2125 mg/kg
- MAK: 5 ml/m³ , 19 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-012-00-X
- R: 60-61-10-E20/21/22
- S: 53-36/37-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 3 F1 III UN 1171
- IMDG: 3 III UN 1171
- IATA/ICAO: 3 III UN 1171
- PAX: 309
- CAO: 310
- LGK: 3 A
- Disposal: 1

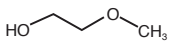
E7154-1, Ethylene glycol monoethyl ether, reagent grade

HS-No: 2909 43 00 00

Assay	min. 99.5 %	Lead (Pb)	max. 0.00001 %
Identity (IR-spectrum)	passes test	Magnesium (Mg)	max. 0.00001 %
Density (20°/4°)	0.929 – 0.930	Manganese (Mn)	max. 0.000002 %
Colour	max. 10 Hazen	Nickel (Ni)	max. 0.000002 %
Acidity	max. 0.001 meq/g	Zinc (Zn)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Acetaldehyde (CH_3CHO)	max. 0.001 %
Calcium (Ca)	max. 0.00005 %	Formaldehyde (HCHO)	max. 0.001 %
Chromium (Cr)	max. 0.000002 %	Peroxides (as H_2O_2)	max. 0.0003 %
Cobalt (Co)	max. 0.000002 %	Non-volatile matter	max. 0.001 %
Copper (Cu)	max. 0.000002 %	Water	max. 0.1 %
Iron (Fe)	max. 0.00001 %		

Code	Capacity
E7154-1-2501	2.5 L

ETHYLENE GLYCOL MONOMETHYL ETHER



2-Methoxyethanol, Methyl glycol, Methyl cellosolve

- $C_3H_8O_2$
- M = 76.10 g/mol
- CAS [109-86-4]
- EC number: 203-713-7

Physical data:
- Form: Liquid
- Density: 0,95 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -85 °C
- Boiling point: 124,5 °C
- Flash point: 39 °C
- Ignition temp.: 285 °C
- Vapour pressure: (20 °C) 11 hPa
- Refraction index: (n 20 °C/D) 1,4021
- Dielectric const.: (20 °C) 15,4
- Evap. heat: (125 °C) 557 KJ/kg
- Saturation conc.: (20 °C) 33 g/m³
- Expl. limit (upper): 20 Vol%
- Expl. limit (lower): 2,5 Vol%

Toxicological data:
- LD 50 (oral, rat): 2370 mg/kg
- MAK: 5 ml/m³ , 16 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-011-00-4
- R: 60-61-10-E20/21/22
- S: 53-36/37-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 3 F1 III UN 1188
- IMDG: 3 III UN 1188
- IATA/ICAO: 3 III UN 1188
- PAX: 309
- CAO: 310
- LGK: 3 A
- Disposal: 1

E7158-1, Ethylene glycol monomethyl ether, reagent grade

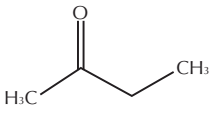
HS-No: 2909 42 00 00

Assay	min. 99.5 %	Iron (Fe)	max. 0.00005 %
Identity (IR-spectrum)	passes test	Lead (Pb)	max. 0.00001 %
Density (20°/4°)	0.964 – 0.968	Magnesium (Mg)	max. 0.00001 %
Colour	max. 10 Hazen	Manganese (Mn)	max. 0.000002 %
Acidity	max. 0.001 meq/g	Nickel (Ni)	max. 0.000002 %
Alkalinity	max. 0.0005 meq/g	Tin (Sn)	max. 0.00001 %
Aluminium (Al)	max. 0.00005 %	Zinc (Zn)	max. 0.00001 %
Barium (Ba)	max. 0.00001 %	Acetaldehyde (CH_3CHO)	max. 0.003 %
Boron (B)	max. 0.000002 %	Formaldehyde	max. 0.001 %
Cadmium (Cd)	max. 0.000005 %	Peroxides (as H_2O_2)	max. 0.002 %
Calcium (Ca)	max. 0.00005 %	Substances darkened by H_2SO_4	passes test
Chromium (Cr)	max. 0.000002 %	Non-volatile matter	max. 0.002 %
Cobalt (Co)	max. 0.000002 %	Water	max. 0.1 %
Copper (Cu)	max. 0.000002 %		

Code	Capacity
E7158-1-2501	2.5 L

ETHYL METHYL KETONE

F Xi



2-Butanone,
Methyl ethyl ketone, MEK

- C_4H_8O
- M = 72.11 g/mol
- CAS [78-93-3]
- EC number: 201-159-0

Physical data:
- Density: 0,80 g/cm³
- Solub. in water (20 °C): 292 g/l
- Melting point: -86 °C
- Boiling point: 79.6 °C
- Flash point: -1 °C
- Ignition temp.: 505 °C
- Vapour pressure: (20 °C) 105 hPa
- Viscosity: (15 °C) 0,42 mPas
- Dipolar moment: (20 °C) 2,7 Debye
- Dielectric const.: (20 °C) 18,5
- Saturation conc.: (20 °C) 310 g/m³
- Expl. limit (upper): 11,5 Vol%
- Expl. limit (lower): 1,8 Vol%
- pH (300 g/l H_2O, 20 °C) ~ 5,5

Toxicological data:
- LD 50 (oral, rat): 2737 mg/kg
- MAK: 200 ml/m³ , 600 mg/m³
- WGK: 1

Safety:
- EC Index no.: 606-002-00-3
- R: 11-36-66-67
- S: 9-16
- VbF class: AI
- Poison class CH (Swiss): 5

Transport/storage:
- ADR: 3 F1 II UN 1193
- IMDG: 3 II UN 1193
- IATA/ICAO: 3 II UN 1193
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

E

E7125-1, Ethyl methyl ketone, reagent grade

HS-No: 2914 12 00 00

Assay	min. 99.5 %	Cobalt (Co)	max. 0.000002 %
Color	max. 10 Hazen	Copper (Cu)	max. 0.000002 %
Acidity	max. 0.0005 meq/g	Chromium (Cr)	max. 0.000002 %
Alkalinity	max. 0.0002 meq/g	Iron (Fe)	max. 0.00001 %
Evaporation residue	max. 0.001 %	Tin (Sn)	max. 0.00001 %
Water	max. 0.05 %	Magnesium (Mg)	max. 0.000005 %
Aluminium (Al)	max. 0.00002 %	Manganese (Mn)	max. 0.000002 %
Barium (Ba)	max. 0.00001 %	Nickel (Ni)	max. 0.000002 %
Boron (B)	max. 0.000002%	Lead (Pb)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Zinc (Zn)	max. 0.00001 %
Calcium (Ca)	max. 0.00005 %		

Code	Capacity
E7125-1-2500	2.5 L
E7125-1-2501	2.5 L
E7125-1-4000	4.0 L
E7125-1-9025	25 L

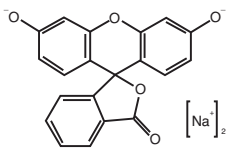
E7125-7, Ethyl methyl ketone, EC-10

HS-No: 2914 12 00 00

Purity (GC)	min. 99.5 %	Gallium (Ga)	max. 20 ppb
Free Acid (as CH_3COOH)	max. 20 ppm	Indium (In)	max. 20 ppb
Spec. resistance	max. 10 M cm	Potassium (K)	max. 100 ppb
Evaporation residue	max. 5 ppm	Lithium (Li)	max. 20 ppb
Water	max. 0.05 %	Magnesium (Mg)	max. 100 ppb
Heavy metals (as Pb)	max. 0.2 ppm	Manganese (Mn)	max. 20 ppb
Silver (Ag)	max. 20 ppb	Molybdenum (Mo)	max. 50 ppb
Aluminium (Al)	max. 200 ppb	Sodium (Na)	max. 500 ppb
Arsenic (As)	max. 10 ppb	Nickel (Ni)	max. 20 ppb
Gold (Au)	max. 100 ppb	Lead (Pb)	max. 50 ppb
Boron (B)	max. 10 ppb	Platinum (Pt)	max. 200 ppb
Barium (Ba)	max. 100 ppb	Antimony (Sb)	max. 10 ppb
Beryllium (Be)	max. 20 ppb	Tin (Sn)	max. 100 ppb
Bismuth (Bi)	max. 100 ppb	Strontium (Sr)	max. 20 ppb
Calcium (Ca)	max. 500 ppb	Titanium (Ti)	max. 100 ppb
Cadmium (Cd)	max. 50 ppb	Thallium (Tl)	max. 50 ppb
Cobalt (Co)	max. 20 ppb	Vanadium (V)	max. 50 ppb
Chromium (Cr)	max. 20 ppb	Zinc (Zn)	max. 100 ppb
Copper (Cu)	max. 20 ppb	Zirconium (Zr)	max. 200 ppb
Iron (Fe)	max. 100 ppb		

Code	Capacity
E7125-7-2500	2.5L

FLUORESCEIN SODIUM



3',6'-Dihydroxyspiro-[isobenzofuran -1-(3H),9'-[9H] xanthen] -3-one, Resorcinolphthalein

- $C_{20}H_{10}Na_2O_5$
- M = 376.28 g/mol
- CAS [518-47-8]
- EC number: 208-253-0

Physical data:
- Form: Solid
- Bulk density: ~ 600 g/m³
- Solub. in water (20 °C): 500 g/l
- Melting point: > 360 °C
- pH (10 g/l, H_2O, 20 °C) ~ 8,3

Toxicological data:
- LD 50 (oral, rat): 6721 mg/kg
- WGK: 3*

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

F4000-01, Fluorescein sodium, C.I. 45350

HS-No: 3204 90 00 00

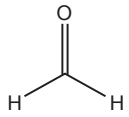
Assay (titr. with $HClO_4$, on dried substance)	min. 95 %	Arsenic (As)	max. 0.005 %
Identity (IR-spectrum)	passes test	Cadmium (Cd)	max. 0.05 %
Absorption maximum (pH 8.0)	490 – 492 nm	Copper (Cu)	max. 0.01 %
Absorptivity (A1%/1cm; λ max, pH 8.0 on dried substance)	1950 – 2150	Lead (Pb)	max. 0.01 %
		Water	max.10 %

Code	Capacity
F4000-01-0025	25 g

F

FORMALDEHYDE, SOLUTION 37 %

T



Formalin solution, Formol, Methanal solution, Methyl aldehyde solution

- CH_2O
- M = 30.03 g/mol
- CAS [50-00-0]
- EC number: 200-001-8

Physical data:
- Density: 1,09 g/cm³
- Melting point: < -15 °C
- Boiling point: 93 - 96 °C
- Flash point: ~ 62 °C
- Ignition temp.: ~ 300 °C (pure substance)
- Vapour pressure: 1,3 hPa (formaldehyde)
- Expl. limit (upper): 73 Vol% (formaldehyde)
- Expl. limit (lower): 7 Vol% (formaldehyde)
- pH (20 °C) 3 - 4

Toxicological data:
- LD 50 (oral, rat): 100 mg/kg (formaldehyde)
- MAK: 0,5 ml/m³ , 0,62 mg/m³
- WGK: 2

Safety:
- EC Index no.: 605-001-00-5
- R: 23/24/25-34-39/23/24/25-40-43
- S: 26-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C9 III UN 2209
- IMDG: 8 III UN 2209
- IATA/ICAO: 8 III UN 2209
- PAX: 818
- CAO: 820
- LGK: 6.1A
- Disposal: 7

F5023-1, Formaldehyde solution 37%, reagent grade, stabilized with with approx. 10% methanol

HS-No: 2912 11 00 00

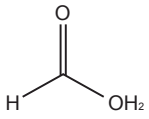
Assay (acidimetric after oxidation)	37.0 - 38.0 %	Heavy metals (as Pb)	≤ 0.0005 %
Identity	passes test	Iron (Fe)	≤ 0.0005 %
Colour	passes test	Methanol (GC)	9.0 - 11.0 %
Free acid as (HCOOH)	≤. 0.03 %	Others residual solvents (Ph Eur/ICH)	Excluded by production process
Density (d 20°C / 4°C)	1.08 - 1.09 g/ml	Sulfated ash	≤ 0.1 %
Chloride (Cl)	≤ 0.001 %		

Code	Capacity
F5023-1-1000	1.0L
F5023-1-2500	2.5L

FORMAMIDE

T

Methanamide, Methane amide, Carbamaldehyde, Formic acid amide



- CH_3NO
- M = 45.04 g/mol
- CAS [75-12-7]
- EC number: 200-542-0

Physical data:
- Form: Liquid
- Density: 1.13g/cm³
- Solub. in water (20 °C): miscible
- Melting point: 2 °C
- Boiling point: 210 °C
- Flash point: 175 °C
- Ignition temp.: 500 °C
- Vapour pressure: (20 °C) 0.08 hPa
- Dipolar moment: (20 °C) 3.4 Debye
- Dielectric const.: (20 °C) 109.5
- Saturation conc.: (20 °C) 0.24 g/m³
- Expl. limit (upper): 19.0 Vol%
- Expl. limit (lower): 2.7 Vol%
- pH (200 g/l H_2O, 20 °C) 4 - 5

Toxicological data:
- LD 50 (oral, rat): 5800 mg/kg
- WGK: 1

Safety:
- R: 61
- S: 53-24/25-37-45
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 6.1 A
- Disposal: 1

F5040-1, Formamide, reagent grade

HS-No: 2924 19 00 90

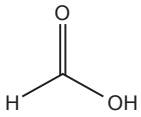
Assay (as N)	min. 99 %	Iron (Fe)	max. 0.0001 %
Identity (IR-spectrum)	passes test	Lead (Pb)	max. 0.0001 %
Density (20º/4º)	1.132 – 1.135	Zinc (Zn)	max. 0.0001 %
Colour	max. 10 Hazen	Formic acid	max. 0.02 %
Melting point	2.0 – 3.0 ºC	Ammonium formate	max. 0.1 %
Chloride (Cl)	max. 0.0001 %	Sulfated Ash (600ºC)	max. 0.005 %
Cadmium (Cd)	max. 0.0001 %	Water	max. 0.1 %
Copper (Cu)	max. 0.0001 %		

Code	Capacity
F5040-1-2501	2.5 L

FORMIC ACID, 85%

C

Methanoic acid, Formylic acid



- CH_2O_2
- M = 46.03 g/mol
- CAS [64-18-6]
- EC number: 200-579-1

Physical data:
- Form: Liquid
- Density: ~ 1.2 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ -9 °C
- Boiling point: ~ 107 °C
- Expl. limit (upper): 45.5 Vol%
- Expl. limit (lower): 10 Vol%

Toxicological data:
- LD 50 (oral, rat): 730 mg/kg (pure substance)
- MAK: 5 ml/m³ , 9.5 mg/m³

Safety:
- EC Index no.: 607-001-00-0
- R: 34
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C3 II UN 1779
- IMDG: 8 II UN 1779
- IATA/ICAO: 8 II UN 1779
- PAX: 808
- CAO: 812

F5033-3, Formic acid 85%, extra pure

HS-No: 2915 11 00 00

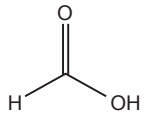
Assay (acidimetric)	min. 85 %	Iron (Fe)	max. 0.001 %
Chlorides (Cl)	max. 0.002 %	Lead (Pb)	max. 0.001 %
Sulfates (SO_4)	max. 0.005 %	Nickel (Ni)	max. 0.001 %
Ammonium (NH_4)	max. 0.01 %	Non-volatile matter	max. 0.01 %
Copper (Cu)	max. 0.001 %		

Code	Capacity
F5033-3-2501	2.5 L

FORMIC ACID, 98-100 %

C

Methanoic acid, Formylic acid



- CH_2O_2
- M = 46.03 g/mol
- CAS [64-18-6]
- EC number: 200-579-1

Physical data:
- Form: Liquid
- Density: 1,22 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ 8 °C
- Boiling point: 101 °C
- Flash point: 48 °C
- Ignition temp.: 480 °C
- Vapour pressure: (20 °C) 42 hPa
- Refraction index: (n 20 °C/D) 1,3714
- Dielectric const.: (16 °C) 58,5
- Evap. heat: (101 °C) 900 KJ/kg
- Saturation conc.: (20 °C) 80 g/m³
- Expl. limit (upper): 38 Vol%
- Expl. limit (lower): 12 Vol%
- pH (10 g/l H_2O, 20 °C) 2,2

Toxicological data:
- LD 50 (oral, rat): 730 mg/kg
- MAK: 5 ml/m³ , 9,5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 607-001-00-0
- R: 35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C3 II UN 1779
- IMDG: 8 II UN 1779
- IATA/ICAO: 8 II UN 1779
- PAX: 808
- CAO: 812
- LGK: 8 A
- Disposal: 4

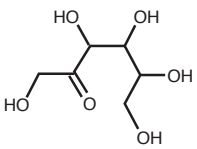
F5035-1, Formic acid 98-100%, reagent grade

HS-No: 2915 11 00 00

Assay (acidimetric)	min. 98 %	Iron (Fe)	max. 0.0002 %
Colour	max. 10 Hazen	Germanium (Ge)	max. 0.000005 %
Acetic acid (CH_3COOH)	max. 0.005 %	Lithium (Li)	max. 0.000002 %
Chlorides (Cl)	max. 0.0005 %	Magnesium (Mg)	max. 0.00005 %
Oxalates (C_2O_4)	max. 0.005 %	Manganese (Mn)	max. 0.000005 %
Sulfates (SO_4)	max. 0.0005 %	Molybdenum (Mo)	max. 0.000002 %
Sulfites (SO_3)	max. 0.001 %	Nickel (Ni)	max. 0.000005 %
Silver (Ag)	max. 0.000002 %	Lead (Pb)	max. 0.000002 %
Aluminium (Al)	max. 0.000005 %	Potassium (K)	max. 0.00001 %
Ammonium (NH_4)	max. 0.001 %	Sodium (Na)	max. 0.00005 %
Barium (Ba)	max. 0.000005 %	Strontium (Sr)	max. 0.000002 %
Beryllium (Be)	max. 0.000002 %	Titanium (Ti)	max. 0.00001 %
Bismuth (Bi)	max. 0.00001 %	Thallium (Tl)	max. 0.000005 %
Cadmium (Cd)	max. 0.000005 %	Vanadium (V)	max. 0.000005 %
Calcium (Ca)	max. 0.00002 %	Zinc (Zn)	max. 0.000005 %
Cobalt (Co)	max. 0.000002 %	Zirconium (Zr)	max. 0.00001 %
Copper (Cu)	max. 0.000002 %	Non-volatile matter	max. 0.001 %
Chromium (Cr)	max. 0.000005 %		

Code	Capacity
F5035-1-2501	2.5L

D(-)-FRUCTOSE



- $C_6H_{12}O_6$
- M = 180.16 g/mol
- CAS [57-48-7]
- EC number: 200-333-3

Physical data:
- Spec. density: ~ 1.65 g/cm³ (20 °C)
- Solub. in water 500 g/l (20 °C)
- pH value ~ 5 - 6 (100 g/l H_2O, 20 °C)
- Melting point: 100 - 110 °C (decomposition)
- Bulk density ~ 700 - 800 kg/m³

Toxicological data:
- WGK: nwg

Safety:
- Poison class CH: F

Transport/storage:
- LGK: 10-13

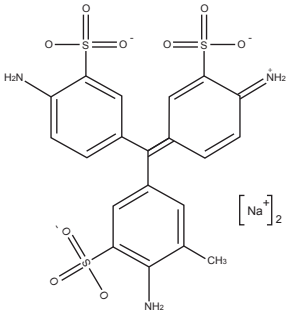
F1000-3, D(-)-Fructose, extra pure

HS-No: 1702 50 50 00

Code	Capacity
F1000-3-0500	500 g

Assay ($C_6H_{12}O_6$)	98.5 – 102.0 %
Identity (IR-spectrum)	passes test
Appearance of solution (50%, water)	passes test
Insoluble in water	passes test
Specific rotation ([α]20°/D, c = 10, water)	-91.0 – -93.5
Chloride (Cl)	max. 0.005 %
Sulfates (SO_4)	max. 0.005 %
Arsenic (As)	max. 0.0001 %
Barium (Ba)	max. 0.005 %
Calcium (Ca)	max. 0.002 %
Calcium and magnesium (as Ca)	max. 0.005 %
Copper (Cu)	max. 0.001 %
Heavy metals (as Pb)	max. 0.0005 %
Iron (Fe)	max. 0.001 %
Lead (Pb)	max. 0.00005 %
Magnesium (Mg)	max. 0.002 %
Nickel (Ni)	max. 0.001 %
Foreign sugars	passes test
Glucose (HPLC)	max. 0.5 %
5-Hydroxymethyfurfural and related substances	passes test
Sulfated ash	max 0.1 %
Water	max. 0.5 %
Residual solvents (Ph Eur/ICH) class 3	max. 0.5 %
Other residual solvents (Ph Eur/ICH)	excluded by production process

FUCHSIN ACID, C.I. 42685



- $C_{20}H_{17}N_3Na_2O_9S_3$
- M = 585.54 g/mol
- CAS [3244-88-0]
- EC number: 221-816-5

Physical data:
- Form: Solid
- Bulk Density: ~ 920 kg/cm³
- Solub. in water (20 °C): 200 g/l
- Melting point: > 130 °C (decomposes)
- pH (10 g/l H_2O, 20 °C) ~ 3 - 4

Transport/storage:
- LGK: 10-13

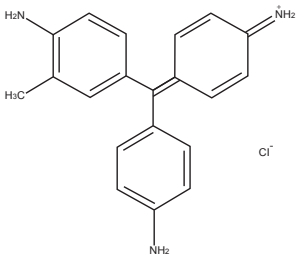
F6001-0, Fuchsin acid, C.I. 42685

HS-No: 3204 12 00 00

Code	Capacity
F6001-0-0025	25 g

Absorption maximum λ (in HCl 0.005 mol/l)	540 – 545 nm
Absorptivity (A1%/1cm,λ max.)	800 – 1300
Loss on drying (135°C)	max. 10 %

FUCHSIN BASIC C.I. 42510



- $C_{20}H_{20}ClN_3$
- M = 337.85 g/mol
- CAS [632-99-5]
- EC number: 211-189-6

Physical data:
- Form: Solid
- Density: ~ 500 kg/cm³
- Solub. in water (25 °C): 4 g/l
- Melting point: ~ 235 °C (decomposes)
- pH (1 g/l H_2O, 25 °C) 5 - 6

Toxicological data:
- WGK: 3

Transport/storage:
- LGK: 10-13

F6000-9, Fuchsin basic C.I. 42510

HS-No: 3204 13 00 00

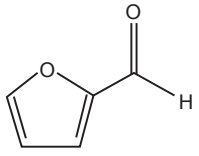
Code	Capacity
F6000-9-0025	25 g

Absorption maximum λ (in ethanol 50%)	549 – 552 nm
Absorptivity (A1%/1cm,λ max.)	1600– 2250
Loss on drying (135°C)	max. 15 %

FURFURAL

T

2-Furaldehyde, 2-Furancarbaldehyde, Furymethanal



- $C_5H_4O_2$
- M = 96.09 g/mol
- CAS [98-01-1]
- EC number: 202-627-7

Physical data:
- Form: Liquid
- Density: 1.16 g/cm³
- Solub. in water (20 °C): 83 g/l
- Melting point: -37 °C
- Boiling point: 162 °C
- Flash point: 60 °C
- Ignition temp.: 315 °C
- Vapour pressure: (20 °C) 1 hPa
- Dielectric const.: (20 °C) 41.9
- Saturation conc.: (20 °C) 5.8 g/m³
- Expl. limit (upper): 19.3 Vol%
- Expl. limit (lower): 2.1 Vol%

Toxicological data:
- LD 50 (oral, rat): 65 mg/kg
- WGK: 2

Safety:
- EC Index no.:605-010-00-4
- R: 21-23/25-36/37-40
- S: 26-36/37/39-45
- Vbc class : All
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 TF1 II UN 1199
- IMDG: 6.1 II UN 1199
- IATA/ICAO: 6.1 II UN 1199
- PAX: 609
- CAO: 611
- LGK: 3 B
- Disposal: 9

Applications: Analytacal chemistry, for the detection of: aromatic amines, insectide, fungicide, solvents.

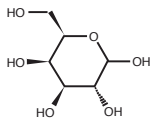
F6005-1, Furfural, reagent grade

HS-No: 2932 12 00 00

Code	Capacity
F6005-1-0501	500 ml

Assay	min. 98 %
Identity (IR-spectrum)	passes test
Density (20°/4°)	1.158 – 1.160
Sulfated ash	max. 0.005 %
Water	max. 0.05 %

D(+)-GALACTOSE



Lactoglucose, D-Galactopyranose

- $C_6H_{12}O_6$
- M = 180.16 g/mol
- CAS [59-23-4]
- EC number: 200-416-4

Physical data:
- Form: Solid
- Spec. density: 1,5 g/cm³
- Bulk density:~ 600 kg/m³
- Solub. in water (20 °C): 650 g/l
- Melting point: 163 - 169 °C
- pH (H_2O, 20 °C) 4,5 - 6,0

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

G1000-3, D(+)-Galactose, extra pure

HS-No: 2940 00 00 80

Identity (IR-spectrum)	passes test	Heavy metals (as Pb)	max. 0.0005 %
Acidly or alkalinely reacting impurities	passes test	Lead (Pb)	max. 0.00005 %
Specific rotation ([α] 20°/D, 10% water, referred to anhydrous substance)	+ 79 - +81°	Sulfated ash	max. 0.1 %
Barium (Ba)	passes test	Related substances (TLC)	passes test
Calcium (Ca)	max. 0.01 %	Loss on drying (105°C)	max. 0.2 %

Code	Capacity
G1000-3-0250	250 g

G

GELATINE POWDER

Gelatine powder

- CAS [9000-70-8]
- EC number: 232-554-6

Physical data:
- Bulk density: ~ 580 kg/m³
- Solub. in water: soluble in hot water
- Boiling point: 100 °C

Toxicological data:
- LD 50 (oral, rat): > 5000 mg/kg
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

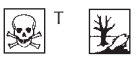
G2001-1, Gelatine powder, reagent grade

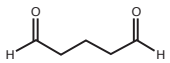
HS-No: 3503 00 10 00

pH (1%, H_2O)	3.8 - 7.6	Peroxides (as H_2O_2)	max. 0.01 %
Sulphur dioxide (SO_2)	max. 0.005 %	Sulfated ash	max. 2 %
Arsenic (As)	max. 0.0001 %	Loss on drying	max. 15 %
Heavy metals (as Pb)	max. 0.001 %	Suitability for microbiology	passes test

Code	Capacity
G2001-1-0500	500 g

GLUTARDIALDEHYDE SOLUTION 25%,





Pentanedial, Glutaraldehyde, Glutaric dialdehyde

- $C_5H_8O_2$
- M = 100.12 g/mol
- CAS [111-30-8]
- EC number: 203-856-5

Physical data:
- Form: Liquid
- Density: 1,06 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -7 °C
- Boiling point: ~ 100 °C

Toxicological data:
- LD 50 (oral, rat): 134 mg/kg (pure substance)
- MAK: 0,05 ml/mlm³, 0,21 mg/m³
- WGK: 2

Safety:
- EC Index no.: 605-022-00-X
- R: 22-23-34-42/43/50
- S: 26-36/37/39-45-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 TC1 II UN 2927
- IMDG: 6.1 II UN 2927
- IATA/ICAO: 6.1 II UN 2927
- PAX: 609
- CAO: 611
- LGK: 6.1 B
- Disposal: 7

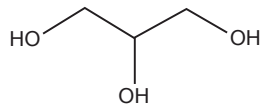
G3001-1, Glutardialdehyde solution 25%, reagent grade

HS-No: 2912 19 00 00

Assay (methanol of bisulfite)	approx. 25.0 %
Density (20°/4°)	1.060 – 1.065

Code	Capacity
G3001-1-0500	500 ml

GLYCEROL



Glycerin, 1,2,3-Propanetriol

- $C_3H_8O_3$
- M = 92.10 g/mol
- CAS [56-81-5]
- EC number: 200-289-5

Physical data:
- Density: 1,26 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: 18 °C
- Boiling point: (0,09 hPa) 120 °C
- Flash point: 199 °C
- Ignition temp.: 400 °C
- Vapour pressure: (20 °C) < 0,001 hPa
- Expl. limit (lower): 0,9 Vol%
- pH (100 g/l H_2O, 20 °C) ~ 5

Toxicological data:
- LD 50 (oral, rat): 12600 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 1

G4018-1, Glycerol 99.5%, reagent grade AR

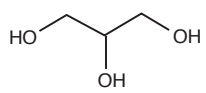
HS-No: 2905 45 00 00

Assay (acidimetric)	min. 99.5 %	Heavy Metals (as Pb)	max. 0.0005 %
Insoluble in water	passes test	Iron (Fe)	max. 0.0005 %
Acidity/alkalinity	passes test	Lead (Pb)	max. 0.001 %
Halogen Compounds (as Cl)	max. 0.003 %	Nickel (Ni)	max. 0.0005 %
Chloride (Cl)	max. 0.001 %	Zinc (Zn)	max. 0.001 %
Sulfates (SO_4)	max. 0.001 %	Aldehydes (HCHO)	max. 0.0005 %
Ammonium (NH_4)	max. 0.0015 %	1,2,4-butantriol (G.C)	max. 0.2 %
Arsenic (As)	max. 0.0001 %	Sulfated Ash	max. 0.01 %
Copper (Cu)	max. 0.001 %	Water	max. 2 %

Code	Capacity
G4018-1-1000	1.0L
G4018-1-2500	2.5L

GLYCEROL ANHYDROUS

Glycerin, 1,2,3-Propanetriol



- $C_3H_8O_3$
- M = 92.10 g/mol
- CAS [56-81-5]
- EC number: 200-289-5

Physical data:
- Form: Liquid
- Density: 1,26 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: 18 °C
- Boiling point: (0,09 hPa) 120 °C
- Flash point: 199 °C
- Ignition temp: 400 °C
- Vapour pressure: (20 °C) < 0,001 hPa
- Expl. limit (lower): 0,9 Vol%
- pH (100 g/l H_2O, 20 °C) ~ 5

Toxicological data:
- LD 50 (oral, rat): 12600 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 1

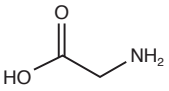
G4018-8, Glycerol anhydrous, molecular biology grade

HS-No.: 2905 45 00 00

Assay	min. 99 %	Arsenic (As)	max. 0.0003 %
Specific gravity	1.249	Heavy Metals (as Pb)	max. 0.0005 %
Ash	max. 0.01 %	RNase, DNase, Protease activity	none detected

Code	Capacity
G4018-8-0100	1.0 L

GLYCINE



Aminoacetic acid, Glycocoll

- $C_2H_5NO_2$
- M = 75.07 g/mol
- CAS [56-40-6]
- EC number: 200-272-2

Physical data:
- Form: Solid
- Spec. density: 1,595 g/cm³
- Bulk density: ~ 920 kg/m³
- Solub. in water (20 °C): 225 g/l
- Melting point: 232 - 236 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) 5,9 - 6,4

Toxicological data:
- LD 50 (oral, rat): 7930 mg/kg
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

G4020-3, Glycine, extra pure

HS-No.: 2922 49 10 00

Assay (titr. with $HClO_4$)	99 – 101 %	Ammonium (NH_4)	max. 0.02 %
Appearance of solution (10%, water)	passes test	Heavy metals (as Pb)	max. 0.001 %
pH (5%, H_2O)	5.9 – 6.4	Sulfated Ash	max. 0.1 %
Hydrolizable substances	passes test	Loss on drying (105ºC)	max. 0.2 %
Other aminoacids	max. 0.1 %	Organic volatile impurities (USP)	passes test
Other ninhydrin positive substance (as glycine)	max. 0.1 %	Residual solvents (Ph Eur) class 2 (Methanol)	max. 0.3 %
Chlorides (Cl)	max. 0.005 %	Other residual solvents (Ph Eur/ICH)	Excluded by production process
Sulfates (SO_4)	max. 0.005 %		

Code	Capacity
G4020-3-0500	500 g

GOLD STANDARD SOLUTION 1000MG/L FOR AA

G1001-0, Gold standard solution 1000mg/l for AA (gold (III) trichloride acid in hydrochloric acid 2 mol/l)

HS-No.: 3822 00 00 00

1 ml = 1000±5 mg/l

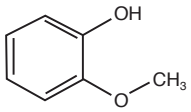
Physical data:
- Solub. in water (20 °C): miscible
- pH (20 °C) < 1

Code	Capacity
G1001-0-0500	500 ml

GUAIACOL

Xn

O-Methoxyphenol, Methylcatechol, 1-Hydroxy-2-methoxybenzene, 2-Methoxyphenol, Pyrocatechol monomethyl ether, 2-Hydroxyanisole



- $C_7H_8O_2$
- M = 124.14 g/mol
- CAS [90-05-1]
- EC number: 201-964-7

Physical data:
- Form: Solid
- Density: 1,13 g/cm³
- Solub. in water (30 °C): 15 g/l
- Melting point: 28 - 32 °C
- Boiling point: 205 °C
- Flash point: 82 °C
- Ignition temp.: 750 °C
- Vapour pressure: (25 °C) 0,1 hPa
- pH (10 g/l H_2O, 20 °C) 5,4

Toxicological data:
- LD 50 (oral, rat): 520 mg/kg
- WGK: 1

Safety:
- EC Index no.: 604-031-00-6
- R: 22-36/38
- S: 26-46
- VbF class: AIII
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 T1 III UN 2810
- IMDG: 6.1 III UN 2810
- IATA/ICAO: 6.1 III UN 2810
- PAX: 611
- CAO: 618
- LGK: 3 B

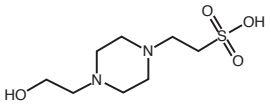
G5000-1, Guaiacol, reagent grade

HS-No.: 2929 50 10 00

Assay	min. 99 %	Sulfated Ash	max. 005 %
Identity (IR-spectrum)	passes test	Water	max. 0.3 %

Code	Capacity
G5000-1-0101	100 ml

HEPES



4-(2-Hydroxyethyl)-1piperazineethanesulfonic acid, N-(2-Hydroxyethyl)-piperazine-N'-(2-ethaneusulfonic acid)

- $C_8H_{18}N_2O_4S$
- M = 238.3 g/mol
- CAS [7365-45-9]
- EC number: 230-907-9

Physical data:
- Form: Solid
- Bulk density: ~ 560 kg/m³
- Solub. in water (20 °C): 400 g/l
- Melting point: 210 - 215 °C
- pH (100 g/l H_2O, 20 °C) 5,0 - 5,5

Toxicological data:
- WGK: 1

Transport/storage:
- LGK: 10-13
- Disposal: 3

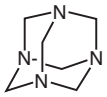
H2007-8, HEPES, high purity grade

HS-No: 2933 59 95 90

Assay	min. 99 %
pKa (20ºC)	7.55

Code	Capacity
H2007-8-0500	500 g

HEXAMETHYLENETETRAMINE



Hexamine, Methenamine, Formin, Urotropin

- $C_6H_{12}N_4$
- M = 140.19 g/mol
- CAS [100-97-0]
- EC number: 202-905-8

Physical data:
- Form: Solid
- Spec. density: 1,33 g/cm³
- Bulk density: ~ 600 kg/m³
- Solub. in water (20 °C): 100 g/l
- pH (100 g/l H_2O, 20 °C) 7,0 - 9,0

Toxicological data:
- LD 50 (oral, rat): 9200 mg/kg
- WGK: 1

Safety:
- EC Index no.: 612-101-00-2
- R: 11-42/43
- S: 16-22-24-37-45
- Poison class CH (Swiss): 5

Transport/storage:
- ADR: 4.1 F1 III UN 1328
- IMDG: 4.1 III UN 1328
- IATA/ICAO: 4.1 III UN 1328
- PAX: 419
- CAO: 420
- LGK: 4.1 B
- Disposal: 3

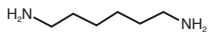
H6001-1, Hexamethylenetetramine, reagent grade

HS-No: 2933 69 20 00

Assay	min. 99 %	Chloride (Cl)	max. 0.001 %
pH value (100g/ml. 25ºC)	8.5 – 9.5	Sulfate (SO_4)	max. 0.001 %
Appearance of solution	passes test	Ammonium (NH_4)	max. 0.001 %
Insolubility matter in water	max. 0.02 %	Iron (Fe)	max. 0.001 %
Residue after ignition (as Sulfate)	max. 0.01 %	Heavy Metals (as Pb)	max. 0.0005 %

Code	Capacity
H6001-1-1000	1 kg

1,6-HEXANEDIAMINE



1,6-Hexanediamine, Hexamethylenediamine

- $C_6H_{16}N_2$
- M = 116.21 g/mol
- CAS [124-09-4]
- EC number: 204-679-6

Physical data:
- Vapour pressure 2 hPa (50 °C)
- Spec. density: 0.83 g/cm³ (60 °C)
- Explosive limit: 0.9 - 7.6 Vol%
- Flash point: 85 °C
- Solub. in water: 490 g/l (20 °C)
- pH value 12 (100 g/l H_2O, 20 °C)
- Melting point: 39 - 42 °C
- Boiling point: 199 - 204 °C
- Ignition temp.: 305 °C

Toxicological data:
- LD 50 (oral, rat): 850 mg/kg
- WGK: 1

Safety:
- EC Index no.: 612-104-00-9
- Harmful, corrosive
- Poison class (CH) 2
- R: 21/22-34-37
- S: 22-26-36/37/39-45

Transport/storage:
- Packing-cat M
- Road/Rail: 8/52 c
- IMDG-Code: 8/III UN 2280
- IATA/DGR: 8 III UN 2280
- PAX: 822
- CAO: 823
- LGK: 8
- Disposal: 3

H1001-1, 1,6-Hexanediamine, reagent grade

HS-No: 2921 22 00 00

Assay	min. 99 %
Melting range	39 – 42 ºC
Identity (IR)	conforms

Code	Capacity
H1001-1-0500	500 ml

HYDRAZINE HYDRATE, 60%

Hydrazinium hydroxide

- $N_2H_4 \cdot H_2O$
- M = 50.06 g/mol
- CAS [10217-52-4]
- EC number: 206-114-9

Physical data:
- Density: 1,03 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -60 °C
- Boiling point: 117 - 119 °C
- Flash point: 91 °C
- Ignition temp.: 310 °C
- Vapour pressure: (20 °C) 13 hPa
- Viscosity: (20 °C) 1,33 mPas
- Expl. limit (upper): 100 Vol%
- Expl. limit (lower): 4,7 Vol%
- pH (510 g/l H_2O, 20 °C) > 12

Toxicological data:
- LD 50 (oral, rat): 129 mg/kg
- WGK: 3

Safety:
- R: 45-E23/24/25-34-43-50/53
- S: 53-26-36/37/39-45-60-61
- Poison class CH (Swiss): 1*

Transport/storage:
- ADR: 8 CT1 II UN 2030
- IMDG: 8 II UN 2030
- IATA/ICAO: Forbidden UN 2030
- PAX: F
- CAO: 812
- LGK: 6.1A
- Disposal: 9

H8010-9, Hydrazine hydrate 60%, TG

HS-No: 2825 10 00 00

Assay	min. 60.0 %	Copper (Cu)	max. 5 %
Specific Gravity (25°C)	1.0190 g/cm³	Appearance	Clear, colourless liquid
Visosity (25°C)	1.5 mPas	Solubility in water	Completely soluble
Chloride (Cl)	max. 0.1 %		

Code	Capacity
H8010-9-920E	200 kg

HYDRAZINE SULFATE

 T  N

Hydrazinium sulfate, Hydrazonium sulfate

- $N_2H_4 \bullet H_2SO_4$
- M = 130.12 g/mol
- CAS [10034-93-2]
- EC number: 233-110-4

Physical data:
- Form: Solid
- Spec. density: ~1,37 g/cm³
- Bulk density: ~ 450 kg/m3
- Solub. in water (20 °C): 30 g/l
- Melting point: 254 °C (decomposes)
- pH (50 g/l H2O, 20 °C) 1,5

Toxicological data:
- LD 50 (oral, rat): 601 mg/kg
- WGK: 3

Safety:
- EC Index no.: 007-014-00-6
- R: 45-E23/24/25-43-50/53
- S: 53-36/37-45-60-61
- Poison class CH (Swiss): 1*

Transport/storage:
- ADR: 6.1 T5 III UN 3288
- IMDG: 6.1 III UN 3288
- IATA/ICAO: 6.1 III UN 3288
- PAX: 619
- CAO: 619
- LGK: 6.1 B
- Disposal: 9

H8014-1, Hydrazine sulfate, reagent grade

HS-No: 2825 10 00 00

Assay	min. 99.0 %	Heavy metals (as Pb)	max. 0.0005 %
Insoluble in water	max. 0.005 %	Iron (Fe)	max. 0.001 %
Chloride (Cl)	max. 0.0005 %	Sulfated Ash	max. 0.02 %
Ammonium (NH_4)	max. 0.04 %		

Code	Capacity
H8014-1-0500	500 g

HYDROCHLORIC ACID 20%

 C

Hydrogen chloride solution

- HCl
- M = 36.461 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Physical data:
- Form: Liquid
- Density: ~1,1 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ -70 °C
- Boiling point: 107 °C
- Vapour pressure: (20 °C) 12 hPa
- pH (20 °C) < 1

Toxicological data:
- MAK: 2ml/m³, 3,0 mg/m³
- WGK: 1

Safety:
- EC Index no.: 017-002-01-X
- R: 34-37
- S: 26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C1 II UN 1789
- IMDG: 8 II UN 1789
- IATA/ICAO: 8 II UN 1789
- PAX: 809
- CAO: 813
- LGK: 8 B
- Disposal: 12

Special regulations:
- Drug precursor, cat: 3

H8000-1, Hydrochloric acid 20%, reagent grade

HS-No: 2806 10 00 00

Assay	min. 20 %	Gallium (Ga)	max. 0.02 ppm
Colour	max. 10 Hazen	Indium (In)	max. 0.02 ppm
Bromide (Br)	max. 50 ppm	Potassium (K)	max. 0.1 ppm
Free Chlorine (Cl)	max. 0.5 ppm	Lithium (Li)	max. 0.02 ppm
Phosphate (PO_4)	max. 0.5 ppm	Magnesium (Mg)	max. 0.1 ppm
Sulfate (SO_4)	max. 0.5 ppm	Manganese (Mn)	max. 0.02 ppm
Sulphite (SO_3)	max. 1 ppm	Molybdenum (Mo)	max. 0.05 ppm
Arsenic and Antimony (as As)	max. 0.01 ppm	Ammonium (NH_4)	max. 2 ppm
Silver (Ag)	max. 0.02 ppm	Sodium (Na)	max. 0.5 ppm
Aluminium (Al)	max. 0.05 ppm	Nickel (Ni)	max. 0.02 ppm
Gold (Au)	max. 0.1 ppm	Lead (Pb)	max. 0.02 ppm
Boron (B)	max. 0.05 ppm	Platinum (Pt)	max. 0.2 ppm
Barium (Ba)	max. 0.05 ppm	Tin (Sn)	max. 0.1 ppm
Beryllium (Be)	max. 0.02 ppm	Strontium (Sr)	max. 0.1 ppm
Bismuth (Bi)	max. 0.1 ppm	Titanium (Ti)	max. 0.1 ppm
Calcium (Ca)	max. 0.5 ppm	Thallium (Tl)	max. 0.05 ppm
Cadmium (Cd)	max. 0.05 ppm	Vanadium (V)	max. 0.05 ppm
Cobalt (Co)	max. 0.02 ppm	Zinc (Zn)	max. 0.1 ppm
Chromium (Cr)	max. 0.02 ppm	Zirconium (Zr)	max. 0.1 ppm
Copper (Cu)	max. 0.02 ppm	Residue after ignition (as Sulfate)	max. 5 ppm
Iron (Fe)	max. 0.2 ppm		

Code	Capacity
H8000-1-1000	1.0 L

HYDROCHLORIC ACID, 37%

 C

Hydrogen chloride solution, Hydrochloric acid fuming

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Physical data:
- Density: ~1,19 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -28 °C
- Boiling point: ~ 50 °C
- Vapour pressure: (20 °C) 190 hPa
- pH (20 °C) < 1

Toxicological data:
- MAK: 5 ml/m³ , 7,6 mg/m³
- WGK: 1

Safety:
- EC Index no.: 017-002-01-X
- R: 34-37
- S: 26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C1 II UN 1789
- IMDG: 8 II UN 1789
- IATA/ICAO: 8 II UN 1789
- PAX: 809
- CAO: 813
- LGK: 8 B
- Disposal: 12

H8040, Hydrochloric acid 37%, reagent grade

HS-No: 2806 10 00 00

Assay	37 ± 1.0 %	Gallium (Ga)	max. 0.02 ppm
Colour	max. 10 Hazen	Indium (In)	max. 0.02 ppm
Bromide (Br)	max. 50 ppm	Potassium (K)	max. 0.1 ppm
Free Chlorine (Cl)	max. 0.5 ppm	Lithium (Li)	max. 0.02 ppm
Phosphate (PO_4)	max. 0.5 ppm	Magnesium (Mg)	max. 0.1 ppm
Sulfate (SO_4)	max. 0.5 ppm	Manganese (Mn)	max. 0.02 ppm
Sulphite (SO_3)	max. 1 ppm	Molybdenum (Mo)	max. 0.05 ppm
Arsenic and Antimony (as As)	max. 0.01 ppm	Ammonium (NH_4)	max. 2 ppm
Silver (Ag)	max. 0.02 ppm	Sodium (Na)	max. 0.5 ppm
Aluminium (Al)	max. 0.05 ppm	Nickel (Ni)	max. 0.02 ppm
Gold (Au)	max. 0.1 ppm	Lead (Pb)	max. 0.02 ppm
Boron (B)	max. 0.05 ppm	Platinum (Pt)	max. 0.2 ppm
Barium (Ba)	max. 0.05 ppm	Tin (Sn)	max. 0.1 ppm
Beryllium (Be)	max. 0.02 ppm	Strontium (Sr)	max. 0.1 ppm
Bismuth (Bi)	max. 0.1 ppm	Titanium (Ti)	max. 0.1 ppm
Calcium (Ca)	max. 0.5 ppm	Thallium (Tl)	max. 0.05 ppm
Cadmium (Cd)	max. 0.05 ppm	Vanadium (V)	max. 0.05 ppm
Cobalt (Co)	max. 0.02 ppm	Zinc (Zn)	max. 0.1 ppm
Chromium (Cr)	max. 0.02 ppm	Zirconium (Zr)	max. 0.1 ppm
Copper (Cu)	max. 0.02 ppm	Residue after ignition (as Sulfate)	max. 5 ppm
Iron (Fe)	max. 0.2 ppm		

Code	Capacity
H8040-1-1000	1.0L
H8040-1-2500	2.5L
H8040-1-2501	2.5L
H8040-1-4000	4.0L

H

H8040-3, Hydrochloric acid 37%, extra pure

HS-No: 2806 10 00 00

Assay (acidimetric)	min. 36.5 %	Copper (Cu)	max. 0.0002 %
Free chloride (Cl)	max. 0.0001 %	Heavy Metals (as Pb)	max. 0.0001 %
Bromides (Br)	max. 0.01 %	Iron (Fe)	max. 0.00005 %
Sulfates (SO_4)	max. 0.0001 %	Lead (Pb)	max. 0.0001 %
Sulfites (SO_3)	max. 0.0005 %	Nickel (Ni)	max. 0.0002 %
Ammonium (NH_4)	max. 0.0005 %	Calcination residue (as SO_4)	max. 0.003 %
Arsenic (As)	max. 0.00005 %	Non volatile matter	max. 0.005 %

Code	Capacity
H8040-3-1000	1L

H8040-6, Hydrochloric acid 37%, EC-100

HS-No: 2806 10 00 00

Assay	37 ± 1.0 %	Gallium (Ga)	max. 0.02 ppm
Colour	max. 10 Hazen	Indium (In)	max. 0.02 ppm
Free Chlorine (Cl)	max. 5.0 ppm	Lithium (Li)	max. 0.02 ppm
Sulfate (SO_4)	max. 0.5 ppm	Magnesium (Mg)	max. 0.1 ppm
Arsenic and Antimony (as As)	max. 0.1 ppm	Molybdenum (Mo)	max. 0.05 ppm
Aluminium (Al)	max. 0.1 ppm	Nickel (Ni)	max. 0.1 ppm
Boron (B)	max. 0.05 ppm	Lead (Pb)	max. 0.5 ppm
Barium (Ba)	max. 0.05 ppm	Platinum (Pt)	max. 0.2 ppm
Beryllium (Be)	max. 0.02 ppm	Strontium (Sr)	max. 0.1 ppm
Bismuth (Bi)	max. 0.5 ppm	Titanium (Ti)	max. 0.1 ppm
Calcium (Ca)	max. 0.5 ppm	Thallium (Tl)	max. 0.1 ppm
Cobalt (Co)	max. 0.02 ppm	Vanadium (V)	max. 0.1 ppm
Chromium (Cr)	max. 0.1 ppm	Zinc (Zn)	max. 0.1 ppm
Copper (Cu)	max. 0.1 ppm	Zirconium (Zr)	max. 0.1 ppm
Iron (Fe)	max. 0.2 ppm	Residue after ignition (as Sulfate)	max. 5 ppm

Code	Capacity
H8040-6-2500	2.5L

H8040-6, Hydrochloric acid 37%, EC-100 (EL Grade)

HS-No: 2806 10 00 00

Assay	36 ± 0.5 %	Gallium (Ga)	max. 20 ppb
Colour	max. 10 Hazen	Indium (In)	max. 20 ppb
Free Chlorine (Cl)	max. 0.5 ppm	Lithium (Li)	max. 20 ppb
Sulfate (SO_4)	max. 0.5 ppm	Magnesium (Mg)	max. 100 ppb
Arsenic and Antimony (as As)	max. 0.1 ppm	Molybdenum (Mo)	max. 50 ppb
Aluminium (Al)	max. 50 ppb	Nickel (Ni)	max. 20 ppb
Boron (B)	max. 50 ppb	Lead (Pb)	max. 20 ppb
Barium (Ba)	max. 50 ppb	Platinum (Pt)	max. 200 ppb
Beryllium (Be)	max. 20 ppb	Strontium (Sr)	max. 100 ppb
Bismuth (Bi)	max. 100 ppb	Titanium (Ti)	max. 100 ppb
Calcium (Ca)	max. 500 ppb	Thallium (Tl)	max. 50 ppb
Cobalt (Co)	max. 20 ppb	Vanadium (V)	max. 50 ppb
Chromium (Cr)	max. 20 ppb	Zinc (Zn)	max. 100 ppb
Copper (Cu)	max. 20 ppb	Zirconium (Zr)	max. 100 ppb
Iron (Fe)	max. 200 ppb	Residue after ignition (as Sulfate)	max. 5 ppm

Code	Capacity
H8040-6-924E	240 kg

H8040-7, Hydrochloric acid 37%, EC-10

HS-No: 2806 10 00 00

Assay	36 ± 1.0 %	Cobalt (Co)	max. 0.1 ppb
Colour	max. 10 APHA	Chromium (Cr)	max. 0.1 ppb
Residue after Ignition	max. 1 ppm	Copper (Cu)	max. 0.1 ppb
Ammonium Salt	max. 0.5 ppm	Iron (Fe)	max. 0.1 ppb
Bromide (Br)	max. 10 ppm	Potassium (K)	max. 0.1 ppb
Free Chlorine (Cl)	max. 0.5 ppm	Lithium (Li)	max. 0.1 ppb
Sulfate (SO_4)	max. 0.2 ppm	Magnesium (Mg)	max. 0.1 ppb
Sulphite (SO_3)	max. 0.5 ppm	Manganese (Mn)	max. 0.1 ppb
Arsenic (as As)	max. 1 ppb	Sodium (Na)	max. 0.1 ppb
Silver (Ag)	max. 0.1 ppb	Nickel (Ni)	max. 0.1 ppb
Aluminium (Al)	max. 0.1 ppb	Lead (Pb)	max. 0.1 ppb
Barium (Ba)	max. 0.1 ppb	Strontium (Sr)	max. 0.1 ppb
Calcium (Ca)	max. 0.1 ppb	Zinc (Zn)	max. 0.1 ppb
Cadmium (Cd)	max. 0.1 ppb	Particles 0.2µm upper	max. 200 /ml

Code	Capacity
H8040-7-2500	2.5 L
H8040-7-9020	20 kg

H8040-7, Hydrochloric acid 37%, EC-10

HS-No: 2806 10 00 00

Assay	min. 36 %	Magnesium (Mg)	max. 10 ppb
Colour	max. 10 APHA	Manganese (Mn)	max. 10 ppb
Free Chlorine (Cl)	max. 500 ppb	Mercury (Hg)	max. 10 ppb
Residue	max. 1 ppm	Molybdenum (Mo)	max. 10 ppb
Sulfate (SO_4)	max. 500 ppb	Nickel (Ni)	max. 10 ppb
Aluminium (Al)	max. 10 ppb	Niobium (Nb)	max. 10 ppb
Antimony (Sb)	max. 10 ppb	Palladium (Pd)	max. 10 ppb
Arsenic (As)	max. 10 ppb	Platinum (Pt)	max. 10 ppb
Barium (Ba)	max. 10 ppb	Potassium (K)	max. 10 ppb
Beryllium (Be)	max. 10 ppb	Silver (Ag)	max. 10 ppb
Bismuth (Bi)	max. 10 ppb	Sodium (Na)	max. 10 ppb
Boron (B)	max. 10 ppb	Strontium (Sr)	max. 10 ppb
Cadmium (Cd)	max. 10 ppb	Tantalum (Ta)	max. 10 ppb
Calcium (Ca)	max. 10 ppb	Thallium (Tl)	max. 10 ppb
Chromium (Cr)	max. 10 ppb	Thorium (Th)	max. 10 ppb
Cobalt (Co)	max. 10 ppb	Tin (Sn)	max. 10 ppb
Copper (Cu)	max. 10 ppb	Titanium (Ti)	max. 10 ppb
Gallium (Ga)	max. 10 ppb	Tungsten (W)	max. 10 ppb
Germanium (Ge)	max. 10 ppb	Uranium (U)	max. 10 ppb
Gold (Au)	max. 10 ppb	Vanadium (V)	max. 10 ppb
Indium (In)	max. 10 ppb	Zinc (Zn)	max. 10 ppb
Iron (Fe)	max. 10 ppb	Zirconium (Zr)	max. 10 ppb
Lithium (Li)	max. 10 ppb		

Code	Capacity
H8040-7-9025	25 L

H8040-8, Hydrochloric acid 37%, EC-1

HS-No: 2806 10 00 00

Assay	min. 36 %	Magnesium (Mg)	max. 1 ppb
Colour	max. 10 APHA	Manganese (Mn)	max. 1 ppb
Free Chlorine (Cl)	max. 500 ppb	Mercury (Hg)	max. 1 ppb
Residue	max. 1 ppm	Molybdenum (Mo)	max. 1 ppb
Sulfate (SO_4)	max. 500 ppb	Ammonium (NH_4)	max. 1000 ppb
Phosphates (PO_4)	max. 50 ppb	Nickel (Ni)	max. 1 ppb
Aluminium (Al)	max. 1 ppb	Niobium (Nb)	max. 1 ppb
Antimony (Sb)	max. 1 ppb	Palladium (Pd)	max. 1 ppb
Arsenic (As)	max. 1 ppb	Platinum (Pt)	max. 1 ppb
Barium (Ba)	max. 1 ppb	Potassium (K)	max. 1 ppb
Beryllium (Be)	max. 1 ppb	Silver (Ag)	max. 1 ppb
Bismuth (Bi)	max. 1 ppb	Sodium (Na)	max. 1 ppb
Boron (B)	max. 1 ppb	Strontium (Sr)	max. 1 ppb
Bromides (Br)	max. 1000 ppb	Tantalum (Ta)	max. 1 ppb
Cadmium (Cd)	max. 1 ppb	Thallium (Tl)	max. 1 ppb
Calcium (Ca)	max. 1 ppb	Thorium (Th)	max. 1 ppb
Chromium (Cr)	max. 1 ppb	Tin (Sn)	max. 1 ppb
Cobalt (Co)	max. 1 ppb	Titanium (Ti)	max. 1 ppb
Copper (Cu)	max. 1 ppb	Tungsten (W)	max. 1 ppb
Gallium (Ga)	max. 1 ppb	Uranium (U)	max. 1 ppb
Germanium (Ge)	max. 1 ppb	Vanadium (V)	max. 1 ppb
Gold (Au)	max. 1 ppb	Zinc (Zn)	max. 1 ppb
Indium (In)	max. 1 ppb	Zirconium (Zr)	max. 1 ppb
Iron (Fe)	max. 1 ppb	Substance reducing iodine (as SO_3)	max. 500 ppb
Lead (Pb)	max. 1 ppb	Particles (>0.2µm)	max. 300 pcs/ml
Lithium (Li)	max. 1 ppb		

Code	Capacity
H8040-8-9020	20 Kg
H8040-8-9025	25 L

H8040-10, Hydrochloric acid 37%, Selective grade

HS-No: 2806 10 00 00

Code	Capacity
H8040-10-924E	240 kg

Assay	min. 36.5 %	Iron (Fe)	max. 0.2 ppm
Colour	max. 10 Hazen	Gallium (Ga)	max. 0.01 ppm
Ammonium	max. 2 ppm	Indium (In)	max. 0.01 ppm
Free Chlorine (Cl)	max. 1 ppm	Lithium (Li)	max. 0.01 ppm
Phosphate (PO_4)	max. 1 ppm	Magnesium (Mg)	max. 0.1 ppm
Sulfate (SO_4)	max. 1 ppm	Molybdenum (Mo)	max. 0.02 ppm
Arsenic and Antimony (as As)	max. 0.01 ppm	Nickel (Ni)	max. 0.02 ppm
Aluminium (Al)	max. 0.01 ppm	Lead (Pb)	max. 0.01 ppm
Boron (B)	max. 0.1 ppm	Platinum (Pt)	max. 0.2 ppm
Barium (Ba)	max. 0.01 ppm	Strontium (Sr)	max. 0.01 ppm
Beryllium (Be)	max. 0.02 ppm	Titanium (Ti)	max. 0.1 ppm
Bismuth (Bi)	max. 0.1 ppm	Thallium (Tl)	max. 0.05 ppm
Calcium (Ca)	max. 0.5 ppm	Vanadium (V)	max. 0.1 ppm
Cobalt (Co)	max. 0.01 ppm	Zinc (Zn)	max. 0.1 ppm
Chromium (Cr)	max. 0.01 ppm	Zirconium (Zr)	max. 0.05 ppm
Copper (Cu)	max. 0.01 ppm	Residue after ignition (as Sulfate)	max. 5 ppm

HYDROCHLORIC ACID, VOLUMETRIC SOLUTIONS

H8050-0, Hydrochloric acid solution 0.01 mol/l (0.01N)

HS-No: 2806 10 00 00

Code	Capacity
H8050-0-1000	1L

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 017-002-01-X
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 8 B

1 ml = 0.0003646 g HCl

Physical data:
- Density: 0,99 g/cm³

H8051-0, Hydrochloric acid solution 0.05 mol/l (0.05N)

HS-No: 2806 10 00 00

Code	Capacity
H8051-0-1000	1L

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 017-002-01-X
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 8 B

1 ml = 0.0018235 g HCl

Physical data:
- Density: 0,99 g/cm³

H8052-0, Hydrochloric acid solution 0.1 mol/l (0.1N)

HS-No: 2806 10 00 00

Code	Capacity
H8052-0-1000	1L

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 017-002-01-X
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 8 B

1 ml = 0.003646 g HCl

Physical data:
- Density: 1,00 g/cm³
- pH (20 °C) 1,2

H8055-0, Hydrochloric acid solution 0.125 mol/l (0.125N)

HS-No: 2806 10 00 00

Code	Capacity
H8055-0-1000	1L

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 017-002-01-X
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 8 B

1 ml = 0.004557 g HCl

Physical data:
- Density: 0,99 g/cm³

H8058-0, Hydrochloric acid solution 0.2 mol/l (0.2N)

HS-No: 2806 10 00 00

Code	Capacity
H8058-0-1000	1L

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 017-002-01-X
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 8 B

1 ml = 0.007292 g HCl

Physical data:
- Density: ~ 1,01 g/cm³

H8059-0, Hydrochloric acid solution 0.25 mol/l (0.25N)

HS-No: 2806 10 00 00

Code	Capacity
H8059-0-1000	1L

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 017-002-01-X
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 8 B

1 ml = 0.009115 g HCl

Physical data:
- Density: 1,00 g/cm³

H8062-0, Hydrochloric acid solution 0.5 mol/l (0.5N)

HS-No: 2806 10 00 00

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Physical data:
- Density: 1,01 g/cm³

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 017-002-01-X
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 8 B

1 ml = 0.0018235 g HCl

Code	Capacity
H8062-0-1000	1L

H8065-0, Hydrochloric acid solution 1 mol/l (1N)

HS-No: 2806 10 00 00

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Physical data:
- Density: 1,02 g/cm³

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 017-002-01-X
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 8 B

1 ml = 0.03646 g HCl

Code	Capacity
H8065-0-1000	1L

H8068-0, Hydrochloric acid solution 1.4 mol/l (1.4N)

HS-No: 2806 10 00 00

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Physical data:
- Density: 1,02 g/cm³
- pH (20 °C) < 1

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 017-002-01-X
- Poison class CH (Swiss): 3

Transport/storage:
- PAX: 809
- CAO: 813
- LGK: 8 B

1 ml = 0.05104 g HCl

Code	Capacity
H8068-0-1000	1L

H8071-0, Hydrochloric acid solution 2 mol/l (2N)

HS-No: 2806 10 00 00

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Physical data:
- Density: ~ 1,03 g/cm³
- pH (20 °C) < 1

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 017-002-01-X
- Poison class CH (Swiss): 3

Transport/storage:
- PAX: 809
- CAO: 813
- LGK: 8 B

1 ml = 0.07292 g HCl

Code	Capacity
H8071-0-1000	1L

H8072-0, Hydrochloric acid solution 3 mol/l (3N)


Xi

HS-No: 2806 10 00 00

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Physical data:
- Density: ~ 1,06 g/cm³
- pH (20 °C) < 1

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 017-002-01-X
- R: 36/37/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C1 II UN 1789
- CAO: 8 II UN 1789
- LGK: 8 II UN 1789
- PAX: 809
- CAO: 813
- LGK: 8 B

1 ml = 0.10938 g HCl

Code	Capacity
H8072-0-1000	1L

H8073-0, Hydrochloric acid solution 5 mol/l (5N)


Xi

HS-No: 2806 10 00 00

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Physical data:
- Density: 1,08 g/cm³
- pH (20 °C) < 1

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 017-002-01-X
- R: 36/37/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C1 II UN 1789
- CAO: 8 II UN 1789
- LGK: 8 II UN 1789
- PAX: 809
- CAO: 813
- LGK: 8 B

1 ml = 0.18235 g HCl

Code	Capacity
H8073-0-1000	1L

H8074-0, Hydrochloric acid solution 6 mol/l (6N)


Xi

HS-No: 2806 10 00 00

Hydrogen chloride solution

- HCl
- M = 36.46 g/mol
- CAS [7647-01-0]
- EC number: 231-595-7

Physical data:
- Density: 1,09 g/cm³
- pH (20 °C) < 1

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 017-002-01-X
- R: 36/37/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C1 II UN 1789
- CAO: 8 II UN 1789
- LGK: 8 II UN 1789
- PAX: 809
- CAO: 813
- LGK: 8 B

1 ml = 0.21876 g HCl

Code	Capacity
H8074-0-1000	1L

HYDROFLUORIC ACID 40%

 T+  C

- HF
- M = 20.01 g/mol
- CAS [7664-39-3]
- EC number: 231-634-8

Physical data:
- Form: Liquid
- Density: 1,13 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ -44 °C
- Boiling point: ~ 112 °C
- pH (20 °C) < 1

Toxicological data:
- MAK: 2 ml/m³ , 1,7 mg/m³
- WGK: 1

Safety:
- EC Index no.: 009-002-00-6
- R: 26/27/28-35
- S: 7/9-26-28.1-36/37/39-45
- Poison class CH (Swiss): 1

Transport/storage:
- ADR: 8 CT1 II UN 1790
- IMDG: 8 II UN 1790
- IATA/ICAO: 8 II UN 1790
- PAX: 809
- CAO: 813
- LGK: 6.1 B
- Disposal: 23

Special regulations:
- Dual use product

H8076-1, Hydrofluoric acid 40%, reagent grade

HS No.: 2811 11 00 00

Assay (acidimetric)	min. 40 %	Heavy metals (as Pb)	max. 0.0001 %
Colour (Hazen)	max. 10 %	Iron (Fe)	max. 0.00001 %
Hexafluorosilicic acid (H_2SiF_6)	max. 0.005 %	Lead (Pb)	max. 0.000002 %
Chlorides (Cl)	max. 0.0001 %	Lithium (Li)	max. 0.000002 %
Phosphates (PO_4)	max. 0.00005 %	Magnesium (Mg)	max. 0.00001 %
Sulfates (SO_4)	max. 0.0002 %	Manganese (Mn)	max. 0.000003 %
Sulfites (SO_3)	max. 0.0002 %	Molybdenum (Mo)	max. 0.000002 %
Aluminium (Al)	max. 0.000005 %	Nickel (Ni)	max. 0.000002 %
Arsenic (As)	max. 0.000005 %	Potassium (K)	max. 0.00001 %
Barium (Ba)	max. 0.000005 %	Silver (Ag)	max. 0.000002 %
Beryllium (Be)	max. 0.000002 %	Sodium (Na)	max. 0.00002 %
Bismuth (Bi)	max. 0.000002 %	Strontium (Sr)	max. 0.000002 %
Cadmium (Cd)	max. 0.000001 %	Titanium (Ti)	max. 0.000002 %
Calcium (Ca)	max. 0.00002 %	Thallium (Tl)	max. 0.000002 %
Chromium (Cr)	max. 0.000002 %	Vanadium (V)	max. 0.000002 %
Cobalt (Co)	max. 0.000002 %	Zinc (Zn)	max. 0.000005 %
Copper (Cu)	max. 0.000002 %	Zirconium (Zr)	max. 0.000002 %
Germanium (Ge)	max. 0.000002 %	Sulfated ash	max. 0.0005 %

Code	Capacity
H8076-1-2500	2.5 L

HYDROFLUORIC ACID 49%

 T+  C

- HF
- M = 20.00 g/mol
- CAS [7664-39-3]
- EC number: 231-634-8

Physical data:
- Form: Liquid
- Density: 1,16 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ -35 °C
- Boiling point: ~ 106 °C
- pH (20 °C) < 1

Toxicological data:
- MAK: 2 ml/m³ , 1,7 mg/m³
- WGK: 1

Safety:
- EC Index no.: 009-002-00-6
- R: 26/27/28-35
- S: 7/9-26-28.1-36/37/39-45
- Poison class CH (Swiss): 1

Transport/storage:
- ADR: 8 CT1 II UN 1790
- IMDG: 8 II UN 1790
- IATA/ICAO: 8 II UN 1790
- PAX: 809
- CAO: 813
- LGK: 6.1 B
- Disposal: 23

Special regulations:
- Dual use product

H8081-1, Hydrofluoric acid 49%, reagent grade

HS No.: 2811 11 00 00

Assay (acidimetric)	min. 48 %	Chromium (Cr)	max. 0.000002 %
Colour (Hazen)	max. 10 %	Iron (Fe)	max. 0.00001 %
Calcination residue (as SO_4)	max. 0.0005 %	Germanium (Ge)	max. 0.000002 %
Chlorides (Cl)	max. 0.0001 %	Potassium (K)	max. 0.00001 %
Hexafluorosilicic acid (H_2SiF_6)	max. 0.005 %	Lithium (Li)	max. 0.000002 %
Phosphates (PO_4)	max. 0.00005 %	Magnesium (Mg)	max. 0.00001 %
Sulfates (SO_4)	max. 0.0002 %	Manganese (Mn)	max. 0.000003 %
Sulfites (SO_3)	max. 0.0002 %	Molybdenum (Mo)	max. 0.000002 %
Silver (Ag)	max. 0.000002 %	Sodium (Na)	max. 0.00002 %
Aluminium (Al)	max. 0.000005 %	Nickel (Ni)	max. 0.000002 %
Arsenic (As)	max. 0.000005 %	Lead (Pb)	max. 0.000002 %
Barium (Ba)	max. 0.00001 %	Strontium (Sr)	max. 0.000002 %
Beryllium (Be)	max. 0.000002 %	Titanium (Ti)	max. 0.000002 %
Bismuth (Bi)	max. 0.000002 %	Thallium (Tl)	max. 0.000002 %
Calcium (Ca)	max. 0.000001 %	Vanadium (V)	max. 0.000002%
Cadmium (Cd)	max. 0.000001 %	Zinc (Zn)	max. 0.000005 %
Cobalt (Co)	max. 0.000002 %	Zirconium (Zr)	max. 0.000002 %

Code	Capacity
H8081-1-2500	2.5 L

HYDROFLUORIC ACID, 49%

 T+  C

- HF
- M = 20.01 g/mol
- CAS [7664-39-3]
- EC number: 231-634-8

Physical data:
- Density: 1,13 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ -44 °C
- Boiling point: ~ 112 °C
- pH (20 °C) < 1

Toxicological data:
- MAK: 3 ml/m³ , 2,5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 009-002-00-6
- R: 26/27/28-35
- S: 7/9-26-28.1-36/37/39-45
- Poison class CH (Swiss): 1

Transport/storage:
- ADR: 8 CT1 II UN 1790
- IMDG: 8 II UN 1790
- IATA/ICAO: 8 II UN 1790
- PAX: 809
- CAO: 813
- LGK: 6.1 B
- Disposal: 23

H8081-7, Hydrofluoric acid 49%, EC-10

HS-No: 2811 11 00 00

	Guarantee	Result		Guarantee	Result
Assay (HF)	48.8 - 49.2	49.0 %	Gold (Au)	max. 5	0.1 ppb
Colour	max. 6	< 6 APHA	Iron (Fe)	max. 10	0.05 ppb
Residue after Ignition	max. 800	50 ppb	Lead (Pb)	max. 10	0.05 ppb
Chloride (Cl)	max. 1000	50 ppb	Lithium (Li)	max. 5	0.1 ppb
Phosphate (PO_4)	max. 400	50 ppb	Magnesium (Mg)	max. 10	0.05 ppb
Sulfate (SO_4) and Sulfite (SO_3)	max. 500	50 ppb	Manganese (Mn)	max. 10	0.05 ppb
Nitrate (NO)	max. 1000	50 ppb	Molybdenum (Mo)	max. 10	0.05 ppb
Arsenic and Antimony (as As)	max. 10	0.05 ppb	Nickel (Ni)	max. 10	0.05 ppb
Aluminium (Al)	max. 10	0.05 ppb	Niobium (Nb)	max. 10	0.05 ppb
Barium (Ba)	max. 5	0.1 ppb	Potassium (K)	max. 10	0.05 ppb
Beryllium (Be)	max. 5	0.1 ppb	Silver (Ag)	max. 5	0.1 ppb
Bismuth (Bi)	max. 5	0.1 ppb	Sodium (Na)	max. 10	0.05 ppb
Boron (B)	max. 10	0.05 ppb	Strontium (Sr)	max. 10	0.05 ppb
Cadmium (Cd)	max. 10	0.05 ppb	Tantalum (Ta)	max. 10	0.05 ppb
Calcium (Ca)	max. 10	0.05 ppb	Thallium (Tl)	max. 10	0.05 ppb
Chromium (Cr)	max. 10	0.05 ppb	Tin (Sn)	max. 10	0.1 ppb
Cobalt (Co)	max. 10	0.05 ppb	Titanium (Ti)	max. 10	0.1 ppb
Copper (Cu)	max. 10	0.05 ppb	Vanadium (V)	max. 10	0.05 ppb
Gallium (Ga)	max. 10	0.05 ppb	Zinc (Zn)	max. 10	0.05 ppb
Germanium (Ge)	max. 10	0.05 ppb	Zirconium (Zr)	max. 10	0.05 ppb

Code	Capacity
H8081-7-2500	2.5 L
H8081-7-920E	200 L

HYDROGEN PEROXIDE 6%


Xi

Hydrogen dioxide, Hydroperoxide

- H_2O_2
- M = 34.01 g/mol
- CAS [7722-84-1]
- EC number: 231-765-0

Physical data:
- Form: Liquid
- Density: 1,016 g/cm³

Toxicological data:
- LD 50 (oral, rat): 2000 mg/kg (90% solution)

Safety:
- EC Index no.: 008-003-00-9
- R: 36
- S: 26-37

H8084-3, Hydrogen Peroxide 6%, extra pure

HS-No: 2847 00 00 00

Assay (permanganometric)	approx. 6 %	Arsenic (As)	max. 0.00005 %
Acidity (as H_2SO_4)	max. 0.05 %	Copper (Cu)	max. 0.001 %
Chloride (Cl)	max. 0.001 %	Iron (Fe)	max. 0.0001 %
Nitrates (NO_3)	max. 0.001 %	Lead (Pb)	max. 0,001 %
Phosphates (PO_4)	max. 0.005 %	Nickel (Ni)	max. 0.001 %
Sulfates (SO_4)	max. 0.001 %	Non-volatile matter	max. 0.05 %
Ammonium (NH_4)	max. 0.001 %		

Code	Capacity
H8084-3-0500	500 ml

HYDROGEN PEROXIDE, 30 %


C

Perhydrol

- H_2O_2
- M = 34.01 g/mol
- CAS [7722-84-1]
- EC number: 231-765-0

Physical data:
- Density: 1,11 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -26 °C
- Boiling point: 107 °C
- Vapour pressure: (20 °C) ~18 hPa
- pH (20 °C) 2 - 4

Toxicological data:
- LD 50 (oral, rat): 2000 mg/kg (90% solution)
- MAK: 1 ml/m³ , 1,4 mg/m³
- WGK: 0

Safety:
- EC Index no.: 008-003-00-9
- R: 34
- S: 3-26-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 OC1 II UN 2014
- IMDG: 5.1 II UN 2014
- IATA/ICAO: 5.1 II UN 2014
- PAX: 501
- CAO: 506
- LGK: 5.1 B
- Disposal: 22

H8087-1, Hydrogen peroxide 30-32 %, reagent grade

HS-No: 2847 00 00 00

Assay (Permanganometric)	min. 30 %	Iron (Fe)	max. 0.000005 %
Colour	max. 10 Hazen	Lead (Pb)	max. 0.000001 %
Free Acid (as H_2SO_4)	max. 0.005 %	Lithium (Li)	max. 0.000001 %
Chlorides (Cl)	max. 0.00005 %	Magnesium (Mg)	max. 0.000005 %
Phosphates (PO_4)	max. 0.0001 %	Manganese (Mn)	max. 0.000001 %
Sulfate (SO_4)	max. 0.0001 %	Molybdenum (Mo)	max. 0.000002 %
Total N	max. 0.0002 %	Nickel (Ni)	max. 0.000002 %
Aluminium (Al)	max. 0.00005 %	Potassium (K)	max. 0.00001 %
Arsenic (As)	max. 0.000001 %	Sodium (Na)	max. 0.00001 %
Barium (Ba)	max. 0.000005 %	Strontium (Sr)	max. 0.000001 %
Beryllium (Be)	max. 0.000001 %	Thallium (Tl)	max. 0.000005 %
Bismuth (Bi)	max. 0.00001 %	Titanium (Ti)	max. 0.00001 %
Calcium (Ca)	max. 0.00002 %	Vanadium (V)	max. 0.000001 %
Cadmium (Cd)	max. 0.000001 %	Zinc (Zn)	max. 0.000005 %
Chromium (Cr)	max. 0.000002 %	Zirconium (Zr)	max. 0.00001 %
Cobalt (Co)	max. 0.000001 %	Residue on ignition	max. 0.002 %
Copper (Cu)	max. 0.000001 %	Non-volatile matter	max. 0.005 %
Germanium (Ge)	max. 0.000005 %		

Code	Capacity
H8087-1-1000	1.0 L
H8087-1-2500	2.5 L

H8087-3, Hydrogen peroxide 30 %, extra pure

HS-No: 2847 00 00 00

Assay (permanganometric)	approx. 30 %	Arsenic (As)	max. 0.00005 %
Acidity (as H_2SO_4)	max. 0.025 %	Copper (Cu)	max. 0.001 %
Chlorides (Cl)	max. 0.001 %	Heavy Metals (as Pb)	max. 0.0005 %
Nitrates (NO_3)	max. 0.001 %	Iron (Fe)	max. 0.0001 %
Phosphates (PO_4)	max. 0.005 %	Nickel (Ni)	max. 0.001 %
Sulfates (SO_4)	max. 0.001 %	Non-volatile matter	max. 0.02 %
Ammonium (NH_4)	max. 0.001 %		

Code	Capacity
H8087-3-2500	2.5L

HYDROGEN PEROXIDE, 35 %

 C

Perhydrol

- H_2O_2
- M = 34.01 g/mol
- CAS [7722-84-1]
- EC number: 231-765-0

Physical data:
- Density: 1,13 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ -24 °C
- Boiling point: ~ 110 °C
- Vapour pressure: (20 °C) ~20 hPa
- pH (20 °C) ~ 2 - 4

Toxicological data:
- MAK: 1 ml/m³ , 1,4 mg/m³
- WGK: 0

Safety:
- EC Index no.: 008-003-00-9
- R: 34
- S: 3-26-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 OC1 II UN 2014
- IMDG: 5.1 II UN 2014
- IATA/ICAO: 5.1 II UN 2014
- PAX: 501
- CAO: 506
- LGK: 5.1 B
- Disposal: 22

H8089-3, Hydrogen peroxide 35 %, extra pure

HS-No: 2847 00 00 00

Assay (permanganometric)	34.5 - 36.5 %	Arsenic (As)	max. 0.00005 %
Free acid (as H_2SO_4)	max. 0.02 %	Copper (Cu)	max. 0.001 %
Chlorides (Cl)	max. 0.001 %	Heavy Metals (as Pb)	max. 0.0002 %
Nitrates (NO_3)	max. 0.001 %	Iron (Fe)	max. 0.0005 %
Phosphates (PO_4)	max. 0.005 %	Nickel (Ni)	max. 0.001 %
Sulfates (SO_4)	max. 0.001 %	Non-volatile matter	max. 0.05 %
Ammonium (NH_4)	max. 0.003 %		

Code	Capacity
H8089-3-1000	1L

HYDROGEN PEROXIDE 50 %,

 O  C

Hydrogen dioxide, Hydroperoxide

- H_2O_2
- M = 34.01 g/mol
- CAS [7722-84-1]
- EC number: 231-765-0

Physical data:
- Form: Liquid
- Density: 1,20 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -52 °C
- Boiling point 114 °C
- Vapour pressure: (30 °C) 240 hPa
- pH (20 °C) 1,0 - 4,0

Toxicological data:
- LD 50 (oral, rat): 1518 mg/kg
- WGK: 0

Safety:
- EC Index no.: 008-003-00-9
- R: 8-20/22-34
- S: 17-26-28.1-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 OC1 II UN 2014
- IMDG: 5.1 II UN 2014
- IATA/ICAO: Forbidden UN 2014
- PAX: F
- CAO: F
- LGK: 5.1 B
- Disposal: 22

H8090-3, Hydrogen peroxide 50 %, extra pure

HS-No: 2847 00 00 00

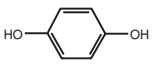
Assay (Permanganometric)	approx. 50 %	Arsenic (As)	max. 0.00005 %
Acidity (as H_2SO_4)	max. 0.05 %	Copper (Cu)	max. 0.001 %
Chlorides (Cl)	max. 0.001 %	Iron (Fe)	max. 0.0005 %
Nitrates (NO_3)	max. 0.001 %	Lead (Pb)	max. 0.001 %
Phosphates (PO_4)	max. 0.005 %	Nickel (Ni)	max. 0.001 %
Sulfates (SO_4)	max. 0.001 %	Non-volatile matter	max. 0.05 %
Ammonium (NH_4)	max. 0.003 %		

Code	Capacity
H8090-3-4000	4.0 L

HYDROQUINONE

 Xn  N

1,4-Dihydroxybenzene, p-Dihydroxybenzene, Quinol



- $C_6H_6O_2$
- M = 110.11 g/mol
- CAS [123-31-9]
- EC number: 204-617-8

Physical data:
- Form: Solid
- Spec. density: 1,35 g/cm³
- Bulk density: ~ 600 kg/m³
- Solub. in water (25 °C): 70 g/l
- Melting point: -172 °C
- Boiling point: 287 °C
- Flash point: 165 °C
- Ignition temp.: 516 °C
- Vapour pressure: (132 °C) 1,3 hPa
- pH (70 g/l H2O, 20 °C) 3,75

Toxicological data:
- LD 50 (oral, rat): 320 mg/kg
- WGK: 2

Safety:
- EC Index no.: 604-005-00-4
- R: 22-40-41-43-50-68
- S: 26-36/37/39-46-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 T2 III UN 2662
- IMDG: 6.1 III UN 2662
- IATA/ICAO: 6.1 III UN 2662
- PAX: 619
- CAO: 619
- LGK: 10-13
- Disposal: 3

H8097-3, Hydroquinone, extra pure

HS-No: 2907 22 00 10

Assay	min. 99 %	Sulfated ash	max. 0.05 %
Identity (IR-spectrum)	passes test	Water	max. 0.3 %

Code	Capacity
H8097-3-0500	500 g

HYDROXYLAMINE HYDROCHLORIDE

 Xn  N

Hydroxylammonium chloride

- $NH_2OH{\cdot}HCl$
- M = 69.49 g/mol
- CAS [5470-11-1]
- EC number: 226-798-2

Physical data:
- Spec. density: 1,67 g/cm³
- Bulk density: ~ 900 g/cm³
- Solub. in water (20 °C): 464 g/l
- Melting point: 159 °C
- pH (50 g/l H_2O, 20 °C) 2,5 - 3,5

Toxicological data:
- LD 50 (oral, rat): 141 mg/kg
- WGK: 3*

Safety:
- EC Index no.: 612-123-00-2 [1]
- R: 22-36/38-43-48/22-50
- S: 22-24-37-46-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C2 III UN 3260
- IMDG: 8 III UN 3260
- IATA/ICAO: 8 III UN 3260
- PAX: 822
- CAO: 823
- LGK: 4.1 A
- Disposal: 28

H8099-1, Hydroxylamine hydrochloride, reagent grade

HS-No: 2825 10 00 00

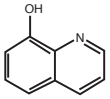
Assay (argentometric)	Min. 99 %	Copper (Cu)	max. 0.0005 %
ph (5%, H_2O)	2.5 - 3.5	Heavy Metals (as Pb)	max. 0.0005 %
Sulfates (SO_4)	max. 0.002 %	Iron (Fe)	max. 0.0005 %
Ammonium (NH_4)	max. 0.05 %	Calcination residue (as SO_4)	max. 0.01 %
Arsenic (As)	max. 0.0005 %		

Code	Capacity
H8099-1-0500	500 g

8-HYDROXYQUINOLINE

Xn

Oxine, 8-Quinolinol, Hydroxybenzopyridine



- C_9H_7NO
- M = 145.16 g/mol
- CAS [148-24-3]
- EC number: 205-711-1

Physical data:
- Form: Solid
- Solub. in water (20 °C): insoluble
- Melting point: 73,8 °C
- Boiling point: 267 °C

Toxicological data:
- LD 50 (oral, rat): 1200 mg/kg
- WGK: 3

Safety:
- R: 20/22
- S: 46
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 6.1 T2 III UN 2811
- IMDG: 6.1 III UN 2811
- IATA/ICAO: 6.1 III UN 2811
- PAX: 619
- CAO: 619
- LGK: 10-13
- Disposal: 3

H8090-1, 8-Hydroxyquinoline, reagent grade

HS-No: 2933 49 90 90

Assay	min. 99.5 %	Residue after ignition (as sulfate)	max. 0.02 %
Melting point	73 ~ 74.5 ºC	Chloride (Cl)	max. 0.002 %
Sensitivity test to magnesium	passes test	Sulfate (SO_4)	max. 0.01 %
Solubility test in ethanol	passes test		

Code	Capacity
H8090-1-0100	100 g

H

IMIDAZOLE

C

1,3-Diazole, Glyoxaline, Iminazole

- $C_3H_4N_2$
- M = 68.08 g/mol
- CAS [288-32-4]
- EC number: 206-019-2

Physical data:
- Form: Solid
- Spec. density: 1,030 g/cm³
- Bulk density: ~ 500 - 600 g/m³
- Solub. in water (20 °C): 633 g/l
- Melting point: 90 - 91 °C
- Boiling point: 256 °C
- Flash point: > 135 °C
- Ignition temp.: 480 °C
- Vapour pressure: (20 °C) 0,003 hPa
- pH (67 g/l H_2O, 20 °C) 10,5

Toxicological data:
- LD 50 (oral, rat): 220 mg/kg
- MAK: 1,5 mg/m³
- WGK: 1

Safety:
- R: 22-34
- S: 22-2636/37/39-45
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 8 CB III UN 3263
- IMDG: 8 III UN 3263
- IATA/ICAO: 8 III UN 3263
- PAX: 822
- CAO: 823
- LGK: 8 A
- Disposal: 3

I5005-1, Imidazole, reagent grade

HS-No: 2933 21 00 90

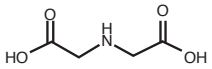
Assay ($HClO_4$)	min. 99.0 %	Iron (Fe)	max. 0.0005 %
Identity (IR-spectrum)	passes test	Lead (Pb)	max. 0.0005 %
pH (5%, H_2O)	9.5 – 11.0	Nickel (Ni)	max. 0.0005 %
Chlorides (Cl)	max. 0.005 %	Zinc (Zn)	max. 0.0005 %
Sulfates (SO4)	max. 0.005 %	UV-VIS spectroscopy	passes test
Cadmium (Cd)	max. 0.0005 %	Sulfated ash	max. 0.1 %
Cobalt (Co)	max. 0.0005 %	Loss on drying (20ºC, in vacuum)	max. 0.5 %
Copper (Cu)	max. 0.0005 %		

Code	Capacity
I5005-1-1000	1 kg

IMINODIACETIC ACID

Xi

- $C_4H_7NO_4$
- M = 133.10 g/mol
- CAS [142-73-4]
- EC number: 205-555-4



Physical data:
- Solub. in water 42 g/l (20 °C)
- M = 133.10 g/mol
- pH value: 2.2 - 2.3 (20 °C) (saturated solution)
- Melting point: 247 °C (decomposes)

Toxicological data:
- WGK: 1

Safety:
- Irritant
- R: 36
- S: 22-24-26
- Poison class CH (Swiss): 3

Transport/storage:
- Packing-cat: E
- Road/Rail: 8/39 b
- IMDG-Code: 8/II UN 3261
- IATA/DGR: 8/II UN 3261
- PAX: 814
- CAO: 816
- LGK: 8
- Disposal: 4

I5001-1, Iminodiacetic acid, reagent grade

HS-No: 2922 49 70 00

Assay	min. 98.5 %	Loss on drying at 110ºC	max. 0.2 %
Melting point	~ 240 ºC	Sulphated ash	max. 0.05 %

Code	Capacity
I5001-1-0100	100 g

IMMERSION OIL

Xn

Physical data:
- Form: Liquid
- Density: 0.92 g/cm³
- Solub. in water (20 °C): almost non-miscible
- Melting point: < 0 °C
- Boiling point: 340 °C
- Flash point: 163 °C
- Vapour pressure: (23 °C) < 0,13 hPa
- Refraction index: (n 20 °C/D) 1,516

Toxicological data:
- WGK: 2

Safety:
- R: 22
- S: 25-46
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

I5010-0, Immersion oil, biology grade

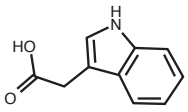
HS-No: 3822 00 00 00

Density (20º/4º)	0.92 – 0.95º	Insoluble in ethanol	passes test
n 20º/D	1.515 – 1.522º	Suitability for microscopy	passes test

Code	Capacity
I5010-0-0060	600 ml

3-INDOLE ACETIC ACID

JAA, Heteroauxine



- $C_{10}H_9NO_2$
- M = 175.19 g/mol
- EC number: 201-748-2

Physical data:
- Solub. in water (20 °C): slightly soluble
- Melting point: 167 - 170 °C
- Bulk density: ~ 620 g/m³

Toxicological data:
- RTEC NL: 3150000
- WGK: 1

Transport/storage:
- LGK: 10-13
- Disposal: 4

I6000-1, 3-Indole acetic acid, reagent grade

HS-No: 2933 90 95 00

Assay	min. 98.0 %	Loss on drying	max. 0.1 %
Melting point	166 ~ 168 ºC	Residue after ignition (as sulfate)	max. 0.05 %
Solubility test in ethanol	passes test		

Code	Capacity
I6000-1-0001	1 g

IODINE

Xn N

- I_2
- M = 253.81 g/mol
- CAS [7553-56-2]
- EC number: 231-442-4

Physical data:
- Spec. density: 4,93 g/cm³
- Bulk density: ~ 2100 g/cm³
- Solub. in water (20 °C): 0,29 g/l
- Melting point: 114 °C
- Boiling point: 185 °C
- Vapour pressure: (25 °C) 0,41 hPa
- pH (saturated solution H_2O, 20 °C) 5,4

Toxicological data:
- LD 50 (oral, rat): 14000 mg/kg
- MAK: 0,1 ml/m³ , 1,1 mg/m³
- WGK: 1

Safety:
- EC Index no.: 053-001-00-3
- R: 20/21-50
- S: 23.2-51-25-36/37-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T5 III UN 3288
- IMDG: 6.1 III UN 3288
- IATA/ICAO: 6.1 III UN 3288
- PAX: 822
- CAO: 823
- LGK: 8 B
- Disposal: 22

I5027-1, Iodine resublimed, reagent grade

HS-No: 2801 20 00 00

Assay (Iodometric)	min. 99.8 %
Chlorides, bromides (as Cl)	max. 0.005 %
Non-volatile matter	max. 0.01 %

Code	Capacity
I5027-1-0500	500 g

IODINE, VOLUMETRIC SOLUTIONS

I5034-0, Iodine solution 0.01 mol/l (0.02N)

HS-No: 2801 20 00 00

- I_2
- M = 253.81 g/mol
- CAS [7553-56-2]
- EC number: 231-442-4

Physical data:
- Density: 1,005 g/cm³

Toxicological data:
- MAK: 0,1 ml/m³ , 1 mg/m³

Safety:
- EC Index no.: 053-001-00-3
- R: 52
- S: 61

1 ml = 0.002538 g I_2

Code	Capacity
I5034-0-1001	1.0 L

I5036-0, Iodine solution 0.05 mol/l (0.1N)

HS-No: 2801 20 00 00

- I_2
- M = 253.81 g/mol
- CAS [7553-56-2]
- EC number: 231-442-4

Physical data:
- Density: 1,02 g/cm³
- pH (20 °C) ~3,5

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 053-001-00-3
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13

1 ml = 0.0127 g I_2

Code	Capacity
I5036-0-1001	1.0 L

IRON (III) CHLORIDE HEXAHYDRATE

Xn

I

Ferric chloride hexahydrate

- $FeCl_3 \cdot 6H_2O$
- M = 270.32 g/mol
- CAS [10025-77-1]
- EC number: 231-729-4

Physical data:
- Bulk density: ~ 600 - 1200 kg/m³
- Solub. in water (20 °C): 920 g/l
- Melting point: 37 °C
- pH (10 g/l H_2O, 25 °C) ~1,8

Toxicological data:
- LD 50 (oral, rat): 450 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- R: 22-38-41
- S: 26-39-46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 15

I6014-1, Iron (III) chlroride hexahydrate, reagent grade

HS-No: 2827 33 00 00

Assay	min. 99 %	Ferrous Iron (Fe2)	max. 0.002 %
Insolubility matter in water	max. 0.01 %	Copper (Cu)	max. 0.005 %
Free acid (as HCl)	max. 0.1 mol/L	Zin (Zn)	max. 0.003 %
Sulfates (SO_4)	max. 0.01 %	Arsenic (As)	max. 0.002 %
Nitrate (NO_3)	max. 0.01 %	Substances not precipitated by ammonium hydroxide (as Sulfate)	max. 0.1 %
Phosphate (PO_4)	max. 0.01 %		
Manganese (Mn)	max. 0.02 %		

Code	Capacity
I6014-1-1000	1 kg

I6014-3, Iron (III) chlroride hexahydrate, extra pure

HS-No: 2827 33 00 00

Assay	min. 99 %	Iron (II) (Fe (II))	max. 0.05 %
Free acid (asHCL)	max. 0.2 %	Lead (Pb)	max. 0.01 %
Phosphates (PO_4)	max. 0.005 %	Magnesium (Mg)	max. 0.05 %
Sulfates (SO_4)	max. 0.05 %	Manganese (Mn)	max. 0.1 %
Arsenic (As)	max. 0.005 %	Potassium (K)	max. 0.05 %
Calcium (Ca)	max. 0.05 %	Sodium (Na)	max. 0.1 %
Copper (Cu)	max. 0.005 %	Zinc (Zn)	max. 0.01 %

Code	Capacity
I6014-3-1000	1 kg

IRON (II) CHLORIDE TETRAHYDRATE

Xn

- $FeCl_2 \bullet_4 H_2O$
- M = 198.83 g/mol
- EC number: 13478-10-9

Physical data:
- Density: 1.93 g/cm³
- Solub. in water: ~ 1600 g/l (10 °C)
- pH value: 2.5 (100 g/l H_2O, 20 °C)
- Melting point: 105 - 110 °C (release of crystalline water)
- Bulk density: 900 kg/m³
- Water absorption hygroscopic

Toxicological data:
- LD 50 (oral, rat): 984 mg/kg
- WGK: 1

Safety:
- Harmful, irritant
- R: 22-38-41
- S: 26-39
- Poison class CH: 3

Transport/storage:
- LGK: 10-13
- Disposal: 15

I6001-1, Iron (II) chloride tetrahydrate, reagent grade

HS-No: 2827 33 00 00

Assay (manganometric)	min. 99 %	Manganese (Mn)	max. 0.005 %
Sulfates (SO_4)	max. 0.01 %	Lead (Pb)	max. 0.001 %
Total Nitrogen (N)	max. 0.001 %	Zinc (Zn)	max. 0.003 %
Arsenic (As)	max. 0.0005 %	Substances not precipitated by ammonia (as Sulphate)	max. 0.05 %
Copper (Cu)	max. 0.002 %		
Iron (III) – salt (Fe III)	max. 0.2 %		

Code	Capacity
I6001-1-0500	500 g

IRON (III) NITRATE NONAHYDRATE

O Xi

- $Fe(NO_3)_3 \cdot 9H_2O$
- M = 404.00 g/mol
- CAS [7782-61-8]
- EC number: 233-899-5

Physical data:
- Spec. density: 1,68 g/cm³
- Bulk density: ~ 900 g/cm³
- Solub. in water (20 °C): soluble
- Melting point: 47 °C (decomposes)
- pH (100 g/l H_2O, 20 °C) ~ 1,3

Toxicological data:
- LD 50 (oral, rat): 3250 mg/kg
- WGK: 1

Safety:
- R: 8-36/38
- S: 26
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 O2 III UN 1466
- IMDG: 5.1 III UN 1466
- IATA/ICAO: 5.1 III UN 1466
- PAX: 516
- CAO: 518
- LGK: 5.1 B
- Disposal: 15

I6017-1, Iron (III) nitrate nonahydrate, reagent grade

HS-No: 2834 29 80 00

Assay (iodometric)	min. 98.5 %	Copper (Cu)	max. 0.001 %
Insolubility matter in water	max. 0.005 %	Zinc (Zn)	max. 0.001 %
Chloride (Cl)	max. 0.0005 %	Substance not precipitated by	
Sulfates (SO_4)	max. 0.005 %	ammonium hydroxide (as sulfate)	max. 0.05 %

Code	Capacity
I6017-1-0500	500 g

I6017-3, Iron (III) nitrate nonahydrate, extra pure

HS-No: 2834 29 80 00

Assay (iodometric)	min. 98 %	Copper (Cu)	max. 0.005 %
Insoluble in water	max. 0.05 %	Iron (II) (Fe (II))	max. 0.01 %
Chloride (Cl)	max. 0.005 %	Lead (Pb)	max. 0.005 %
Sulfates (SO_4)	max. 0.01 %	Magnesium (Mg)	max. 0.02 %
Calcium (Ca)	max. 0.02 %	Zinc (Zn)	max. 0.01 %

Code	Capacity
I6017-3-0500	500 g

IRON STANDARD SOLUTION 1000MG/L FOR AA

Xi

I1001-0, Iron standard solution 1000mg/l for AA (iron (III) nitrate nonahydrate in nitric acid 0.5 mol/l)

HS-No: 3822 00 00 00

Physical data:
- Density: ~ 1,02 g/cm³
- Solub. in water (20 °C): miscible
- pH (20 °C) < 1

Safety:
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C1 III UN 3264
- IMDG: 8 III UN 3264
- IATA/ICAO: 8 III UN 3264
- PAX: 818
- CAO: 820
- LGK: 8 B

1 ml = 1000±5 mg/l

Code	Capacity
I1001-0-0500	500 ml

IRON (II) SULFATE HEPTAHYDRATE

Xn

Iron vitriol

- $FeSO_4 \cdot 7H_2O$
- M = 278,02 g/mol
- CAS [7782-63-0]
- EC number: 231-753-5

Physical data:
- Spec. density: 1,89 g/cm³
- Bulk density: ~600 kg/m³
- Solub. in water (20 °C): 665 g/l
- Melting point: > 60 °C (release of crystalline water)
- pH (50 g/l H_2O, 20 °C) 3 - 4

Toxicological data:
- LD 50 (oral, rat): 319 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- R: 22
- S: 24/25-46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 15

I6007-1, Iron (II) sulfate heptahydrate, reagent grade

HS-No: 2833 29 50 00

Assay (cerimetric)	min. 99.5 %	Iron (III) (Fe (III))	max. 0.02 %
pH (5%, H_2O)	3 - 4	Lead (Pb)	max. 0.0005 %
Chloride (Cl)	max. 0.0005 %	Magnesium (Mg)	max. 0.05 %
Phosphates (PO_4)	max. 0.001 %	Zinc (Zn)	max. 0.002 %
Total Nitrogen (N)	max. 0.001 %	Non-precipitable with ammonia	
Arsenic (As)	max. 0.0002 %	(as SO_4)	max. 0.05 %
Copper (Cu)	max. 0.001 %		

Code	Capacity
I6007-1-0500	500 g
I6007-1-1000	1 kg

IRON (III) SULFATE HYDRATE

- $Fe2(SO_4)_3 \cdot xH_2O$
- M = 399.87 g/mol
- CAS [15244-10-7]
- EC number: 233-072-9

Physical data:
- Spec. density: (18°C, anhydrous substance) 3,097 g/cm³
- Bulk density: ~ 200 g/cm³
- Solub. in water (20 °C): freely soluble
- pH (50 g/l H_2O, 20 °C) ~ 1,5

Toxicological data:
- WGK: 1

Safety:
- S: 24/25
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

I6024-1, Iron (III) sulfate hydrate, reagent grade

HS-No: 2833 29 50 00

Assay (iodometric) (as $Fe_2(SO_4)_3$)	min. 75 %	Copper (Cu)	max. 0.005 %
Insoluble in water	max. 0.025 %	Iron (II) (Fe (II))	max. 0.05 %
Chloride (Cl)	max. 0.01 %	Potassium (K)	max. 0.01 %
Nitrates (NO_3)	max. 0.02 %	Sodium (Na)	max. 0.05 %

Code	Capacity
I6024-1-0500	500 g

IRON (II) SULPHIDE

- FeS
- M = 87.92 g/mol
- CAS [1317-37-9]
- EC number: 215-268-6

Physical data:
- Form: Solid
- Spec. density: 4,8 g/cm^3
- Bulk density: ~ 1500 - 2000 kg/m^3
- Solub. in water (20 °C): almost insoluble
- Melting point: ~ 1195 °C

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 15

I6022-3, Iron (II) Sulphide, extra pure

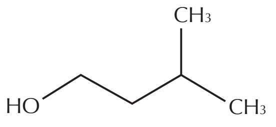
HS-No: 2830 90 11 00

Sulphide content	approx. 29 %

Code	Capacity
I6022-3-0500	500 g

ISOAMYL ALCOHOL

Xn



3-Methyl-1-butanol, Isopentyl alcohol

- $C_5H_{12}O$
- M = 88,15 g/mol
- CAS [123-51-3]
- EC number: 204-633-5

Physical data:
- Density: 0,81 g/cm^3
- Solub. in water (20 °C): 25 g/l
- Melting point: -117 °C
- Boiling point: 131 °C
- Flash point: 43 °C
- Ignition temp.: 340 °C
- Vapour presssure: (20 °C) 3,1 hPa
- Dipolar moment: (20 °C) 1,7 Debye
- Dielectric const.: (20 °C) 14,7
- Evap. heat: (132 °C) 441 KJ/kg
- Saturation conc.: (20 °C) 11 g/m^3
- Expl. limit (upper): 8 Vol%
- Expl. limit (lower): 1,2 Vol%
- pH (25 g/l H_2O, 20 °C) ~ 7

Toxicological data:
- LD 50 (oral, rat): >5000 mg/kg
- MAK: 100 ml/m^3 , 370 mg/m^3
- WGK: 1

Safety:
- EC Index no.: 603-006-00-7
- R: 10-20
- S: 24/25
- VbF class: AII
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 III UN 1105
- IMDG: 3 III UN 1105
- IATA/ICAO: 3 III UN 1105
- PAX: 309
- CAO: 310
- LGK: 3 A
- Disposal: 1

I7009-1, Iso-Amyl alcohol, reagent grade

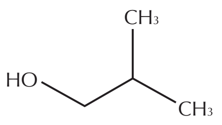
HS-No: 2905 15 00 00

Assay	min. 98.5 %	Acids and esters (as Amyl Acetate)	max. 0.2 %
Titrable Acid	max. 0.002 meq/g	Carbonyl (as HCHO)	max. 0.1 %
Residue After Evaporation	max. 0.003 %	Water	max. 0.5 %

Code	Capacity
I7009-1-2501	2.5L

ISOBUTANOL

Xi



2-Methyl-1-propanol, Isobutyl alcohol, Isopropylcarbinol

- $C_4H_{10}O$ · M = 74,12 g/mol
- CAS [78-83-1]
- EC number: 201-148-0

Physical data:
- Density: 0,8 g/cm^3
- Solub. in water (20 °C): 80 g/l
- Melting point: -108 °C
- Boiling point: 108 °C
- Flash point: 28 °C
- Ignition temp.: 430 °C
- Vapour pressure: (20 °C) 12 hPa
- Refraction index: (n 20 °C/D) 1,3955
- Viscosity: (20 °C) 6,68 mPas
- Dipolar moment: (20 °C) 1,79 Debye
- Dielectric const.: (20 °C) 17,7
- Evap. heat: (108 °C) 577 KJ/kg
- Saturation conc.: (20 °C) 36 g/m^3
- Expl. limit (upper): 12 Vol%
- Expl. limit (lower): 1,6 Vol%
- pH (80 g/l H_2O, 20 °C) 7

Toxicological data:
- LD 50 (oral, rat): 2460 mg/kg
- MAK: 100 ml/m^3 , 310 mg/m^3
- WGK: 1

Safety:
- EC Index no.: 603-108-00-1
- R: 10-37/38-41-67
- S: 7/9-13-26-37/39-46
- VbF class: AII
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 III UN 1212
- IMDG: 3 III UN 1212
- IATA/ICAO: 3 III UN 1212
- PAX: 309
- CAO: 310
- LGK: 3 A
- Disposal: 1

I7019-1, Isobutanol, reagent grade

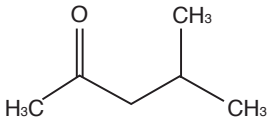
HS-No: 2905 14 90 00

Assay (GC)	min. 99.5 %	Lead (Pb)	max. 0.00002 %
Solublility in Water	passes test	Magnesium (Mg)	max. 0.00001 %
Colour	max. 10 Hazen	Manganese (Mn)	max. 0.000002 %
Acidity	max. 0.0005 meq/g	Nickel (Ni)	max. 0.000005 %
Aluminium (Al)	max. 0.00005 %	Tin (Sn)	max. 0.00002 %
Arsenic (As)	max. 0.00002 %	Zinc (Zn)	max. 0.00002 %
Barium (Ba)	max. 0.000005 %	2-Butanol (GC)	max. 0.05 %
Boron (B)	max. 0.00005 %	n-butyraldehyde (GC)	max. 0.1 %
Calcium (Ca)	max. 0.00005 %	Isobutyraldehyde (GC)	max. 0.05 %
Cadmium (Cd)	max. 0.00001 %	Peroxydes (as H_2O_2)	max. 0.001 %
Cobalt (Co)	max. 0.000005 %	Substances Darkened by H_2SO_4	passes test
Chromium (Cr)	max. 0.000005 %	Non-volatile matter	max. 0.001 %
Copper (Cu)	max. 0.000005 %	Water	max. 0.1 %
Iron (Fe)	max. 0.00002 %	UV spectrphotometry	passes test

Code	Capacity
I7019-1-1000	1.0 L
I7019-1-2500	2.5 L

ISOBUTYL METHYL KETONE

F Xn



Isobutyl methyl ketone,
4-Methyl -2-pentanone,
Isopropylacetone, Hexone, MIBK

- $C_6H_{12}O$
- M = 100.16 g/mol
- CAS [108-10-1]
- EC number: 203-550-1

Physical data:
- Form: Liquid
- Density: 0,80 g/cm³
- Solub. in water (20 °C): ~ 18 - 20 g/l
- Melting point: -84 °C
- Boiling point: 116 - 118 °C
- Flash point: 14 °C
- Ignition temp.: 475 °C
- Vapour pressure: (20 °C) 20,2 hPa
- Dipolar moment: (20 °C) 13,11 Debye
- Dielectric const.: (20 °C) 13,1
- Evap. heat: (117 °C) 364 KJ/kg
- Saturation conc.: (20 °C) 82 g/m³
- Expl. limit (upper): 8,0 Vol%
- Expl. limit (lower): 1,2 Vol%
- pH (20 °C) ~ 7

Toxicological data:
- LD 50 (oral, rat): 2080 mg/kg
- MAK: 20 ml/m³ , 83 mg/m³
- WGK: 1

Safety:
- EC Index no.: 606-004-00-4
- R: 11-20-36/37-66
- S: 9-16-29
- VbF class: AI
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 II UN 1245
- IMDG: 3 II UN 1245
- IATA/ICAO: 3 II UN 1245
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

I7025-1, Isobutyl Methyl Ketone, reagent grade

Assay (GC)	min. 99.5 %	Copper (Cu)	max. 0.000002 %
Colour	max. 10 Hazen	Iron (Fe)	max. 0.00001 %
Acidity	max 0.0002 meq/g	Lead (Pb)	max. 0.00001 %
Alkalinity	max. 0.001 meq/g	Magnesium (Mg)	max. 0.00001 %
Aluminium (Al)	max. 0.00005 %	Manganese (Mn)	max. 0.000002 %
Barium (Ba)	max. 0.000001 %	Nickel (Ni)	max. 0.000002 %
Boron (B)	max. 0.000002 %	Tin (Sn)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Zinc (Zn)	max. 0.00001 %
Calcium (Ca)	max. 0.00005 %	KMnO4 red. Matter (as O)	max. 0.0003 %
Chromium (Cr)	max. 0.000002 %	Non-volatile matter	max. 0.0005 %
Cobalt (Co)	max. 0.000002 %	Water	max. 0.05 %

Code	Capacity
I7025-1-2501	2.5 L

KAOLIN

Kaolin

- CAS [1332-58-7]
- EC number: 310-127-9

Physical data:
- Spec. density: 2.6 g/cm³ (20 °C)
- Solub. in water (20 °C): insoluble
- pH value 6 - 7 (slurry)
- Bulk density: ~ 350 kg/m³

Toxicological data:
- MAK: 1.5 ml/m³
- WGK: nwg

Safety:
- S: 22
- RTECS GF: 1670500
- Poison class CH: F

Transport/storage:
- LGK: 10-13

K1000-3, Kaolin, extra pure

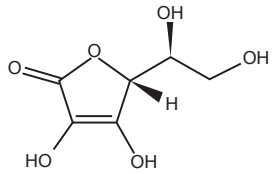
HS-No: 2507 00 20 00

Chloride (Cl)	max. 0.035 %	Sand	passes test
Carbonate (CO_3)	passes test	Iron (Fe)	max. 0.06 %
Soluble matter in acids	max. 1.0 %	Heavy metals (as Pb)	max. 0.01 %
Loss on ignition	max. 15.0 %	Arsenic (As)	max. 0.0002 %

Code	Capacity
K1000-3-0500	500 g

K

L(+)-ASCORBIC ACID



Vitamin C, 3-Oxo-L-gulonic acid- -lactone

- $C_6H_8O_6$
- M = 176.13 g/mol
- CAS [50-81-7]
- EC number: 200-066-2

Physical data:
- Spec. density: 1,65 g/cm³
- Bulk density: ~ 500 - 900 kg/m³
- Solub. in water (24 °C): 330 g/l
- Melting point: 190 - 192 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) 2,2 - 2,5

Toxicological data:
- LD 50 (oral, rat): 11900 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

L1003-1, L(+)-ascorbic acid, reagent grade

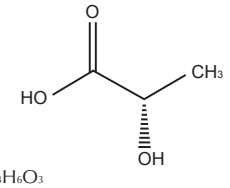
HS-No: 2936 27 00 00

Assay (acidimetric)	min. 99.7 %
Specific rotation ([ ]20°/D; in H_2O 10%)	+20.5 - +21.5
pH (5%, H_2O)	2.2 - 2.5
Chloride (Cl)	max. 0.005 %
Sulphate (SO_4)	max. 0.002 %
Copper (Cu)	max. 0.0005 %
Heavy metals (as Pb)	max. 0.001 %
Iron (Fe)	max. 0.0002 %
Sulfated ash	max. 0.05 %
Loss on drying (105°C)	max. 0.1 %

Code	Capacity
L1003-1-0100	100 g
L1003-1-0250	250 g

L(+)-LACTIC ACID

Xi



- $C_3H_6O_3$
- M = 90.08 g/mol
- CAS [79-33-4]
- EC number: 200-018-0

Physical data
- Form: Thick Liquid
- Density: ~ 1.18 g/cm³
- Solub. in water (20°C): miscible
- Melting point: 18 °C
- Boiling point: (20 hPa) 122 °C
- pH (10 g/l H_2O, 20 °C) ~ 2.8

Toxicological data:
- LD 50 (oral, rat): 3543 mg/kg (pure substance)
- WGK: 1

Safety:
- R: 38-41
- S: 26-39
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

L1020-1, L(+)-Lactic acid, reagent grade

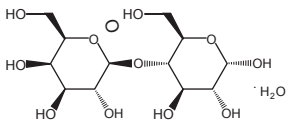
HS-No: 2915 90 10 00

Assay	min. 88 %
Insoluble in water	passes test
Insoluble in $C_2H_5OC_2H_5$	passes test
Aldehydes	passes test
Chloride (Cl)	max. 0.001 %
Sulfate (SO_4)	max. 0.002 %
Arsenic (As)	max. 0.00001 %
Copper (Cu)	max. 0.0005 %
Heavy metals (as Pb)	max. 0.0005 %
Iron (Fe)	max. 0.0002 %
Lead (Pb)	max. 0.0005 %
Nickel (Ni)	max. 0.0005 %
Substances darkened by H_2SO_4	passes test
Sulfated ash	max. 0.01 %

Code	Capacity
L1020-1-1000	500 g

D(+)-LACTOSE MONOHYDRATE

Lactobiose, Milk sugar



- $C_{12}H_{22}O_{11} \cdot H_2O$
- M = 360.32 g/mol
- CAS [10039-26-6]
- EC number: 200-559-2

Physical data:
- Form: Solid
- Bulk density: ~500 kg/m³
- Solub. in water (20°C): freely soluble
- Melting point: 223°C
- pH (50 g/l H_2O, 20°C) 4 - 6

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (swiss): F

Transport/storage:
- LGK: 10-13

L1000-3, d(+)-lactose monohydrate, extra pure

HS-No: 1702 11 00 00

Specific rotation ([α] 20°/D, c=10, H_2O)	+ 54.4 - +55.9°
Acidity/alkalinity	passes test
Appearance of solution (10%, water)	passes test
Proteins and UV-absorbing impurities	passes test
Arsenic (As)	max. 0.00005 %
Copper (Cu)	max. 0.0025 %
Heavy metals (as Pb)	max. 0.0005 %
Lead (Pb)	max. 0.00005 %
Zinc (Zn)	max. 0.0025 %
Sulfated ash	max. 0.1 %
Water	4.5 – 5.5 %
Residual solvents (Ph Eur/ICH)	Excluded by production process

Code	Capacity
L1000-3-0500	500 g

LANTHANUM (III) CHLORIDE HEPTAHYDRATE

$LaCl_3 \cdot 7H_2O$

- $Cl_3La \cdot 7H_2O$
- M = 371.37 g/mol
- CAS [10025-84-0]
- EC number: 233-237-5

Physical data
- Form: Solid
- Bulk density: ~ 900 g/cm³
- Solub. in water (20°C): soluble
- Melting point: 91 °C (release of crystalline water)
- Boiling point: (20 hPa) 122 °C
- pH (100 g/l H_2O, 25 °C) ~ 5

Toxicological data:
- LD 50 (oral, rat): 4184 mg/kg (anhydrous substance)
- WGK: 1

Transport/storage:
- LGK: 10-13
- Disposal: 28

L1030-1, Lanthanum (III) chloride heptahydrate, reagent grade

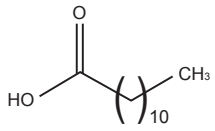
HS-No: 2846 90 00 00

Assay (Gravimetric)	min. 99 %	Iron (Fe)	max. 0.0001 %
Identity	passes test	Lead (Pb)	max. 0.0001 %
Insoluble in water	max. 0.01 %	Magnesium (Mg)	max. 0.0001 %
Sulfates (SO_4)	max. 0.005 %	Potassium (K)	max. 0.001 %
Calcium (Ca)	max. 0.001 %	Sodium (Na)	max. 0.001 %
Copper (Cu)	max. 0.0001 %	Zinc (Zn)	max. 0.0001 %
Heavy metals (as Pb)	max. 0.0005 %		

Code	Capacity
L1030-1-0100	100 g

LAURIC ACID

Dodecanoic acid



- $C_{12}H_{24}O_2$
- M = 200.32 g/mol
- CAS [143-07-7]
- EC number: 205-582-1

Physical data:
- Spec. density: ~ 0,87 g/cm³
- Bulk density: ~ 400 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: 42 - 45 °C
- Boiling point: (1,3 hPa) 131 °C
- Flash point: > 160 °C
- Vapour pressure: (20 °C) < 0,01 hPa

Toxicological data:
- LD 50 (oral, rat): 12000 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 4

L1034-3, Lauric acid, extra pure

HS-No: 2915 90 10 00

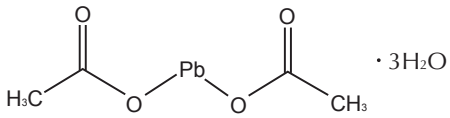
Assay	min. 99 %	Heavy metals (as Pb)	max. 0.001 %
Saponificable compounds	max. 0.5 %	Iron (Fe)	max. 0.0001 %
Iodine Index	max. 0.5 %	Sulfated ash	max. 0.01 %

Code	Capacity
L1034-3-0500	500 g
L1034-3-1000	1 kg

L

LEAD (II) ACETATE TRIHYDRATE

T N



- $Pb(CH_3COO)_2 \cdot 3H_2O$
- M = 379.34 g/mol
- CAS [6080-56-4]
- EC number: 206-104-4

Physical data:
- Spec. density: 2,55 g/cm³
- Bulk density: ~ 1200 kg/m³
- Solub. in water (20 °C): 410 g/l
- Melting point: 75 °C
- pH (50 g/l H_2O, 20 °C) 5,5 - 6,5

Toxicological data:
- LD 50 (oral, rat): 4665 mg/kg
- MAK: 0,1 mg/m³
- WGK: 3*

Safety:
- EC Index no.: 082-005-00-8
- R: 61-33-E48/22-50/53-62
- S: 53-45-60-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T5 III UN 1616
- IMDG: 6.1 III UN 1616
- IATA/ICAO: 6.1 III UN 1616
- PAX: 619
- CAO: 619
- LGK: 6.1B
- Disposal: 15

L2003-3, Lead (II) acetate trihydrate, extra pure

HS-No: 2915 29 00 90

Assay (complexometric)	min. 99.5 %	Silver (Ag)	max. 0.001 %
Insoluble in water	passes test	Zinc (Zn)	max. 0.005 %
Chloride (Cl)	max. 0.002 %	Non precipitable with H_2S (as Sulfate)	max. 0.2 %
Copper (Cu)	max. 0.001 %		
Iron (Fe)	max. 0.001 %		

Code	Capacity
L2003-3-0500	500 g

LEAD (II) BROMIDE

T N

- $PbBr_2$
- M = 367.01 g/mol
- CAS [10031-22-8]
- EC number: 233-084-4

Physical data:
- Solub. in water: 5g/l (20 °C
- Melting point: 372 - 374 °C

Toxicological data:
- MAK: 0.1 mg/m³
- WGK: 3*

Safety:
- Toxic for reproduction, harmful, dangerous for the environment
- EC-Index-No.: 082-001-00-6
- R: 61-E20/22-33-50/53-62
- S: 53-45-60-61

Transport/storage:
- Packing-cat: G
- Road/Rail 6.1/62 c
- IMDG-Code: 6.1/III UN 2291
- IATA/DGR: 6.1 III UN 2291
- CAO: 619
- PAX: 619
- SAX: 6,1692
- LGK: 6.1 B
- Disposal: 15

L2005-3, Lead (II) Bromide, extra pure

HS-No: 2827 59 00 00

Assay (ex Pb)	max. 99 %

Code	Capacity
L2005-3-0500	500 g

LEAD (II) NITRATE

 T  N

- $Pb(NO_3)_2$
- M = 331.21 g/mol
- CAS [10099-74-8]
- EC number: 233-245-9

Physical data:
- Spec. density: 4,53 g/cm³
- Bulk density: ~ 1850 kg/m³
- Solub. in water (20 °C): 525 g/l
- Melting point: ~ 470 °C
- pH (50 g/l H_2O, 20 °C) 3 - 4

Toxicological data:
- MAK: 0,1 mg/m³
- WGK: 2

Safety:
- EC Index no.: 082-001-00-6
- R: 61-E20/22-33-50/53-62
- S: 53-45-60-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 5.1 OT2 II UN 1469
- IMDG: 5.1 II UN 1469
- IATA/ICAO: 5.1 II UN 1469
- PAX: 508
- CAO: 511
- LGK: 5.1B
- Disposal: 15

L2019-1, Lead (II) nitrate, reagent grade

HS-No: 2834 29 20 00

Assay (complexometric)	min. 99.5 %	Magnesium (Mg)	max. 0.005 %
Insoluble substances	max. 0.005 %	Potassium (K)	max. 0.005 %
Chloride (Cl)	max. 0.0005 %	Sodium (Na)	max. 0.005 %
Calcium (Ca)	max. 0.005 %	Non precipitable with H_2S	
Copper (Cu)	max. 0.0005 %	(as sulfate)	max. 0.01 %
Iron (Fe)	max. 0.0005 %		

Code	Capacity
L2019-1-0500	500 g

LEAD (II) OXIDE

 T  N

Litharge

- PbO
- M = 223.19 g/mol
- CAS [1317-36-8]
- EC number: 215-267-0

Physical data:
- Spec. density: 9,6 g/cm³
- Bulk density: ~ 3500 - 3700 kg/m³
- Solub. in water (20 °C): 0,017 g/l
- Melting point: 890 °C
- Boiling point: 1470 °C
- pH (100 g/l H_2O, 20 °C) 8 - 9

Toxicological data:
- LD 50 (oral, rat): > 10000 mg/kg
- MAK: 0,1 mg/m³
- WGK: 1

Safety:
- EC Index no.: 082-001-00-6
- R: 61-E20/22-33-50/53-62
- S: 53-45-60-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T5 III UN 2291
- IMDG: 6.1 III UN 2291
- IATA/ICAO: 6.1 III UN 2291
- PAX: 619
- CAO: 619
- LGK: 6.1B
- Disposal: 15

L2022-3, Lead (II) oxide, extra pure

HS-No: 2824 10 00 00

Assay (complexometric)	min. 99 %	Copper (Cu)	max. 0.002 %
Insoluble in dil. acetic acid	max. 0.05 %	Iron (Fe)	max. 0.002 %
Soluble in water	max. 0.2 %	Silver (Ag)	max. 0.005 %
Chloride (Cl)	max. 0.005 %	Loss on calcinations (700°C)	max. 0.2 %
Nitrates (NO_3)	max. 0.01 %		

Code	Capacity
L2022-3-0500	500 g

L

LEAD (IV) OXIDE

 T  N

Lead dioxide, Lead peroxide

- PbO_2
- M = 239.20 g/mol
- CAS [1309-60-8]
- EC number: 215-174-5

Physical data:
- Spec. density: 9,4 g/cm³
- Bulk density: ~ 1500 kg/m³
- Solub. in water (20 °C): almost insoluble
- Melting point: 290 °C (decomposes)
- pH (100 g/l H_2O, 20 °C) 6 - 7

Toxicological data:
- MAK: 0,1 mg/m³
- WGK: 3

Safety:
- EC Index no.: 082-001-00-6
- R: 61-E20/22-33-50/53-62
- S: 53-45-60-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 5.1 OT2 III UN 1872
- IMDG: 5.1 III UN 1872
- IATA/ICAO: 5.1 III UN 1872
- PAX: 516
- CAO: 518
- LGK: 5.1B
- Disposal: 15

L2030-3, Lead (IV) oxide, extra pure

HS-No: 2824 90 00 00

Assay (bromometric)	min. 97 %	Total N	max. 0.005 %
Insoluble in acid	max. 0.05 %	Copper (Cu)	max. 0.001 %
Chloride (Cl)	max. 0.003 %	Iron (Fe)	max. 0.02 %
Sulfates (SO_4)	max. 0.003 %	Manganese (Mn)	max. 0.0002 %
Carbon (C)	max. 0.005 %	Non precipitable with H_2S (as SO_4)	max. 0.5 %

Code	Capacity
L2030-3-0500	500 g

LEAD STANDARD SOLUTION 1000MG/L FOR AA

Physical data
- Form: Liquid
- Density: ~ 1.02 g/cm³
- CAS [10039-26-6]
- Solub. in water (20°C): miscible
- pH (20°C) < 1

Toxicological data:
- WGK: 1

Safety:
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage
- ADR: 8 C1 III UN 3264
- IMDG: 8 III UM 3264
- IATA/ICAO: 8 III UM 3264
- PAX: 818
- CAO: 820
- LGK: 8B

Lead standard solution 1000mg/l for AA

HS-No: 3822 00 00 00

(lead (II) nitrate in nitric acid 0.5 mol/l)
Composition ..... 1000±5 mg/l

Code	Capacity
L1001-0-0500	500 ml

LEAD (II) SULFATE

- $PbSO_4$
- M = 303.25 g/mol
- CAS [7446-14-2]
- EC number: 231-198-9

Physical data:
- Spec. density: 6,2 g/cm³
- Solub. in water (20 °C): 0,045 g/l
- Melting point: 1170 °C

Safety:
- EC Index no.: 082-001-00-6
- R: 61-E20/22-33-50/53-62
- S: 53-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C2 II UN 1794
- IMDG: 8 II UN 1794
- IATA/ICAO: 8 II UN 1794
- PAX: 619
- CAO: 619

L2032-3, Lead (II) sulfate, extra pure

HS-No: 2836 91 00 90

Assay (complexometric)	min. 98 %
Insoluble in CH_3COONH_4	max. 0.1 %
Chloride (Cl)	max. 0.005 %
Iron (Fe)	max. 0.005 %

Code	Capacity
L2032-3-0500	500 g

LITHIUM CARBONATE

Xn

Li_2CO_3

- $LiCO_3$
- M = 73.89 g/mol
- CAS [554-13-2]
- EC number: 209-062-5

Physical data
- Form: Solid
- Spec. density: ~ 2.1 g/cm³
- Bulk. density: ~ 250 kg/m³
- Solub. in water (20°C): 13 g/l
- Melting point: 720 °C
- pH (5 g/l H_2O, 20 °C) ~ 10 - 11

Toxicological data:
- LD 50 (oral, rat): 525 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- R: 22-36
- S: 24-46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 14

L3000-1, Lithium carbonate, reagent grade

HS-No: 2836 91 00 90

Assay	min. 97.0 %	Barium (Ba)	max. 0.01 %
Chloride (Cl)	max. 0.005 %	Iron (Fe)	max. 0.007 %
Sulfate (SO_4)	max. 0.1 %	Sodium (Na)	max. 0.3 %
Nitrate (NO_3)	max. 0.005 %	Potassium (K)	max. 0.2 %
Phosphate (PO_4)	max. 0.003 %	Heavy metals (as Pb)	max. 0.002 %

Code	Capacity
L3000-1-0500	500 g

LITHIUM CHLORIDE MONOHYDRATE

Xn

- $LiCl \cdot H_2O$
- M = 60.41 g/mol
- CAS [16712-20-2]
- EC number: 231-212-3

Physical data:
- Spec. density: 2,07 g/cm³
- Bulk density: ~ 530 kg/m³
- Solub. in water (20 °C): 832 g/l
- Melting point: 614 °C
- Boiling point: 1360 °C
- Vapour pressure: (547 °C) 1,33 hPa
- pH (50 g/l H_2O, 20 °C) ~ 6

Toxicological data:
- LD 50 (oral, rat): 526 mg/kg
- WGK: 1

Safety:
- R: 22-36/38
- S: 46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 14

L3018-1, Lithium chloride monohydrate, reagent grade

HS-No: 2827 39 80 90

Assay	min. 97.0 %	Sodium (Na)	max. 0.03 %
pH (50g/l, 25ºC)	4.5 – 7.5	Magnesium (Mg)	max. 0.002 %
Appearance of solution	passes test	Potassium (K)	max. 0.03 %
Insolubility matter in water	max. 0.005 %	Calcium (Ca)	max. 0.005 %
Sulfates (SO_4)	max. 0.01 %	Iron (Fe)	max. 0.001 %
Nitrate (NO_3)	max. 0.002 %	Barium (Ba)	max. 0.005 %
Ammonium (NH_4)	max. 0.002 %	Heavy metals (as Pb)	max. 0.001 %
Phosphate (PO_4)	max. 0.001 %		

Code	Capacity
L3018-1-0500	500 g

L3018-3, Lithium chloride monohydrate, extra pure

HS-No: 2827 39 80 90

Assay (argentometric)	min. 98 %	Copper (Cu)	max. 0.002 %
Insoluble in water	max. 0.05 %	Iron (Fe)	max. 0.001 %
Nitrogen compounds (as N)	max. 0.005 %	Lead (Pb)	max. 0.002 %
Phosphates (PO_4)	max. 0.003 %	Nickel (Ni)	max. 0.002 %
Sulfates (SO_4)	max. 0.01 %	Potassium (K)	max. 0.01 %
Heavy metals (as Pb)	max. 0.001 %	Sodium (Na)	max. 0.02 %
Calcium (Ca)	max. 0.01 %		

Code	Capacity
L3018-3-1000	1 kg

LITHIUM HYDROXIDE MONOHYDRATE

 C

- $LiOH \cdot H_2O$
- M = 41.96 g/mol
- CAS [1310-66-3]
- EC number: 215-183-4

Physical data:
- Spec. density: 1,51 g/cm³
- Bulk density: ~ 650 kg/m³
- Solub. in water (20 °C): 124 g/l
- Melting point: 462 °C
- Boiling point: 924 °C (decomposes)
- pH (50 g/l H_2O, 50 °C) ~ 12

Toxicological data:
- WGK: 1

Safety:
- R: 35
- S: 26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C6 II UN 2680
- IMDG: 8 II UN 2680
- IATA/ICAO: 8 II UN 2680
- PAX: 814
- CAO: 816
- LGK: 8 B
- Disposal: 13

L3023-1, Lithium hydroxide monohydrate, reagent grade

HS-No: 2825 20 00 00

Assay (acidimetric)	min. 98 %	Calcium (Ca)	max. 0.005 %
Assay of Li_2CO_3	max. 1 %	Heavy metals (as Pb)	max. 0.001 %
Insoluble in acid	max. 0.01 %	Iron (Fe)	max. 0.0005 %
Chloride (Cl)	max. 0.005 %	Potassium (K)	max. 0.01 %
Sulfates (SO_4)	max. 0.005 %	Sodium (Na)	max. 0.01 %

Code	Capacity
L3023-1-0500	500 g

LITHIUM NITRATE

 O

- $LiNO_3$
- M = 68.95 g/mol
- CAS [7790-69-4]
- EC number: 232-218-9

Physical data
- Form: Solid
- Spec. density: ~ 2.36 g/cm³
- Bulk. density: ~ 910 kg/m³
- Solub. in water (20°C): 13 g/l
- Melting point: 255 °C
- pH (50 g/l H_2O, 20 °C) ~ 7 - 9

Toxicological data:
- WGK: 1

Safety:
- R: 8
- S: 24/25
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 O2 III UN 2722
- IMDG: 5.1 III UN 2722
- IATA/ICAO: 5.1 III UN 2722
- PAX: 516
- CAO: 518
- LGK: 5.1 B
- Disposal: 14

L3050-1, Lithium nitrate, reagent grade

HS-No: 2836 29 80 00

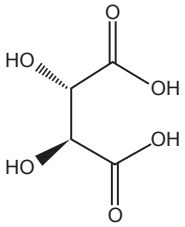
Appearance of solution	passes test	Sodium (Na)	max. 0.1 %
Insolubility matter in water	max. 0.1 %	Magnesium (Mg)	max. 0.01 %
Loss on drying	max. 3.0 %	Potassium (K)	max. 0.1 %
Acid and alkali test	passes test	Calcium (Ca)	max. 0.03 %
Chloride (Cl)	max. 0.002 %	Iron (Fe)	max. 0.002 %
Sulfate (SO_4)	max. 0.052 %	Barium (Ba)	max. 0.01 %
Phosphate (PO_4)	max. 0.001 %	Heavy metals (as Pb)	max. 0.001 %
Ammonium (NH_4)	max. 0.003 %		

Code	Capacity
L3050-1-0500	500 g

L(+)-TARTARIC ACID

 Xi

2,3-Dihydroxybutanedioic acid



- $C_4H_6O_6 \cdot$
- M = 150.09 g/mol
- CAS [87-69-4]
- EC number: 201-766-0

Physical data:
- Form: solid
- Spec. density: 1,76 g/cm³
- Bulk density: ~ 800 - 1000 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 170 °C
- Ignition point: 425 °C
- pH (100 g/l H_2O, 25 °C) ~ 1,6

Toxicological data:
- WGK: 1

Safety:
- R: 36
- S: 24/25
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 4

L1012-1, L(+)-Tartaric acid, reagent grade

HS-No: 2918 12 00 00

Assay (acidimetric)	min. 99.5 %	Copper (Cu)	max. 0.0005 %
Identity (IR-spectrum)	passes test	Heavy metals (as Pb)	max. 0.0005 %
Appearance of solution	passes test	Iron (Fe)	max. 0.0005 %
Insoluble in water	max. 0.005 %	Lead (Pb)	max. 0.0005 %
Specific rotation ([ ] 20°/D; c=20, H_2O)..	+12.0 - +12.8°	Magnesium (Mg)	max. 0.002 %
Chloride (Cl)	max. 0.0005 %	Nickel (Ni)	max. 0.0001 %
Phosphates (PO_4)	max. 0.001 %	Oxalic acid	max. 0.035 %
Sulfates (SO_4)	max. 0.005 %	Sulphur compounds (as SO_4)	max. 0.002 %
Arsenic (As)	max. 0.00002 %	Sulfated Ash	max. 0.01 %
Calcium (Ca)	max. 0.002 %	Loss on drying (105°C)	max. 0.2 %

Code	Capacity
L1012-1-0500	500 g

L1012-3, L(+)-Tartaric acid, extra pure

HS-No: 2918 12 00 00

Assay	99.7 – 100.5 %	Mercury (Hg)	max. 0.0001 %
Identity	passes test	Lead (Pb)	max. 0.0005 %
Organic volatile impurities (NF)	passes test	Heavy metals (as Pb)	max. 0.001 %
Chloride (Cl)	max. 0.01 %	Oxalates (as $C_2H_2O_4$)	max. 0.01 %
Calcium (Ca)	max. 0.02 %	Sulphated ash (600°C)	max. 0.1 %
Sulphate (SO_4)	max. 0.015 %	Loss on drying (105°C)	max. 0.2 %

Code	Capacity
L1012-3-0500	500 g

MAGNESIUM

F

- Mg
- M = 24.31 g/mol
- CAS [7439-95-4]
- EC number: 231-104-6

Physical data:
- Spec. density: 1,75 g/cm³
- Solub. in water (20 °C): insoluble
- Melting point: 651 °C
- Boiling point: 1107 °C

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 012-002-00-9
- R: 11-15
- S: 7/8-43.6
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 4.1 F3 III UN 1869
- IMDG: 4.1 III UN 1869
- IATA/ICAO: 4.1 III UN 1869
- PAX: 419
- CAO: 420
- LGK: 4.3
- Disposal: 26

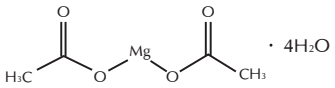
M1032-3, Magnesium powder, extra pure

HS-No: 8104 30 00 00

Assay (complexometric)	min. 99 %
Insoluble in HCl	max. 0.05 %
Iron (Fe)	max. 0.05 %

Code	Capacity
M1032-3-0250	250 g

MAGNESIUM ACETATE TETRAHYDRATE



· 4H₂O

- $Mg(CH_3COO)_2 \cdot 4H_2O$
- M = 214.46 g/mol
- CAS [16674-78-5]
- EC number: 205-554-9

Physical data:
- Spec. density: 1,45 g/cm³
- Bulk density: ~ 510 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 80 °C
- pH (50 g/l H_2O, 50 °C) 6,1

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

M1001-1, Magnesium acetate tetrahydrate, reagent grade

HS-No: 2915 29 00 90

Assay (complexometric)	99.5 – 102 %	Heavy metals (as Pb)	max. 0.0005 %
Insoluble in water	max. 0.005 %	Iron (Fe)	max. 0.0001 %
Chloride (Cl)	max. 0.001 %	Manganese (Mn)	max. 0.001 %
Sulfate (SO_4)	max. 0.001 %	Potassium (K)	max. 0.005 %
Total Nitrogen (N)	max. 0.001 %	Sodium (Na)	max. 0.001 %
Barium (Ba)	max. 0.001 %	Strontium (Sr)	Emax. 0.005 %
Calcium (Ca)	max. 0.001 %	Zinc (Zn)	max. 0.0002 %
Copper (Cu)	max. 0.0005 %		

Code	Capacity
M1001-1-0500	500 g

M1001-3, Magnesium acetate tetrahydrate, extra pure

HS-No: 2915 29 00 90

Assay (complexometric)	min. 99 %	Copper (Cu)	max. 0.001 %
Insoluble in water	max. 0.025 %	Iron (Fe)	max. 0.001 %
Chloride (Cl)	max. 0.005 %	Manganese (Mn)	max. 0.001 %
Sulfate (SO_4)	max. 0.01 %	Potassium (K)	max. 0.01 %
Total Nitrogen (N)	max. 0.005 %	Sodium (Na)	max. 0.01 %
Barium (Ba)	max. 0.001 %	Strontium (Sr)	max. 0.005 %
Calcium (Ca)	max. 0.01 %	Zinc (Zn)	max. 0.001 %

Code	Capacity
M1001-3-0500	500 g

M

MAGNESIUM CARBONATE BASIC

- ~ $4MgCO_3 \cdot Mg(OH)_2 \cdot 5H_2O$
- M = 485 g/mol
- CAS [12125-28-9]
- EC number: 235-192-7

Physical data:
- Form: Solid
- Spec. density: 2,16 g/cm³
- Bulk density:~110 - 180 kg/cm³
- Solub. in water (20 °C): insoluble
- Melting point: 700 °C
- pH (50 g/l H_2O suspension, 20 °C) ~ 10,5

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

M1010-1, Magnesium carbonate basic, reagent grade

HS-No: 2836 99 11 00

Assay (complexometric, Mg)	min. 24.0 %	Barium and strontium (as Ba)	max. 0.001 %
Substances soluble in water	max. 0.5 %	Calcium (Ca)	max. 0.001 %
Substances insoluble in hydrochloric acid	max. 0.005 %	Copper (Cu)	max. 0.0005 %
Chloride (Cl)	max. 0.005 %	Iron (Fe)	max. 0.001 %
Sulfate (SO_4)	max. 0.003 %	Potassium (K)	max. 0001 %
Total nitrogen (N)	max. 0.001 %	Sodium (Na)	max. 0.2 %
Heavy metals (as Pb)	max. 0.001 %	Lead (Pb)	max. 0.001 %
		Zinc (Zn)	max. 0.0005 %

Code	Capacity
M1010-1-0250	250 g

MAGNESIUM CHLORIDE HEXAHYDRATE

- $MgCl_2 \cdot 6H_2O$
- M = 203.31 g/mol
- CAS [7791-18-6]
- EC number: 232-094-6

Physical data:
- Spec. density: ~1,57 g/cm³
- Solub. in water (20 °C): 1670 g/l
- Melting point: ~ 117 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) 5,0 - 6,5

Toxicological data:
- LD 50 (oral, rat): 8100 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

M1014-1, Magnesium chloride hexahydrate, reagent grade

HS-No: 2827 31 00 00

Assay (complexometric)	min. 99.5 %	Calcium (Ca)	max. 0.01 %
Insoluble matter	max. 0.005 %	Potassium (K)	max. 0.005 %
Phosphates (PO_4)	max. 0.0005 %	Sodium (Na)	max. 0.005 %
Nitrate (NO_3)	max. 0.001 %	Strontium (Sr)	max. 0.005 %
Sulfate (SO_4)	max. 0.002 %	Heavy Metals (as Pb)	max. 0.0005 %
Ammonium (NH_4)	max. 0.002 %	Iron (Fe)	max. 0.0005 %
Barium (Ba)	max. 0.005 %	Manganese (Mn)	max. 0.0005 %

Code	Capacity
M1014-1-0500	500 g
M1014-1-1000	1 kg

MAGNESIUM HYDROXIDE CARBONATE PENTAHYDRATE

Magnesium carbonate basic

- $4MgCO_3 \cdot Mg(OH)_2 \cdot 5H_2O$
- M = ~ 485 g/mol
- CAS [12125-28-9]
- EC number: 235-192-7

Physical data:
- Spec. density: 2,16 g/cm³
- Bulk density: ~ 110 - 180 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: 700 °C
- pH (50 g/l H_2O suspension, 20 °C) ~ 10,5

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

M1020-3, Magnesium hydroxide carbonate pentahydrate, extra pure

HS-No: 2836 99 11 00

Assay (as MgO)	40 - 45 %
Chloride (Cl)	max. 0.1 %
Insoluble in H_2SO_4	max. 0.1 %
Sulphur compounds (as SO_4)	max. 0.2 %

Code	Capacity
M1020-3-0500	500 g

MAGNESIUM NITRATE HEXAHYDRATE

O

- $Mg(NO_3)_2 \cdot 6H_2O$
- M = 256.41 g/mol
- CAS [13446-18-9]
- EC number: 233-826-7

Physical data:
- Spec. density: 1,46 g/cm³
- Solub. in water (20 °C): 1250 g/l
- Melting point: ~ 89 - 95 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) 5,0 - 7,0

Toxicological data:
- LD 50 (oral, rat): 5440 mg/kg
- WGK: 1

Safety:
- R: 8
- S: 24/25

Transport/storage:
- ADR: 5.1 O2 III UN 1474
- IMDG: 5.1 III UN 1474
- IATA/ICAO: 5.1 III UN 1474
- PAX: 516
- CAO: 518
- LGK: 5.1 B
- Disposal: 14

M1021-1, Magnesium nitrate hexahydrate, reagent grade

HS-No: 2834 29 80 00

Assay (complexometric)	min. 99.5 %	Barium, strontium (as Ba)	max. 0.002 %
Insoluble in water	max. 0.005 %	Calcium (Ca)	max. 0.005 %
pH (5%, H_2O)	5 - 7	Heavy Metals (as Pb)	max. 0.0005 %
Chloride (Cl)	max. 0.001 %	Iron (Fe)	max. 0.0005 %
Sulfate (SO_4)	max. 0.002 %	Manganese (Mn)	max. 0.0005 %
Phosphates (PO_4)	max. 0.0005 %	Potassium (K)	max. 0.0005 %
Ammonium (NH_4)	max. 0.001 %	Sodium (Na)	max. 0.0005 %
Arsenic (As)	max. 0.0001 %		

Code	Capacity
M1021-1-0500	500 g
M1021-1-1000	1 Kg

MAGNESIUM OXIDE

- MgO
- M = 40.30 g/mol
- CAS [13009-48-4]
- EC number: 215-171-9

Physical data:
- Spec. density: 3,58 g/cm³
- Bulk density: ~ 200 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: -2800°C
- Boiling point: 3600°C
- pH (saturated solution H_2O, 20 °C) -10

Toxicological data:
- MAK: 4mg/m³
- WGK: 1

Safety:
- S: 22
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 14

M1029-3, Magnesium oxide, extra pure

HS-No: 2519 90 10 00

Assay (complexometric)	min. 98 %	Copper (Cu)	max. 0.0005 %
Insoluble in acetic acid	max. 0.1 %	Heavy metals (as Pb)	max. 0.002 %
Soluble in water	max. 1 %	Iron (Fe)	max. 0.05 %
Chloride (Cl)	max. 0.05 %	Lead (Pb)	max. 0.0005 %
Sulphate (SO_4)	max. 0.5 %	Zinc (Zn)	max. 0.0025 %
Arsenic (As)	max. 0.0002 %	Loss on calcinations (900ºC)	max. 5 %
Calcium (Ca)	max. 1 %		

Code	Capacity
M1029-3-0500	500 g

MAGNESIUM SULFATE ANHYDROUS

- $MgSO_4$
- M = 120.37 g/mol
- CAS [7487-88-9]
- EC number: 231-298-2

Physical data:
- Spec. density: 2,66 g/cm³
- Bulk density: ~ 600 kg/m³
- Solub. in water (40 °C): 450 g/l
- Melting point: 1124 °C
- pH (50 g/l H_2O, 25 °C) ~ 7,9

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

M1035-1, Magnesium sulfate anhydrous, reagent grade

HS-No: 2833 21 00 00

Assay (complexometric)	min. 98 %	Sodium chloride (NaCl)	max. 0.1 %
Calcium sulfate ($CaSO_4$)	max. 0.5 %	Iron (Fe)	max. 0.01 %
Potassium chloride (KCl)	max. 0.1 %	Manganese (Mn)	max. 0.11 %
Potassium sulfate (K_2SO_4)	max. 0.6 %	Loss on drying (600°C)	max. 1 %

Code	Capacity
M1035-1-0500	500 g

MAGNESIUM SULFATE HEPTAHYDRATE

Bitter salt, Epsom salt, Sulfuric acid magnesium salt heptahydrate

- $MgSO_4 \cdot 7H_2O$
- M = 246.48 g/mol
- CAS [10034-99-8]
- EC number: 231-298-2

Physical data:
- Spec. density: 1,68 g/cm³
- Bulk density: ~ 900 kg/m³
- Solub. in water (20 °C): 710 g/l
- pH (50 g/l H_2O, 20 °C) 5,0 - 8,2

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

M1045-1, Magnesium sulfate heptahydrate, reagent grade AR

HS-No: 2833 21 00 00

Assay (complexometric)	min. 99.5 %	Heavy Metals (as Pb)	max. 0.0005 %
pH (5%, H_2O)	5 - 8	Iron (Fe)	max. 0.0001 %
Chloride (Cl)	max. 0.0003 %	Lead (Pb)	max. 0.0001 %
Total N	max. 0.002 %	Manganese (Mn)	max. 0.0005 %
Calcium (Ca)	max. 0.005 %	Potassium (K)	max. 0.001 %
Copper (Cu)	max. 0.0001 %	Sodium (Na)	max. 0.001 %

Code	Capacity
M1045-1-0500	500 g
M1045-1-1000	1 kg

MALACHITE GREEN

- $C_{23}H_{25}ClN_2$
- M = 929.02 g/mol
- CAS [2437-29-8]

M1050-3, Malachite green, extra pure

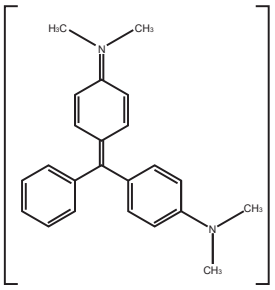
Identification test	passes test	Loss on drying	max. 3.5 %
Sensitivity test to tungsten	passes test	Residue after ignition (as sulfate)	max. 2.0 %

Code	Capacity
M1050-3-0101	100 g

MALACHITE GREEN OXALATE, C.I. 42000

Xn

Diamond green B



- $C_{50}H_{52}O_8N_4 \cdot H_2C_2O_4$
- M = 927.02 g/mol
- CAS [2437-29-8]
- EC number: 219-441-7

Physical data:
- Form: Solid
- Bulk density: ~ 400 - 500 kg/m³
- Solub. in water (24 °C): insoluble
- Melting point: ~ 159°C
- Boiling point: 3600°C
- pH (10 g/l H_2O, 24 °C) 2,4

Toxicological data:
- WGK: 3

Safety:
- EC Index no.: 607-007-00-3
- R: 21/22
- S: 24/25-37-46
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 T2 III UN 2811
- IMDG: 6.1 III UN 2811
- IATA/ICAO: 6.1 III UN 2811
- PAX: 619
- CAO: 619
- LGK: 10-13

M1050-1, Malachite green oxalate, C.I. 42000, reagent and microscopy grade

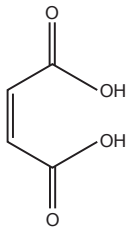
HS-No: 3204 13 00 00

Identity	passes test	TLC test	passes test
Absorption maximum λ (water)	616 – 620 nm	Loss on drying (110°C)	max. 7 %
Absorptivity (A1%/1 cm; λ max, 0.003 g/l, water)	1730 – 1960		

Code	Capacity
M1050-1-0101	100 g

MALEIC ACID

Xn



cis-Butenedioic acid

- $C_4H_4O_4$
- M = 116.07 g/mol
- CAS [110-16-7]
- EC number: 203-742-5

Physical data:
- Spec. density: 1,59 g/cm³
- Bulk density: 750 - 800 kg/m³
- Solub. in water (25 °C): 788 g/l
- Melting point: 133 °C
- Boiling point: 135 °C (decomposes)
- Flash point: 127 °C
- Vapour pressure: (20 °C) < 0,1 hPa

Toxicological data:
- LD 50 (oral, rat): 708 mg/kg
- WGK: 1

Safety:
- EC Index no.: 607-095-00-3
- R: 22-36/37/38
- S: 26-28.1-37-46
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 8 C4 III UN 3261
- IMDG: 8 III UN 3261
- IATA/ICAO: 8 III UN 3261
- PAX: 822
- CAO: 823
- LGK: 8
- Disposal: 4

M1061-3, Maleic acid, extra pure

HS-No: 2917 19 90 90

Assay (acidimetric, referred to anhydrous substance)	min. 99 %	Iron (Fe)	max. 0.0005 %
Appearance of solution 10% in H_2O	clear and colourless	Sulfated ash	max. 0.1 %
Fumaric acid (TCL)	max. 1.5 %	Water	max. 2 %
Heavy metals (as Pb)	max. 0.001 %	Residual solvents (Ph /Eur/ICH)	excluded by production process

Code	Capacity
M1061-3-0500	500 g

MANGANESE (II) ACETATE TETRAHYDRATE


Xi

- $Mn(C_2H_3O_2)_2 \cdot 4H_2O$
- M = 245.09 g/mol
- CAS-No. 6156-78-1
- EC-No. 211-334-3

Physical data:
- Spec. density: 1.59 g/cm³

Safety:
- R: 36/37/38
- S: 26-36

M1052-1, Manganese (II) acetate tetrahydrate, reagent grade

Assay	min. 99.0 %	Iron (Fe)	max. 0.001 %
Appearance of solution	passes test	Zinc (Zn)	max. 0.02 %
Insolubility matter in water	max. 0.005 %	Heavy metals (as Pb)	max. 0.002 %
Chloride (Cl)	max. 0.005 %	Substance not precipitated by	
Sulfate (SO_4)	max. 0.005 %	ammonium sulfide (as sulfate)	max. 0.2 %

Code	Capacity
M1052-1-0500	500 g

MANGANESE (II) CHLORIDE TETRAHYDRATE


Xn

- $MnCl_2 \cdot 4H_2O$
- M = 197.91 g/mol
- CAS [13446-34-9]
- EC number: 231-869-6

Physical data:
- Spec. density: 2,01 g/cm³
- Bulk density: ~ 1150 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 58 °C
- pH (50 g/l H_2O, 20 °C) ~ 4 - 6

Toxicological data:
- LD 50 (oral, rat): 1484 mg/kg
- WGK: 1

Safety:
- R: 22
- S: 46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 15

M1067-1, Manganese (II) chloride tetrahydrate, reagent grade

HS-No: 2827 39 80 90

Assay	min. 99.0 %	Barium (Ba)	max. 0.005 %
Insolubility matter in water	max. 0.005 %	Heavy metals (as Pb)	max. 0.0005 %
Sulfates (SO_4)	max. 0.005 %	Alkali metals and alkali earth metals	
Iron (Fe)	max. 0.0002 %	(as sulfate)	max. 0.2 %
Zinc (Zn)	max. 0.02 %	Oxidizing and reducing substances	passes test

Code	Capacity
M1067-1-0500	500 g

M1067-3, Manganese (II) chloride tetrahydrate, extra pure

HS-No: 2827 39 80 90

Assay (complexometric)	min. 99 %	Iron (Fe)	max. 0.001 %
pH (5%, H_2O)	4 - 6	Lead (Pb)	max. 0.001 %
Sulfates (SO_4)	max. 0.01 %	Nickel (Ni)	max. 0.005 %
Calcium (Ca)	max. 0.01 %	Zinc (Zn)	max. 0.005 %
Heavy Metals (as Pb)	max. 0.002 %		

Code	Capacity
M1067-3-1000	1 kg

MANGANESE (IV) OXIDE


Xn

Manganese dioxide, Pyrolusite, Black manganese oxide, Manganese superoxide

- MnO_2
- M = 86.94 g/mol
- CAS [1313-13-9]
- EC number: 215-202-6

Physical data:
- Spec. density: 5,03 g/cm³
- Bulk density: ~ 1000 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: 535 °C (decomposes)
- pH (200 g/l H_2O, 20 °C) 4,0 - 5,5

Toxicological data:
- MAK: 0,5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 025-001-00-3
- R: 20/22
- S: 25-46
- Poison class CH (Swiss): 5

Transport/storage:
- ADR: 5.1 O2 II UN 1479
- IMDG: 5.1 II UN 1479
- IATA/ICAO: 5.1 II UN 1479
- PAX: 508
- CAO: 511
- LGK: 5.1B
- Disposal: 15

M1080-3, Manganese (IV) oxide 95% precipitate, extra pure

HS-No: 2820 10 00 00

Assay (permanganometric)	approx. 95 %
Silicium dioxide (SiO_2)	max. 3 %
Iron (Fe)	max. 1 %
Loss on drying (105°C)	max. 1 %

Code	Capacity
M1080-3-0500	500 g

MANGANESE (II) SULFATE MONOHYDRATE


Xn


N

- $MnSO_4 \cdot H_2O$
- M = 169.02 g/mol
- CAS [10034-96-5]
- EC number: 232-089-9

Physical data:
- Spec. density: 2,95 g/cm³
- Bulk density: ~ 1000 - 1200 kg/m³
- Solub. in water (20 °C): 762 g/l
- Melting point: 117 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) 3,0 - 3,5

Toxicological data:
- MAK: 0,5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 025-003-00-4
- R: 48/20/22-51/53
- S: 22-46-61
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 9 M7 III UN 3077
- IMDG: 9 III UN 3077
- IATA/ICAO: 9 III UN 3077
- PAX: 911
- CAO: 911
- LGK: 10-13
- Disposal: 15

M1070-1, Manganese (II) sulfate monohydrate, reagent grade

HS-No: 2833 29 90 00

Assay (complexometric)	min. 99 %	Magnesium (Mg)	max. 0.005 %
Insoluble in water	max. 0.01 %	Nickel (Ni)	max. 0.0005 %
Chloride (Cl)	max. 0.001 %	Potassium (K)	max. 0.005 %
Calcium (Ca)	max. 0.005 %	Sodium (Na)	max. 0.005 %
Copper (Cu)	max. 0.0002 %	Zinc (Zn)	max. 0.001 %
Iron (Fe)	max. 0.0005 %	$KMnO_4$ red matter (as O)	max. 0.0005 %
Lead (Pb)	max. 0.0002 %	Loss on calcinations (500°C)	10 - 12 %

Code	Capacity
M1070-1-0500	500 g

MANGANESE STANDARD SOLUTION 1000MG/L FOR AA

 Xi

Physical data:
- Density: ~ 1.01 g/cm³
- Solub. in water (20 °C): miscible
- pH (20 °C) < 1

Toxicological data:
- WGK: 0

Safety:
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C1 III UN 3264
- IMDG: 8 III UN 3264
- IATA/ICAO: 8 III UN 3264
- PAX: 818
- CAO: 820
- LGK: 8 B

M1003-0, Manganese standard solution 1000mg/l for AA
(manganese nitrate in nitric acid 0.5 mol/l)

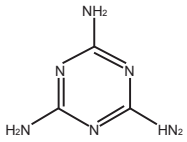
HS-No: 3822 00 00 00

Composition ..... 1000±5 mg/l

Code	Capacity
M1003-0-0500	500 ml

MELAMINE

2,4,6-Triamino-1,3,5-triazine



- $C_3H_6N_6$
- M = 126.12 g/mol
- CAS [108-78-1]
- EC number: 203-615-4

Physical data:
- Form: Powder, finecrystaline
- Spec. density: 1.57 g/cm³
- Bulk density: 800 kg/m³
- Solub. in water (20 °C): 3.2 g/l
- Melting point: 354 °C (decomposes)
- Flash point: > 280 °C
- Ignition temp.: > 600 g/cm³
- pH (32 g/l H_2O, 20 °C) 7 - 8

Toxicological data:
- LD 50 (oral, rat): > 3000 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 3

M1000-2, Melamine, synthesis grade

HS-No: 2933 61 00 00

Assay (ex. N) ..... min. 99 %
Identity (IR-spectrum) ..... passes test

Code	Capacity
M1000-2-0500	500 g

MERCURY

 T  N

- Hg
- M = 200.59 g/mol
- CAS [7439-97-6]
- EC number: 231-106-7

Physical data:
- Density: 13,55 g/cm³
- Solub. in water (20 °C): 0,0036 mg/l
- Melting point: -39 °C
- Boiling point: 357 °C
- Vapour pressure: (20 °C) 0,0017 hPa
- pH ~ 7

Toxicological data:
- MAK: 0,1 mg/m³
- WGK: 3

Safety:
- EC Index no.: 080-001-00-0
- R: 23-33-50/53
- S: 7-45-60-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C9 III UN 2809
- IMDG: 8 III UN 2809
- IATA/ICAO: 8 III UN 2809
- PAX: 803
- CAO: 803
- LGK: 6.1B
- Disposal: 20

M1092-3, Mercury, extra pure

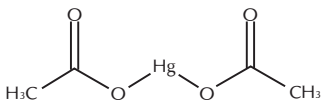
HS-No: 2805 40 90 00

Assay ..... min. 99.6 %
Insoluble in HNO_3 ..... max. 0.002 %
Heavy metals (as Pb) ..... max. 0.0005 %
Iron (Fe) ..... max. 0.0005 %
Loss on drying ..... max. 0.003 %

Code	Capacity
M1092-3-1000	1 kg

MERCURY (II) ACETATE

 T+  N



Acetic acid mercury(II) salt,
Mercuric salts

- $Hg(CH_3COO)_2$
- M = 318.68 g/mol
- CAS [1600-27-7]
- EC number: 216-491-1

Physical data:
- Spec. density: 3,27 g/cm³
- Bulk density: ~ 1000 kg/m³
- Solub. in water (20 °C): 400 g/l
- Melting point: 178 - 180 °C

Toxicological data:
- LD 50 (oral, rat): 40,9 mg/kg
- WGK: 3

Safety:
- EC Index no.: 080-002-00-6
- R: 26/27/28-33-50/53
- S: 13-28.1-36/37-45-60-61

Transport/storage:
- ADR: 6.1 T5 II UN 1629
- IMDG: 6.1 II UN 1629
- IATA/ICAO: 6.1 II UN 1629
- PAX: 613
- CAO: 615
- LGK: 6.1B
- Disposal: 20

M2010-1, Mercury (II) acetate, reagent grade

HS-No: 2915 29 00 90

Assay (complexometric) ..... min. 99 %
Insoluble in dil. acetic acid ..... max. 0.01 %
Chlorides (Cl) ..... max. 0.005 %
Nitrates (NO_3) ..... max. 0.005 %
Sulfates (SO_4) ..... max. 0.005 %
Heavy metals (as Pb) ..... max. 0.002 %
Iron (Fe) ..... max. 0.001 %
Mercury (I) (as Hg) ..... max. 0.3 %
Sulfated ash after reduction ..... max. 0.02 %

Code	Capacity
M2010-1-0101	100 g
M2010-1-0250	250 g

M

MERCURY (II) CHLORIDE

 T+  N

- $HgCl_2$
- M = 271.50 g/mol
- CAS [7487-94-7]
- EC number: 231-299-8

Physical data:
- Spec. density: 5,44 g/cm³
- Bulk density: ~ 2000 kg/m³
- Solub. in water (20 °C): 74 g/l
- Melting point: 280,7 °C
- Boiling point: 302 °C
- Vapour pressure: (20 °C) 0,0001 hPa
- pH (15 g/l H_2O, 20 °C) 3,2

Toxicological data:
- LD 50 (oral, rat): 1 mg/kg
- MAK: 0,1 mg/m³
- WGK: 3

Safety:
- EC Index no.: 080-010-00-X
- R: 28-34-48/24/25-50/53
- S: 36/37/39-45-60-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T5 II UN 1624
- IMDG: 6.1 II UN 1624
- IATA/ICAO: 6.1 II UN 1624
- PAX: 613
- CAO: 615
- LGK: 6.1B
- Disposal: 20

M2016-1, Mercury (II) chloride, reagent grade

HS-No: 2827 39 80 90

Assay (complexometric)	min. 99 %	Magnesium (Mg)	max. 0.001 %
Insoluble in ether	passes test	Mercury (I) chloride (Hg_2Cl_2)	max. 0.05 %
Insoluble in water	max. 0.01 %	Nickel (Ni)	max. 0.0005 %
Nitrates (NO_3)	max. 0.001 %	Potassium (K)	max. 0.005 %
Sulfates (SO_4)	max. 0.02 %	Silver (Ag)	max. 0.0005 %
Total N	max. 0.002 %	Sodium (Na)	max. 0.005 %
Calcium (Ca)	max. 0.001 %	Zinc (Zn)	max. 0.0005 %
Cadmium (Cd)	max. 0.0005 %	Not red. matter with HCOOH	
Copper (Cu)	max. 0.0005 %	(calcination residue, as sulfate)	max. 0.01 %
Heavy metals (as Pb)	max. 0.001 %	$KMnO_4$ red. matter (as O)	max. 0.001 %
Iron (Fe)	max. 0.0005 %	Loss on drying (on P_2O_5)	max. 1 %
Lead (Pb)	max. 0.0005 %		

Code	Capacity
M2016-1-0101	100 g
M2016-1-0250	250 g
M2016-1-1000	1Kg

MERCURY (II) IODIDE

 T+  N

- HgI_2
- M = 454.40 g/mol
- CAS [7774-29-0]
- EC number: 231-873-8

Physical data:
- Spec. density: (25 °C) 6,36 g/cm³
- Bulk density: ~ 1350 kg/m³
- Solub. in water (25 °C): 0,06 g/l
- Melting point: 259 °C
- Boiling point: 354 °C
- Vapour pressure: (60 °C) ~ 0,001 hPa
- pH (50 g/l H_2O, 20 °C) 6 - 7

Toxicological data:
- LD 50 (oral, rat): 18 mg/kg
- MAK: 0,1 mg/m³
- WGK: 3

Safety:
- EC Index no.: 080-002-00-6
- R: 26/27/28-33-50/53
- S: 13-28.1-36/37-45-60-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T5 II UN 1638
- IMDG: 6.1 II UN 1638
- IATA/ICAO: 6.1 II UN 1638
- PAX: 613
- CAO: 615
- LGK: 6.1B
- Disposal: 20

M2023-1, Mercury (II) iodide, reagent grade

HS-No: 2827 60 00 90

Assay (argentometric)	min. 99 %	Mercury (I) (as Hg)	max. 0.1 %
Insoluble in a solution of KI	passes test	Other heavy metals (as Pb)	max. 0.001 %
Insoluble mercury salts (as Hg)	max. 0.05 %	Not red. Matter with HCOOH	
Iron (Fe)	max. 0.001 %	(calcination residue, as sulfate)	max. 0.02 %

Code	Capacity
M2023-1-0250	250 g
M2023-1-0500	500 g

M

MERCURY (II) NITRATE MONOHYDRATE

 T+  N

Mercury nitrate, Mercury pernitrate

- $Hg(NO_3)_2 \cdot H_2O$
- M = 342.62 g/mol
- CAS [7783-34-8]
- EC number: 233-152-3

Toxicological data:
- MAK: 0,1 mg/m³

Safety:
- EC Index no.: 080-002-00-6
- R: 26/27/28-33-50/53
- S: 13-28.1-45-60-61

Special regulations:
- Restricted chemical

M2025-1, Mercury (II) nitrate monohydrate, reagent grade

HS-No: 2834 29 30 00

Assay (complexometric)	min. 99 %	Potassium (K)	max. 0.005 %
Chloride (Cl)	max. 0.002 %	Sodium (Na)	max. 0.005 %
Sulphate (SO_4)	max. 0.002 %	Mercury (I) (as Hg)	max. 0.2 %
Copper (Cu)	max. 0.0005 %	Residue after reduction	max. 0.01 %
Iron (Fe)	max. 0.001 %		

Code	Capacity
M2025-1-0100	100 g
M2025-1-0500	500 g

MERCURY (II) SULFATE

 T+  N

Mercury bisulfate

- $HgSO_4$
- M = 296.65 g/mol
- CAS [7783-35-9]
- EC number: 231-992-5

Physical data:
- Spec. density: ~ 6,47 g/cm³
- Bulk density: ~ 670 kg/m³
- Solub. in water (20 °C): hydrolysis reaction
- Ignition temp.: > 450 °C
- pH (50 g/l H_2O, 20 °C) ~ 1

Toxicological data:
- LD 50 (oral, rat): 57 mg/kg
- MAK: 0,1 mg/m³
- WGK: 3

Safety:
- EC Index no.: 080-002-00-6
- R: 26/27/28-33-50/53
- S: 13-28.1-36/37-45-60-61

Transport/storage:
- ADR: 6.1 T5 II UN 1645
- IMDG: 6.1 II UN 1645
- IATA/ICAO: 6.1 II UN 1645
- PAX: 613
- CAO: 615
- LGK: 6.1B
- Disposal: 20

M2038-1, Mercury (II) sulfate, reagent grade

HS-No: 2833 29 70 00

Assay (complexometric)	min. 99 %	Magnesium (Mg)	max. 0.003 %
Chloride (Cl)	max. 0.003 %	Nickel (Ni)	max. 0.001 %
Nitrates (NO_3)	max. 0.005 %	Potassium (K)	max. 0.002 %
Cadmium (Cd)	max. 0.0001 %	Zinc (Zn)	max. 0.001 %
Calcium (Ca)	max. 0.003 %	Sulfated ash after reduction	max. 0.02 %
Copper (Cu)	max. 0.0005 %	Mercury (I) (as Hg)	max. 0.05 %
Iron (Fe)	max. 0.001 %	Suitability for COD	passes test
Lead (Pb)	max. 0.0005 %		

Code	Capacity
M2038-1-0250	250 g

MERCURY STANDARD SOLUTION 1000MG/L FOR AA

 C

Physical data:
- Density: ~ 1.05 g/cm³
- Solub. in water (20 °C): miscible
- pH (20 °C) < 1

Toxicological data:
- WGK: 1

Safety:
- R: 20/21/22-33-34
- S: 26-36/37/39-45

Transport/storage:
- ADR: 8 CT1 III UN 2922
- IMDG: 8 III UN 2922
- IATA/ICAO: 8 III UN 2922
- PAX: 818
- CAO: 820
- LGK: 8 B
- Disposal: 20

- CAO: 820
- LGK: 8 B
- Disposal: 20

Special regulations:
- Restricted chemical

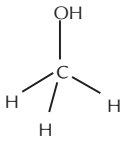
M1005-0, Mercury standard solution 1000mg/l for AA
(mercury (II) nitrate monohydrate in nitric acid 2 mol/l)

HS-No: 3822 00 00 00

Composition ..... 1000±5 mg/l

Code	Capacity
M1005-0-0500	500 ml

METHANOL



 F  T

Methyl alcohol, Carbinol, Methynol, Wood alcohol

- CH_3OH
- M = 32.04 g/mol
- CAS [67-56-1]
- EC number: 200-659-6

Physical data:
- Density: 0,79 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -98 °C
- Boiling point: 64,5 °C
- Flash point: 11 °C
- Ignition temp.: 455 °C
- Vapour pressure: (20 °C) 128 hPa
- Refraction index: (n 20 °C/D) 1,3288
- Viscosity: (20 °C) 0,52 mPas
- Dipolar moment: (20 °C) 1,7 Debye
- Dielectric const.: (25 °C) 32,6
- Evap. heat: (65 °C) 1100 KJ/kg
- Saturation conc.: (20 °C) 166 g/m³
- Expl. limit (upper): 44 Vol%
- Expl. limit (lower): < 5,5 Vol%

Toxicological data:
- LD 50 (oral, rat): 5628 mg/kg
- MAK: 200ml/m³ , 270 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-001-00-X
- R: 11-23/24/25-39/23/24/25
- S: 7-16-36/37-45
- VbF class: B
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 3 FT1 II UN 1230
- IMDG: 3 II UN 1230
- IATA/ICAO: 3 II UN 1230
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

M2064-1, Methanol anhydrous, reagent grade

HS-No: 2905 11 00 00

Assay (G.C)	min. 99.9 %	Iron (Fe)	max. 0.0001 %
Free acid (as HCOOH)	max. 0.002 %	Acetone (G.C)	max. 0.001 %
Chloride (Cl)	max. 0.0001 %	Substances darkened by H_2SO_4	passes test
Sulfates (SO_4)	max. 0.0005 %	Non-volatile matter	max. 0.0005 %
Heavy metals (as Pb)	max. 0.0002 %	Water	max. 0.003 %

Code	Capacity
M2064-1-2501	2.5L

M2097-1, Methanol, reagent grade

HS-No: 2905 11 00 00

Assay (GC)	min. 99.8 %	Lithium (Li)	max. 0.02 ppm
Free Acid (as Methanoic acid)	max. 20 ppm	Magnesium (Mg)	max. 0.1 ppm
Free Alkali (as Ammonia)	max. 1.0 ppm	Manganese (Mn)	max. 0.02 ppm
Spec. resistance	min. 0.5 M cm	Molybdenum (Mo)	max. 0.05 ppm
Heavy metals (as Pb)	max. 0.2 ppm	Sodium (Na)	max. 0.5 ppm
Silver (Ag)	max. 0.02 ppm	Nickel (Ni)	max. 0.02 ppm
Aluminium (Al)	max. 0.2 ppm	Lead (Pb)	max. 0.05 ppm
Arsenic (As)	max. 0.01 ppm	Platinum (Pt)	max. 0.2 ppm
Gold (Au)	max. 0.1 ppm	Antimony (Sb)	max. 0.01 ppm
Boron (B)	max. 0.01 ppm	Tin (Sn)	max. 0.1 ppm
Barium (Ba)	max. 0.1 ppm	Strontium (Sr)	max. 0.02 ppm
Beryllium (Be)	max. 0.02 ppm	Titanium (Ti)	max. 0.1 ppm
Bismuth (Bi)	max. 0.1 ppm	Thallium (Tl)	max. 0.05 ppm
Calcium (Ca)	max. 0.5 ppm	Vanadium (V)	max. 0.05 ppm
Cadmium (Cd)	max. 0.05 ppm	Zinc (Zn)	max. 0.1 ppm
Cobalt (Co)	max. 0.02 ppm	Zirconium (Zr)	max. 0.2 ppm
Chromium (Cr)	max. 0.02 ppm	Aldehydes and Ketones	
Copper (Cu)	max. 0.02 ppm	(as Formaldehyde)	max. 10.0 ppm
Iron (Fe)	max. 0.1 ppm	Substances reducing $KMnO_4$ (as O)	max. 2.5 ppm
Gallium (Ga)	max. 0.02 ppm	Substances discoloured by H_2SO_4	corresponds
Indium (In)	max. 0.02 ppm	Non-volatile matter	max. 5.0 ppm
Potassium (K)	max. 0.1 ppm	Water	max. 500 ppm

Code	Capacity
M2097-1-1000	1.0L
M2097-1-2500	2.5L
M2097-1-2501	2.5L
M2097-1-4000	4.0L

M2097-4, Methanol, HPLC grade

HS-No: 2905 11 00 00

Assay (G.C.)	min. 99.9 %	Formaldehyde	max. 0.001 %
Appearance	clear	Substances darkened by H_2SO_4	passes test
Solubility in water	passes test	Substances reducing permanganate	passes test
Colour	max. 10 Hazen	Non-volatile matter	max. 0.0002 %
Titrable Acid	max. 0.0003 meq/g	Water (K.F.)	max. 0.05 %
Titrable Base	max. 0.0002 meq/g	LC gradient Elution Suitability	passes test
Acetone (G.C.)	max. 0.001 %		

Maximum absorbance in a 1.0cm cell at wavelength:	Absorbance:
205 nm	1.00
220 nm	0.25
240 nm	0.05
254 nm	0.01
280 nm	0.005
400 nm	0.005

Code	Capacity
M2097-4-2501	2.5 L

M2097-6, Methanol, EC-10

HS-No: 2905 11 00 00

Assay (GC)	min. 99.8 %	Potassium (K)	max. 0.02 ppm
Free Acid (as Methanoic acid)	max. 20 ppm	Lithium (Li)	max. 0.01 ppm
Free Alkali (as Ammonia)	max. 1.0 ppm	Magnesium (Mg)	max. 0.02 ppm
Spec. resistance	min 0.5 MΩ•cm	Manganese (Mn)	max. 0.01 ppm
Heavy metals (as Pb)	max. 0.1 ppm	Molybdenum (Mo)	max. 0.01 ppm
Silver (Ag)	max. 0.01 ppm	Sodium (Na)	max. 0.1 ppm
Aluminium (Al)	max. 0.05 ppm	Nickel (Ni)	max. 0.01 ppm
Arsenic (As)	max. 0.01 ppm	Lead (Pb)	max. 0.01 ppm
Gold (Au)	max. 0.02 ppm	Platinum (Pt)	max. 0.05 ppm
Boron (B)	max. 0.01 ppm	Antimony (Sb)	max. 0.01 ppm
Barium (Ba)	max. 0.02 ppm	Tin (Sn)	max. 0.02 ppm
Beryllium (Be)	max. 0.01 ppm	Strontium (Sr)	max. 0.01 ppm
Bismuth (Bi)	max. 0.02 ppm	Titanium (Ti)	max. 0.02 ppm
Calcium (Ca)	max. 0.1 ppm	Thallium (Tl)	max. 0.01 ppm
Cadmium (Cd)	max. 0.01 ppm	Vanadium (V)	max. 0.01 ppm
Cobalt (Co)	max. 0.01 ppm	Zinc (Zn)	max. 0.02 ppm
Chromium (Cr)	max. 0.01 ppm	Zirconium (Zr)	max. 0.02 ppm
Copper (Cu)	max. 0.01 ppm	Aldehydes and Ketones (as Formaldehyde)	max. 10.0 ppm
Iron (Fe)	max. 0.05 ppm	Substances reducing $KMnO_4$ (as O)	max. 2.5 ppm
Gallium (Ga)	max. 0.01 ppm	Non-volatile matter	max. 5.0 ppm
Indium (In)	max. 0.01 ppm	Water	max. 256 ppm

Code	Capacity
M2097-6-4000	4.0 L

M2097-7, Methanol, EC-10

HS-No: 2905 11 00 00

Assay	min. 99.9 %	Titration
Colour	max. 10 APHA	Colorimetric
Acidity	max. 0.3 meq/g	-
Alkalinity	max. 0.1 meq/g	-
Residue after Evaporation	max. 5.0 ppm	Gravimetric
Water	max. 0.05 %	Kari Fischer Titrates
Chloride (Cl)	max. 0.20 ppm	Ion Chromatography
Phosphate (PO_4)	max. 0.50 ppm	Ion Chromatography
Aluminium (Al)	max. 100 ppb	ICP-MS
Arsenic (As)	max. 10 ppb	ICP-MS
Barium (Ba)	max. 20 ppb	ICP-MS
Boron (B)	max. 10 ppb	ICP-MS
Cadmium (Cd)	max. 20 ppb	ICP-MS
Calcium (Ca)	max. 100 ppb	ICP-MS
Chromium (Cr)	max. 20 ppb	ICP-MS
Cobalt (Co)	max. 20 ppb	ICP-MS
Copper (Cu)	max. 10 ppb	ICP-MS
Gallium (Ga)	max. 50 ppb	ICP-MS
Germanium (Ge)	max. 100 ppb	ICP-MS
Gold (Au)	max. 20 ppb	ICP-MS
Heavy Metals (as Pb)	max. 100 ppb	ICP-MS
Iron (Fe)	max. 100 ppb	ICP-MS
Lead (Fb)	max. 100 ppb	ICP-MS
Lithium (Li)	max. 50 ppb	ICP-MS
Magnesium (Mg)	max. 50 ppb	ICP-MS
Manganese (Mn)	max. 10 ppb	ICP-MS
Nickel (Ni)	max. 10 ppb	ICP-MS
Potassium (K)	max. 100 ppb	ICP-MS
Silicon (Si)	max. 50 ppb	ICP-MS
Silver (Ag)	max. 20 ppb	ICP-MS
Sodium (Na)	max. 100 ppb	ICP-MS
Strontium (Sr)	max. 10 ppb	ICP-MS
Tin (Sn)	max. 50 ppb	ICP-MS
Thallium (Tl)	max. 20 ppb	ICP-MS
Zinc (Zn)	max. 100 ppb	ICP-MS
Particle Count (> 1.0µm)	max. 10 per m/	Liquid Particle Counter

Code	Capacity
M2097-7-2500	2.5 L

METHYLENE BLUE

Xn

- $C_{16}H_{18}ClN_3S$
- M = 319.86 g/mol
- CAS [61-73-4]
- EC number: 200-515-2

Physical data:
- Form: Liquid
- Density: 0.995 kg/m³
- Flash point: 12 °C

Safety:
- R: 36/38-68
- S: 26-36/37

M2153-1, Methylene blue, for microscopy

HS-No: 2927 00 00 90

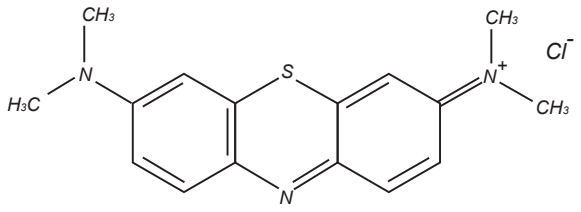
Assay of basic dye	min. 82 %	Suitability as biological stain	passes test %
Loss on drying (110°)	max. 15 %	Residue on ignition (as SO4)	max. 0.5 %

Code	Capacity
M2135-0-0025	25 g
M2135-0-0101	100 g

METHYLENE BLUE, C.I. 52015

Xn

3,7-Bis(dimethylamino)phenothiazinium chloride, Solvent blue 8, Methylthyoninium chloride, Tetramethylthionine chloride



· xH_2O (x = 2 - 3)

- $C_{16}H_{18}ClN_3S \cdot xH_2O$ (x= 2 - 3)
- M = 319.86 g/mol
- CAS [61-73-4]
- EC number: 200-515-2

Physical data:
- Bulk density: ~ 400 - 600 kg/m³
- Solub. in water (20 °C): ~ 50 g/l
- Melting point: ~ 180 °C (decomposes)
- pH (10 g/l H_2O, 20 °C) ~ 3

Toxicological data:
- LD 50 (oral, rat): 1180 mg/kg (anhydrous substance)
- WGK: 3*

Safety:
- R: 22
- S: 46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13

M2153-3, Methylene blue, C.I. 52015, extra pure

HS-No: 3204 13 00 00

Assay (on dried sample)	min. 99 %	Zinc (Zn)	max. 0.005 %
Insoluble in ethanol 96%	max. 0.2 %	Sulfated ash	max. 0.2 %
Arsenic (As)	max. 0.0005 %	Loss on drying	18 - 22 %
Heavy metals (as Pb)	max. 0.005 %		

Code	Capacity
M2153-3-0100	100 g

METHYL METHACRYLATE

F Xi

Methyl 2-methylpropenoate, MAA

- $C_5H_8O_2$
- M = 100.12 g/mol
- CAS [80-62-6]
- EC-No. 201-297-1

Physical data:
- Vapour pressure 47 hPa (20 °C)
- Spec. density 0.94 g/cm³ (20 °C)
- Explosive limits 2.1 - 12.5 Vol%
- Flash point 10 °C
- Solub. in water 16 g/l (20 °C)
- Melting point - 48 °C
- Boiling point 100 °C
- Ignition temp. 430 °C

Toxicological data:
- MAK 50 mlm3 / 210 bg/m³
- VbF-CLASS. AI
- WGK: 1
- LD 50 oral rat 7872 mg/kg

Safety:
- Highly flammable, irritant, sensitizing
- R: 11-36/37/38-43
- S: 9-16-29-33
- Poison class (CH): 4
- EC-Index-No. 607-035-00-6

Transport/storage:
- LGK 3 A
- Packing-cat A
- Road/Rail: 3/3 b
- IMDG-Code 3.2/II UN 1247
- IATA/DGR 3 II UN 1247 CAO 307 PAX 305

M2140-1, Methyl methacrylate, reagent grade

HS-No: 2916 14 10 00

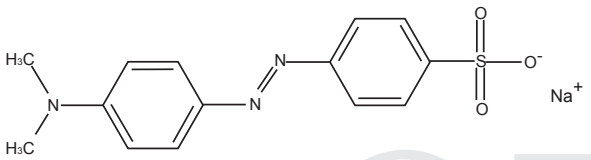
Assay	min. 99.0 %	Residue after ignition (as sulfate)	max. 0.03 %
Density (20°C)	0.939 – 0.941 g/ml	High polymer	passes test
Free acid (as $C_4H_6O_2$)	max. 0.03 %	Fire retardant (as $C_6H_6O_2$)	0.01 – 0.02 %

Code	Capacity
M2140-1-0500	500 ml

METHYL ORANGE, C.I. 13025

T

Helianthine, 4-Dimethylaminoazobenzene-4'-sulfonic acid sodium salt, Gold orange, Orange III



- $C_{14}H_{14}N_3NaO_3S$
- M = 327.34 g/mol
- CAS [547-58-0]
- EC number: 208-925-3

Physical data:
- Bulk density: ~ 200 - 400 kg/m³
- Solub. in water (20 °C): ~ 5 g/l
- pH (5 g/l H_2O, 20 °C) ~ 6,5

Toxicological data:
- LD 50 (oral, rat): 60 mg/kg
- WGK: 3*

Safety:
- R: 25
- S: 37-45
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 6.1 T2 III UN 2811
- IMDG: 6.1 III UN 2811
- IATA/ICAO: 6.1 III UN 2811
- PAX: 619
- CAO: 619
- LGK: 6.1A
- Disposal: 3

M2130-0, Methyl orange, C.I. 13025 indicator

HS-No: 2927 00 00 90

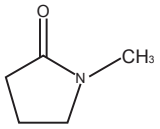
pH range (pink to orange-yellow)	3.1 - 4.4	Absorptivity (A1%/1 cm; 1, pH 4.4 on dried material)	750 - 850
Absorption maximum 1 (pH 3.1)	501 - 504 nm	Loss on drying (110°C)	max. 5 %
Absorption maximum 2 (pH 4.4)	467 - 471 nm		
Absorptivity (A1%/1 cm; 1, pH 3.1 on dried material)	1050 - 1150		

Code	Capacity
M2130-0-0025	25 g
M2130-0-0101	100 g

1-METHYL-2-PYRROLIDONE (N-METHYLPYRROLIDONE)

Xi

N-Methypyrrolidone, N-Methyl-2pyrrolidinone, NMP



- C_5H_9NO
- M = 99.13 g/mol
- CAS [872-50-4]
- EC number: 212-828-1

Physical data:
- Form: Liquid
- Density: 1.03 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -24 °C
- Boiling point: 202 °C
- Flash point: 91 °C
- Ignition temp.: 245 °C
- Vapour pressure: (20 °C) 0.32 hPa
- Refraction index: (n 20 °C/D) 1.4684
- Viscosity: (20 °C) 1.67 mPas
- Dipolar moment: (20 °C) 4.1 Debye
- Dielectric const.: (25 °C) 33
- Expl. limit (upper): 9.5 Vol%
- Expl. limit (lower): 1.3 Vol%
- pH (100 g/l H2O, 20 °C) 8.5 - 10.0

Toxicological data:
- LD 50 (oral, rat): 3598 mg/kg
- MAK: 19 ml/m³ , 80 mg/m³
- WGK: 1

Safety:
- EC Index no.: 606-021-00-7
- R: 36/38
- S: 41
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 5

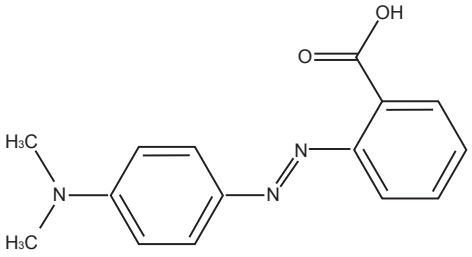
M2160-1, 1-Methyl-2-pyrrolidone (N-Methylpyrrolidone), reagent grade

HS-No: 2933 79 00 00

Assay (G.C)	min 99.5 %	Iron (Fe)	max. 0.00001 %
Free Alkali (as methylamine)	max. 0.01 %	Magnesium (Mg)	max. 0.00001 %
Aluminium (Al)	max. 0.00005 %	Manganese (Mn)	max. 0.000002 %
Barium (Ba)	max. 0.00001 %	Nickel (Ni)	max. 0.000002 %
Boron (B)	max. 0.000002 %	Lead (Pb)	max. 0.00001%
Cadmium (Cd)	max. 0.000005 %	Tin (Sn)	max. 0.00001 %
Calcium (Ca)	max. 0.00005 %	Zinc (Zn)	max. 0.00001 %
Chromium (Cr)	max. 0.000002 %	Sulfated Ash	max. 0.0005 %
Cobalt (Co)	max. 0.000002 %	Water (K.F.)	max. 0.05 %
Copper (Cu)	max. 0.000002 %		

Code	Capacity
M2160-1-2501	2.5 L

METHYL RED, C.I. 13020



2-[(4-Dimethylamino)phenylazo]benzoic acid,
4-(Dimethylamino)-azobenzene-1,2'-carboxylic acid

- $C_{15}H_{15}N_3O_2$
- M = 269.31 g/mol
- CAS [493-52-7]
- EC number: 207-776-1

Physical data:
- Bulk density: ~ 300 - 500 kg/m³
- Solub. in water (20 °C): sligthly soluble
- Melting point: 178 - 182 °C

Toxicological data:
- WGK: 3*

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

M2135-0, Methyl red, C.I. 13020 indicator

HS-No: 2927 00 00 90

pH range (red-violet to brownish-yellow)	4.5 - 6.2
Absorption maximum 1 (pH 4.5)	523 - 526 nm
Absorption maximum 2 (pH 6.2)	427 - 437 nm
Absorptivity (A1%/1 cm; 1, pH 4.5 on dried material)	1380 - 1480
Absorptivity (A1%/1 cm; 1, pH 6.2 on dried material)	700 - 800
Transition range acc. ACS	passes test
Loss on drying (110°C)	max. 0.5 %

Code	Capacity
M2135-0-0025	25 g
M2135-0-0101	100 g

METHYL THYMOL BLUE

- $C_{37}H_{44}N_2O_{12}S$
- M = 756.83 g/mol
- CAS [1945-77-3]

M2170-1, Methyl thymol Blue, reagent grade

Free thymol blue	passes test
Sensitivity test	passes test
Loss on drying	max. 15 %
Residue after ignition (as sulfate)	35 – 42 %

Code	Capacity
M2170-1-0005	5 g

MIXED ACID ETCHANT

- M = Nitric acid – 39.3 ± 1.0%
  Hydrofluoric acid – 11.6 ± 1.0%
  Acetic acid – 20.7 ± 1.0%

M4002-6, Mixed Acid Etchant, EC-100

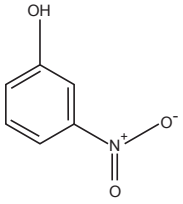
Residue after Ignition	max. 5 ppm	Gold (Au)	max. 0.5 ppm
Color (Hazen)	max. 10 Hazen	Iron (Fe)	max. 1.0 ppm
Density 20°C	1.28 g/cm³	Lead (Pb)	max. 0.5 ppm
Heavy Metals (as Pb)	max. 0.5 ppm	Lithium (Li)	max. 1.0 ppm
Arsenic (As)	max. 0.1 ppm	Magnesium (Mg)	max. 1.0 ppm
Antimony (Sb)	max. 0.1 ppm	Molybdenum (Mo)	max. 0.5 ppm
Aluminium (Al)	max. 0.1 ppm	Manganese (Mn)	max. 0.5 ppm
Barium (Ba)	max. 0.1 ppm	Nickel (Ni)	max. 0.5 ppm
Beryllium (Be)	max. 0.5 ppm	Potassium (K)	max. 1.0 ppm
Bismuth (Bi)	max. 0.5 ppm	Platinum (Pt)	max. 0.5 ppm
Boron (B)	max. 1.0 ppm	Silver (Ag)	max. 0.5 ppm
Cadmium (Cd)	max. 0.5 ppm	Sodium (Na)	max. 1.0 ppm
Calcium (Ca)	max. 1.0 ppm	Strontium (Sr)	max. 1.0 ppm
Cobalt (Co)	max. 0.5 ppm	Thallium (Tl)	max. 0.5 ppm
Copper (Cu)	max. 0.5 ppm	Tin (Sn)	max. 1.0 ppm
Chromium (Cr)	max. 0.5 ppm	Zinc (Zn)	max. 1.0 ppm
Gallium (Ga)	max. 0.5 ppm	Zirconium (Zr)	max. 0.5 ppm
Germanium (Ge)	max. 1.0 ppm		

Code	Capacity
M4002-6-925E	250 kg

M-NITROPHENOL

Xn

3-Nitrophenol



- $C_6H_5NO_3$
- M = 139.11 g/mol
- CAS [554-84-7]
- EC number: 209-073-5

Physical data:
- Form : Solid
- Spec. density: 1,49g/cm³
- Bulk density: ~640 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: 94 - 95 °C
- pH (20 °C) 6,6 - 8,6

Toxicological data:
- LD 50 (oral, rat): 328 mg/kg
- WGK: 2*

Safety:
- R: 22-36/38
- S: 26-28. 1-46
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 6.1 T2 III UN 1663
- IMDG: 6.1 III UN 1663
- IATA/ICAO: 6.1 III UN 1663
- PAX: 619
- CAO: 619
- LGK: 10-13
- Disposal: 3

M4000-0, m-Nitrophenol, indicator

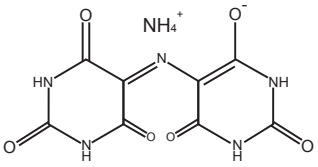
HS-No: 2908 90 00 90

Assay (DSC)	min. 99 %
Identity (IR-spectrum)	passes test
pH range (colorless to yellow)	6.6 – 8.6

Code	Capacity
M4000-0-0025	25 g

MUREXIDE

Ammonium purpurate, acid



- $C_8H_8N_6O_6$
- M = 284.19 g/mol
- CAS [3051-09-0]
- EC number: 221-266-6

Physical data:
- Bulk density: ~ 330 kg/m³
- Solub. in water (20 °C): ~ 1 g/l
- pH (1g/l H_2O, 20 °C) ~ 5

Toxicological data:
- WGK: 2

Transport/storage:
- LGK: 10-13
- Disposal: 4

M7001-0, Murexide, indicator for metal titration

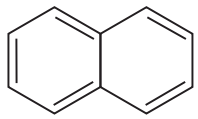
HS-No: 2933 59 95 90

Absorption maximum (water)	517 - 523 nm
Absorptivity (A1%/1 cm; max)	375 - 500
Suitability as complexometric indicator	passes test
Loss on drying	max. 10 %

Code	Capacity
M7001-0-0005	5 g
M7001-0-0025	25 g

NAPHTHALENE

Xn N



- $C_{10}H_8$
- M = 128.16 g/mol
- CAS [91-20-3]
- EC number: 202-049-5

Physical data:
- Form: Solid
- Spec. density: 1.15 g/cm³
- Bulk density: 600 kg/m³
- Solub. in water (20 °C): 0.3 g/l
- Melting point: 79 - 82 °C
- Boiling point: 218 °C
- Flash point: 80 °C
- Ignition temp.: 540 °C
- Vapour pressure: (20 °C) 0.066 hPa
- Expl. limit (upper): 5.9 Vol%
- Expl. limit (lower): 0.9 Vol%

Toxicological data:
- LD 50 (oral, rat): > 2000 mg/kg
- WGK: 2

Safety:
- EC Index no.: 601-052-00-2
- R: 22-40-50/53
- S: 36/37-46-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 4.1 F1 III UN 1334
- IMDG: 4.1 II UN 1334
- IATA/ICAO: 4.1 II UN 1334
- PAX: 419
- CAO: 420
- LGK: 4.1B
- Disposal: 3

N1000-3, Naphthalene, extra pure

HS-No: 2902 90 10 00

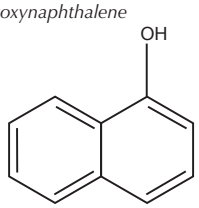
Assay	min. 99.5 %
Identity (IR-spectrum)	passes test
Sulfated ash	max. 0.01 %
Water	max. 0.2 %

Code	Capacity
N1000-3-0500	500 g

1-NAPHTHOL

Xn

1-Hydroxynaphthalene



- $C_{10}H_8O$
- M = 144.17 g/mol
- CAS [90-15-3]
- EC number: 201-969-4

Physical data:
- Form: Solid
- Spec. density: 1.28 g/cm³
- Bulk density: ~ 450 kg/m³
- Solub. in water (20 °C): ~ 0.1 g/l
- Melting point: 95 - 97 °C
- Boiling point: ~ 288 °C
- Flash point: 125 °C
- Ignition temp.: 510 °C
- Vapour pressure: (94 °C) 1.3 hPa
- pH (H_2O) ~ < 7

Toxicological data:
- LD 50 (oral, rat): 275 mg/kg
- WGK: 1

Safety:
- EC Index no.: 604-029-00-5
- R: 21/22-37/38-41
- S: 22-26-36/39-46
- Poison class CH (Swiss): 2

Transport/storage:
- LGK: 10-13
- Disposal: 3

N1002-1, 1-Naphthol, reagent grade

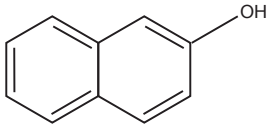
HS-No: 2907 15 10 00

Assay	min. 99 %	Iron (Fe)	max. 0.001 %
Identity (IR-spectrum)	passes test	Naphthalene (G.C)	max. 0.2 %
Appearance of solution	passes test	2-Naphthol (G.C)	max. 0.2 %
Chloride (Cl)	max. 0.005 %	Sulfated Ash	max. 0.05 %
Heavy metals (As Pb)	max. 0.001 %	Water	max. 0.2 %

Code	Capacity
N1002-1-0025	25 g

2-NAPHTHOL

Xn N



- $C_{10}H_8O$
- M = 144.17 g/mol
- CAS [135-19-3]
- EC number: 205-182-7

Physical data:
- Form: Solid
- Spec. density: 1.22 g/cm³
- Bulk density: ~ 300 kg/m³
- Solub. in water (20 °C): 1 g/l
- Melting point: 121.6 °C
- Boiling point: 285 °C
- Flash point: 153 °C
- Vapour pressure: (30 °C) < 0.1 hPa

Toxicological data:
- LD 50 (oral, rat): 1960 mg/kg
- WGK: 2

Safety:
- EC Index no.: 604-007-00-5
- R: 20/22-50
- S: 24/25-46-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 9 M7 III UN 3077
- IMDG: 9 III UN 3077
- IATA/ICAO: 9 III UN 3077
- PAX: 911
- CAO: 911
- LGK: 10-13
- Disposal: 3

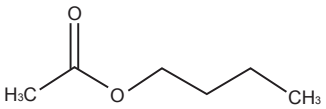
N1004-1, 2-Naphthol, reagent grade

HS-No: 2907 15 90 00

Assay	min. 99 %	Iron (Fe)	max. 0.001 %
Identity (IR-spectrum)	passes test	Naphthalene (G.C)	max. 0.1 %
Appearance of solution	passes test	2-Naphthol (G.C)	max. 0.1 %
Chloride (Cl)	max. 0.005 %	Sulfated Ash	max. 0.05 %
Heavy metals (As Pb)	max. 0.001 %	Water	max. 0.2 %

Code	Capacity
N1004-1-0025	25 g

N-BUTYL ACETATE



Acetic acid n-butyl ester

- $C_6H_{12}O_2$
- M = 116.16 g/mol
- CAS [123-86-4]
- EC number: 204-658-1

Physical data:
- Density: 0,88 g/cm³
- Solub. in water (20 °C): 7 g/l
- Melting point: -77 °C
- Boiling point: 127 °C
- Flash point: 22 °C
- Ignition temp.: 370 °C
- Vapour pressure: (20 °C) ~ 13 hPa
- Refraction index: (n 20 °C/D) 1,3941
- Viscosity: (25 °C) 0,69 mPas
- Dipolar moment: (22 °C) 1,84 Debye
- Dielectric const.: (20 °C) 5,0
- Evap. heat: (126 °C) 309 KJ/kg
- Saturation conc.: (20 °C) 62 g/m³
- Expl. limit (upper): 7,5 Vol%
- Expl. limit (lower): 1,2 Vol%

Toxicological data:
- LD 50 (oral, rat): 10768 mg/kg
- MAK: 100ml/m³ , 480 mg/m³
- WGK: 1

Safety:
- EC Index no.: 607-025-00-1
- R: 10-66-67
- S: 25
- VbF class: AII
- Poison class CH (Swiss): 5

Transport/storage:
- ADR: 3 F1 II UN 1123
- IMDG: 3 II UN 1123
- IATA/ICAO: 3 II UN 1123
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

N1073-1, n-Butyl acetate, reagent grade

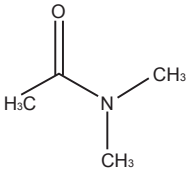
HS-No: 2915 33 00 00

Assay (G.C)	min. 99.5 %
Colour	max. 10 Hazen
Free acid (as CH_3COOH)	max. 0.01 %
Aluminium (Al)	max. 0.00005 %
Barium (Ba)	max. 0.00001 %
Boron (B)	max. 0.000002 %
Cadmium (Cd)	max. 0.000005 %
Calcium (Ca)	max. 0.00005 %
Cobalt (Co)	max. 0.000002 %
Zinc (Zn)	max. 0.00001 %
Copper (Cu)	max. 0.000002 %
Chromium (Cr)	max. 0.000002 %
Tin (Sn)	max. 0.00001 %
Iron (Fe)	max. 0.00001 %
Magnesium (Mg)	max. 0.00001 %
Manganese (Mn)	max. 0.000002 %
Nickel (Ni)	max. 0.000002 %
Lead (Pb)	max. 0.0001 %
n-butyl formate (G.C)	max. 0.1 %
n-butyl propionate (G.C)	max. 0.1 %
n-butanol (G.C)	max. 0.2 %
Substances darkened by H_2SO_4	passes test
Non-volatile matter	max. 0.0005 %
Water	max. 0.1 %

Code	Capacity
N1073-1-1000	1.0 L
N1073-1-250	2.5 L

N,N-DIMETHYLACETAMIDE

Acetic acid dimethylamide



- C_4H_9NO
- M = 87.12 g/mol
- CAS [127-19-5]
- EC number: 2924 19 00 90

Physical data:
- Form: Liquid
- Density: 0,94 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -20 °C
- Boiling point: 165 - 166 °C
- Flash point: 70 °C
- Ignition temp.: 320 °C
- Vapour pressure: (20 °C) 1.76 hPa
- Refraction index: (n 20 °C/D) 1,4230
- Dipolar moment: (20 °C) 3,8 Debye
- Dielectric const.: (25 °C) 37.8
- Saturation conc.: (20 °C) 12 g/m³
- Expl. limit (upper): 11.5 Vol%
- Expl. limit (lower): 1.7 Vol%
- pH (200 g/l H_2O, 20 °C) ~ 4

Toxicological data:
- LD 50 (oral, rat): 4300 mg/kg
- MAK: 10 ml/m³ , 30 mg/m³
- WGK: 1

Safety:
- EC Index no.: 616-011-00-4
- R: 61-E20/21
- S: 26-28.1-36/37-45
- Poison class CH (Swiss): 2

Transport/storage:
- LGK: 3 B
- Disposal: 1

N1040-1, N,N-Dimethylacetamide, reagent grade

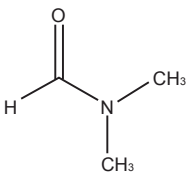
HS-No: 2924 19 00 90

Assay	min. 99.5 %
Free acid (as CH_3COOH)	max. 0.01 %
Chloride (Cl)	max. 0.01 %
Heavy metals (Pb)	max. 0.000005 %
Iron (Fe)	max. 0.000005 %
Non-volatile matter	max. 0.005 %
Water (K.F.)	max. 0.05 %

Code	Capacity
N1040-1-2501	2.5 L

N,N-DIMETHYLFORMAMIDE

DMF, Formic acid dimethylamide



- C_3H_7NO
- M = 73.10 g/mol
- CAS [68-12-2]
- EC number: 200-679-5

Physical data:
- Density: 0,94 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -61 °C
- Boiling point: 153 °C
- Flash point: 58 °C
- Ignition temp.: 410 °C
- Vapour pressure: (20 °C) 3,77 hPa
- Refraction index: (n 20 °C/D) 1,4305
- Viscosity: (20 °C) 0,8 mPas
- Dipolar moment: (20 °C) 3,8 Debye
- Dielectric const.: (25 °C) 36,7
- Saturation conc.: (20 °C) 12 g/m³
- Expl. limit (upper): 16 Vol%
- Expl. limit (lower): 2,2 Vol%
- pH (200 g/l H_2O, 20 °C) 7

Toxicological data:
- LD 50 (oral, rat): 2800 mg/kg
- MAK: 10 ml/m³ , 30 mg/m³
- WGK: 1

Safety:
- EC Index no.: 616-001-00-X
- R: 61-E20/21-36
- S: 53-36/37-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 3 F1 III UN 2265
- IMDG: 3 III UN 2265
- IATA/ICAO: 3 III UN 2265
- PAX: 309
- CAO: 310
- LGK: 6.1 A
- Disposal: 1

N1042-1, N,N-Dimethylformamide, reagent grade

HS-No: 2924 19 00 90

Assay	min. 99.8 %
Colour	max. 15 APHA
Residue After Evaporation	max. 0.005 %
Titrable Base	max. 0.003 meq/g
Titrable Acid	max. 0.0005 meq/g
Water (Coulometric KF)	max. 0.15 %

Code	Capacity
N1042-1-2501	2.5 L

NESSLER'S REAGENT

Physical data:
- Form: Liquid
- Density: 1.16 g/cm³
- Solub. in water (20 °C): miscible
- pH (20 °C) > 14

Toxicological data:
- MAK: 0.1 mg/m³
- WGK: 2

Safety:
- R: 23/24/25-33-35-51/53
- S: 26/37/39-45-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T4 II UN 2024
- IMDG: 6.1 II UN 2024
- IATA/ICAO: 6.1 II UN 2024
- PAX: 617
- CAO: 612
- LGK: 6.1 B
- Disposal: 20

N1005-0, Nessler's reagent

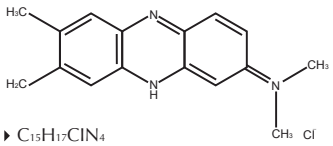
HS-No: 3822 00 00 00

Suitability for determination of
ammonia and ammonic salts ..... passes test %

Code	Capacity
L1001-0-0500	500 ml

NEUTRAL RED, C.I. 50040

Toluylene red, Basic Red 5



- $C_{15}H_{17}ClN_4$
- M = 288.78 g/mol
- CAS [553-24-2]
- EC number: 209-035-8

Physical data:
- Form: Solid
- Bulk density: ~ 350 - 500 kg/m³
- Solub. in water (25 °C): 50 g/l
- pH (10 g/H_2O, 20 °C) ~ 3.1

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 3

N1006-0, Neutral red, C.I. 50040, for microscopy and indicator

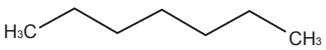
HS-No: 3204 13 00 00

Assay (espectrophotometric)	min. 90.0 %	Related substances (TLC)	passes test
Absorption maximum λ max (ethanol 50%) ..	539 - 544 nm	Suitability for microscopy	passes test
Absorptivity (E1%/1cm; λ max, 0.0005%, ethanol 50%) ..	1395 - 1550	Loss on drying (110ºC)	max. 18 %

Code	Capacity
N1006-0-0025	25 g

N-HEPTANE

n-Dipropylmethane,
n-Heptylhydride, 1-Methyl hexane



- C_7H_{16}
- M = 100.21 g/mol
- CAS [142-82-5]
- EC number: 205-563-8

Physical data:
- Density: 0,68 g/cm³
- Solub. in water (20 °C): almost non-miscible
- Melting point: -90,6 °C
- Boiling point: 98,4 °C
- Flash point: -4 °C
- Ignition temp.: 215 °C
- Vapour pressure: (20 °C) 48 hPa
- Refraction index: (n 20 °C/D) 1,3876
- Viscosity: (25 °C) 0,4 mPas
- Dielectric const.: (20 °C) 1,9
- Saturation conc.: (20 °C) 196 g/m³
- Expl. limit (upper): 7 Vol%
- Expl. limit (lower): 1 Vol%

Toxicological data:
- LD 50 (oral, rat): > 15000 mg/kg
- MAK: 500 ml/m³ , 2100 mg/m³
- WGK: 1

Safety:
- EC Index no.: 601-008-00-2
- R: 11-38-50/53-65-67
- S: 9-16-29-33-46-60-61-62
- VbF class: AI
- Poison class CH (Swiss): 5

Transport/storage:
- ADR: 3 F1 II UN 1206
- IMDG: 3 II UN 1206
- IATA/ICAO: 3 II UN 1206
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

N

N3008-1, n-Heptane 99%, reagent grade

HS-No: 2901 10 90 00

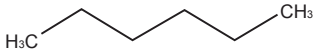
Assay (G.C)	min. 99.2 %	Lead (Pb)	max. 0.00001 %
Colour	max. 10 Hazen	Magnesium (Mg)	max. 0.00001 %
Free acid (as CH_3COOH)	max. 0.0005 %	Manganese (Mn)	max. 0.000002 %
Aluminium (Al)	max. 0.00005 %	Nickel (Ni)	max. 0.000002 %
Barium (Ba)	max. 0.00001 %	Tin (Sn)	max. 0.00001 %
Boron (B)	max. 0.000002 %	Zinc (Zn)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Aromatic hydrocarbons (as C_6H_6)	max. 0.1 %
Calcium (Ca)	max. 0.00005 %	Sulphur compounds (as S)	max. 0.005 %
Cobalt (Co)	max. 0.000002 %	Substances darkened by H_2SO_4	passes test
Copper (Cu)	max. 0.000002 %	Non-volatile matter	max. 0.0005 %
Chromium (Cr)	max. 0.000002 %	Water	max. 0.01 %
Iron (Fe)	max. 0.00001 %		

Code	Capacity
N3008-1-2501	2.5 L

N-HEXANE

F Xn N

n-Caproylhydride, n-Hexylhydride



- C_6H_{14}
- M = 86,18 g/mol
- CAS [110-54-3]
- EC number: 203-777-6

Physical data:
- Density: 0,66 g/cm³
- Solub. in water (20 °C): 0,0095 g/l
- Melting point: -94,3 °C
- Boiling point: 69 °C
- Flash point: -22 °C
- Ignition temp.: 240 °C
- Vapour pressure: (20 °C) 160 hPa
- Viscosity: (20 °C) 0,31 mPas
- Dielectric const.: (20 °C) 1,8
- Saturation conc.: (20 °C) 563 g/m³
- Expl. limit (upper): 8,1 Vol%
- Expl. limit (lower): 1,0 Vol%

Toxicological data:
- LD 50 (oral, rat): 28710 mg/kg
- MAK: 50 ml/m³ , 180 mg/m³
- WGK: 1

Safety:
- EC Index no.: 601-037-00-0
- R: 11-38-48/20-51/53-62-65-67
- S: 9-16-29-33-36/37-61-62
- VbF class: AI
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 II UN 1208
- IMDG: 3 II UN 1208
- IATA/ICAO: 3 II UN 1208
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

N3057-1, n-Hexane, reagent grade

HS-No: 2901 10 90 00

Assay	min. 99 %	Iron (Fe)	max. 0.00001 %
n-Hexane content	min. 60 %	Lead (Pb)	max. 0.00001 %
Colour	max. 10 APHA	Magnesium (Mg)	max. 0.00001 %
Aluminium (Al)	max. 0.00005 %	Manganese (Mn)	max. 0.000002 %
Barium (Ba)	max. 0.00001 %	Nickel (Ni)	max. 0.000002 %
Boron (B)	max. 0.000002 %	Tin (Sn)	max. 0.00001 %
Cadmiun (Cd)	max. 0.000005 %	Zinc (Z)	max. 0.00001 %
Calcium (Ca)	max. 0.00005 %	Residue After Evaporation)	max. 0.001 %
Chromium (Cr)	max. 0.000002 %	Water-soluble Titrable Acid	max. 0.0003 meq/g
Cobalt (Co)	max. 0.000002 %	Thiophene	passes test
Copper (Cu)	max. 0.000002 %	Sulphur compounds (as S)	max. 0.005 %

Code	Capacity
N3057-1-2501	2.5L

N3057-4, n-Hexane 95%, HPLC grade

Assay (G.C.)	min. 95 %	Thiophene	passes test
Assay (C6-hydrocarbons) (G.C.)	Min. 99.5 %	Water-soluble titrable acid	max. 0.0003 meq/g
Colour	max. 10 Hazen	Non-volatile matter	max. 0.0002 %
Sulphur compounds (as S)	max. 0.005 %	Water (K.F)	max. 0.01 %

Maximum absorbance in a 1.0cm cell at wavelength:	Absorbance:
195 nm	1.00
210 nm	0.20
220 nm	0.08
254 nm	0.01
280 nm	0.005
400 nm	0.005

Code	Capacity
N3057-4-2501	2.5 L

NICKEL (II) CHLORIDE HEXAHYDRATE

T N

Nickel dichloride hexahydrate

- $NiCl_2 \cdot 6H_2O$
- M = 237.71 g/mol
- CAS [7791-20-0]
- EC number: 231-743-0

Physical data:
- Spec. density: 3,55 g/cm³ (anhydrous substance)
- Bulk density: ~ 640 kg/m³
- Solub. in water (20 °C): 553 g/l
- Melting point: 140 °C (release of crystalline water)
- Vapour pressure: (671 °C) 1,3 hPa (anhydrous substance)
- pH (100 g/l H_2O, 20 °C) ~ 4,9

Toxicological data:
- LD 50 (oral, rat): 105 mg/kg (anhydrous substance)
- WGK: 2

Safety:
- R: 25-43-50/53
- S: 24-37-45-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T5 III UN 3288
- IMDG: 6.1 III UN 3288
- IATA/ICAO: 6.1 III UN 3288
- PAX: 619
- CAO: 619
- LGK: 6.1B
- Disposal: 15

N3062-1, Nickel (II) chloride hexahydrate, reagent grade

HS-No: 2827 35 00 00

Assay (complexometric)	min. 98.5 %	Copper (Cu)	max. 0.001 %
pH (5%, H_2O)	3.5 - 5.5	Iron (Fe)	max. 0.001 %
Sulfates (SO_4)	max. 0.005 %	Lead (Pb)	max. 0.002 %
Calcium (Ca)	max. 0.005 %	Sodium (Na)	max. 0.01 %
Cobalt (Co)	max. 0.005 %	Zinc (Zn)	max. 0.001 %

Code	Capacity
N3062-1-0500	500 g

N3062-3, Nickel (II) chloride hexahydrate, extra pure

HS-No: 2827 35 00 00

Assay (complexometric)	min. 97 %	Lead (Pb)	max. 0.002 %
Sulfates (SO_4)	max. 0.01 %	Zinc (Zn)	max. 0.15 %
Cobalt (Co)	max. 0.05 %	Non precipitable with $(NH_4)_2S$(as SO_4)	max. 0.3 %
Iron (Fe)	max. 0.005 %		

Code	Capacity
N3062-3-0500	500 g

NICKEL (II) HYDROXIDE CARBONATE HYDRATE (ABOUT 47% NI) EXTRA PURE

Xn

$NiCO_3 2Ni(OH)_2 4H_2O$
$CNiO_3 2H_2NiO_2 4H_2O$

- CAS: [39430-27-8]
- EC number 235-715-9

Physical data:
- Solub. in water (20°C) insoluble
- pH value ~ 8.5 (50g/l, H_2O, 20°C) (slurry)
- Bulk density ~ 300 kg/m³
- Harmful, sensitizing

Toxicological data:
- WGK 3*
- LD 50 (oral, rat) 840 mg/kg

Safety:
- R 22-40-43
- S 24-37
- Poison class (CH)3

Transport/storage:
- LGK 10-13
- Merkblatt BG Chemie Nr. M050

N3014-3, Nickel (II) hydroxide carbonate hydrate, extra pure

HS-No: 2836 99 18 00

Assay (Complexometric, Ni)	min. 47.0 %	Lead (Pb)	max. 0.002 %
Chloride (Cl)	max. 0.02 %	Zinc (Zn)	max. 0.001 %
Sulfate (SO_4)	max. 0.01 %	Non precipitable with ammonium sulphide (as sulphate)	max. 0.3 %
Cobalt (Co)	max. 0.05 %		
Copper (Cu)	max. 0.003 %		
Iron (Fe)	max. 0.005 %		

Code	Capacity
N3014-3-0500	500 g
N3014-3-1000	1 kg

NICKEL (II) NITRATE HEXAHYDRATE

O Xn

- $Ni(NO_3)_2 6H_2O$
- M = 290.81 g/mol
- CAS [13478-00-7]
- EC number: 236-068-5

Physical data:
- Form: Solid
- Bulk density: ~ 800 kg/m³

- Solub. in water (20 °C): soluble
- Melting point: 56,7 °C
- pH (50 g/l H_2O, 20 °C) ~ 5

Toxicological data:
- LD 50 (oral, rat): 1620 mg/kg
- WGK: 2

Safety:
- R: 8-22-43
- S: 24-37-46
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 5.1 O2 III UN 2725

- IMDG: 5.1 III UN 2725
- IATA/ICAO: 5.1 III UN 2725
- PAX: 516
- CAO: 518
- LGK: 5.1 B
- Disposal: 15

N3065-1, Nickel (II) nitrate hexahydrate, reagent grade

HS-No: 2834 29 20 00

Assay (complexometric, Nil)	min. 99.0 %	Iron (Fe)	max. 0.001 %
Chloride (Cl)	max. 0.001 %	Sodium (Na)	max. 0.005 %
Sulfates (SO_4)	max. 0.005 %	Ammonium (NH_4)	max. 0.05 %
Calcium (Ca)	max. 0.005 %	Lead (Pb)	max. 0.001 %
Cobalt (Co)	max. 0.005 %	Zinc (Zn)	max. 0.001 %
Copper (Cu)	max. 0.001 %		

Code	Capacity
N3065-1-0500	500 g

N3065-3, Nickel (II) nitrate hexahydrate, extra pure

HS-No: 2834 29 20 00

Assay (complexometric)	min. 97.0 %	Iron (Fe)	max. 0.005 %
Chloride (Cl)	max. 0.003 %	Lead (Pb)	max. 0.001 %
Sulfates (SO_4)	max. 0.01 %	Zinc (Zn)	max. 0.05 %
Calcium (Ca)	max. 0.2 %	Non precipitable with $(NH_4)_2S$ (as SO_4)	max. 0.3 %
Cobalt (Co)	max. 0.01 %		
Copper (Cu)	max. 0.002 %		

Code	Capacity
N3065-3-0500	500 g

NICKEL (II) SULFATE HEXAHYDRATE

Xn N

- $NiSO_4 6H_2O$
- M = 262.86 g/mol
- CAS [10101-97-0]
- EC number: 232-104-9

Physical data:
- Spec. density: 2,07 g/cm³
- Bulk density: ~ 1000 kg/m³

- Solub. in water (20 °C): 625 g/l
- Melting point: 53 °C
- pH (100 g/l H_2O, 20 °C) 4,3 - 4,7

Toxicological data:
- LD 50 (oral, rat): 264 mg/kg
- WGK: 3*

Safety:
- EC Index no.: 028-009-00-5
- R: 22-40-42/43-50/53
- S: 22-36/37-45-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 9 M7 III UN 3077
- IMDG: 9 III UN 3077
- IATA/ICAO: 9 III UN 3077
- PAX: 911
- CAO: 911
- LGK: 10-13
- Disposal: 15

N3073-1, Nickel (II) sulfate hexahydrate, reagent grade

HS-No: 2833 24 00 00

Assay (complexometric)	min. 99 %	Iron (Fe)	max. 0.001 %
pH (5%, H_2O)	4 - 6	Lead (Pb)	max. 0.001 %
Total N	max. 0.001 %	Magnesium (Mg)	max. 0.01 %
Chloride (Cl)	max. 0.001 %	Manganese (Mn)	max. 0.0005 %
Calcium (Ca)	max. 0.005 %	Potassium (K)	max. 0.005 %
Cobalt (Co)	max. 0.002 %	Sodium (Na)	max. 0.01 %
Copper (Cu)	max. 0.002 %	Zinc (Zn)	max. 0.002 %

Code	Capacity
N3073-1-0500	500 g

N3073-3, Nickel (II) sulfate hexahydrate, extra pure

HS-No: 2833 24 00 00

Assay (complexometric)	min. 99 %	Copper (Cu)	max. 0.002 %
pH (5%, H_2O)	4 - 6	Iron (Fe)	max. 0.005 %
Chloride (Cl)	max. 0.003 %	Lead (Pb)	max. 0.001 %
Arsenic (As)	max. 0.001 %	Zinc (Zn)	max. 0.005 %
Cadmium (Cd)	max. 0.005 %	Non precipitable with $(NH_4)_2$ S (as SO_4)	max. 0.5 %
Cobalt (Co)	max. 0.01 %		

Code	Capacity
N3073-3-0500	500 g

NICKEL STANDARD SOLUTION 1000MG/L FOR AA

 Xi

Physical data:
- Density: ~ 1.01 g/cm³
- Solub. in water (20 °C): miscible
- pH (20 °C) < 1

Toxicological data:
- WGK: 1

Safety:
- R: 36/38-52/53
- S: 26-37-61
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 8 C1 III UN 3564
- IMDG: 8 III UN 3564
- IATA/ICAO: 8 III UN 3564
- PAX: 818
- CAO: 820
- LGK: 8 B

N1003-0, Nickel standard solution 1000mg/l for AA
(nickel (II) nitrate in nitric acid 0.5 mol/l)

HS-No: 3822 00 00 00

composition ..... 1000±5 mg/l

Code	Capacity
L1001-0-0500	500 ml

NITRIC ACID 20%

 C

- HNO_3
- M = 63.01 g/mol
- CAS [7697-37-2]
- EC number: 231-714-2

Physical data:
- Density: 1,41 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -41 °C
- Boiling point: 122 °C
- Vapour pressure: (20 °C) 9,4 hPa
- pH (20 °C) < 1

Toxicological data:
- MAK: 2 ml/m³ , 5,2 mg/m³
- WGK: 1

Safety:
- EC Index no.: 007-004-00-1
- R: 35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 CO1 II UN 2031
- IMDG: 8 II UN 2031
- IATA/ICAO: Forbidden UN 2031
- PAX: F
- CAO: 813
- LGK: 8 B
- Disposal: 12

N3102-1, Nitric acid 20%, reagent grade

HS-No: 2808 00 00 00

Code	Capacity
N3102-1-2501	2.5 L

Assay	min. 20 %	Germanium (Ge)	max. 0.1 ppm
Chloride (Cl)	max. 0.5 ppm	Indium (In)	max. 0.02 ppm
Phosphate (PO_4)	max. 0.5 ppm	Potassium (K)	max. 0.1 ppm
Sulfate (SO_4)	min 0.5 ppm	Lithium (Li)	max. 0.02 ppm
Arsenic and Antimony (as As)	max. 0.01 ppm	Magnesium (Mg)	max. 0.1 ppm
Silver (Ag)	max. 0.02 ppm	Manganese (Mn)	max. 0.02 ppm
Aluminium (Al)	max. 0.5 ppm	Molybdenum (Mo)	max. 0.05 ppm
Gold (Au)	max. 0.1 ppm	Sodium (Na)	max. 0.3 ppm
Boron (B)	max. 0.05 ppm	Nickel (Ni)	max. 0.02 ppm
Barium (Ba)	max. 0.05 ppm	Lead (Pb)	max. 0.05 ppm
Beryllium (Be)	max. 0.02 ppm	Platinum (Pt)	max. 0.2 ppm
Bismuth (Bi)	max. 0.1 ppm	Tin (Sn)	max. 0.1 ppm
Calcium (Ca)	max. 0.1 ppm	Strontium (Sr)	max. 0.05 ppm
Cadmium (Cd)	max. 0.05 ppm	Titanium (Ti)	max. 0.1 ppm
Cobalt (Co)	max. 0.02 ppm	Thallium (Tl)	max. 0.05 ppm
Chromium (Cr)	max. 0.02 ppm	Vanadium (V)	max. 0.05 ppm
Copper (Cu)	max. 0.02 ppm	Zinc (Zn)	max. 0.1 ppm
Iron (Fe)	max. 0.2 ppm	Zirconium (Zr)	max. 0.1 ppm
Gallium (Ga)	max. 0.02 ppm	Residue after ignition	max. 5 ppm

NITRIC ACID, 65 %


C

- HNO_3
- M = 63.01 g/mol
- CAS [7697-37-2]
- EC number: 231-714-2

Physical data:
- Density: 1,41 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ -32 °C
- Boiling point: 122 °C
- Vapour pressure: (20 °C) 9,4 hPa
- pH (20 °C) < 1

Toxicological data:
- MAK: 2 ml/m³ , 5,2 mg/m³
- WGK: 1

Safety:
- EC Index no.: 007-004-00-1
- R: 35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 CO1 II UN 2031
- IMDG: 8 II UN 2031
- IATA/ICAO: Forbidden UN 2031
- PAX: F
- CAO: 813
- LGK: 8 B
- Disposal: 12

N3115-1, Nitric acid 65 %, reagent grade

HS-No: 2808 00 00 00

Assay	65.5 ± 0.5 %	Germanium (Ge)	max. 0.01 ppm
Chloride (Cl)	max. 0.2 ppm	Mercury (Hg)	max. 0.05 ppm
Fluride (F)	max. 1 ppm	Indium (In)	max. 0.02 ppm
Phosphate (PO_4)	max. 0.2 ppm	Potassium (K)	max. 0.1 ppm
Sulfate (SO_4)	min. 0.5 ppm	Lithium (Li)	max. 0.01 ppm
Arsenic and Antimony (as As)	max. 0.01 ppm	Magnesium (Mg)	max. 0.05 ppm
Silver (Ag)	max. 0.01 ppm	Manganese (Mn)	max. 0.01 ppm
Aluminium (Al)	max. 0.05 ppm	Molybdenum (Mo)	max. 0.01 ppm
Gold (Au)	max. 0.05 ppm	Sodium (Na)	max. 0.2 ppm
Barium (Ba)	max. 0.01 ppm	Nickel (Ni)	max. 0.02 ppm
Beryllium (Be)	max. 0.01 ppm	Lead (Pb)	max. 0.1 ppm
Bismuth (Bi)	max. 0.1 ppm	Platinum (Pt)	max. 0.1 ppm
Calcium (Ca)	max. 0.05 ppm	Strontium (Sr)	max. 0.01 ppm
Cadmium (Cd)	max. 0.2 ppm	Titanium (Ti)	max. 0.02 ppm
Cobalt (Co)	max. 1 ppm	Thallium (Tl)	max. 0.02 ppm
Chromium (Cr)	max. 0.2 ppm	Vanadium (V)	max. 0.01 ppm
Copper (Cu)	max. 0.5 ppm	Zinc (Zn)	max. 0.02 ppm
Iron (Fe)	max. 0.01 ppm	Zirconium (Zr)	max. 0.02 ppm
Gallium (Ga)	max. 0.05 ppm	Residue after ignition	max. 3 ppm

Code	Capacity
N3115-1-1001	1.0L
N3115-1-2501	2.5L

N3115-3, Nitric acid 65 %, extra pure

HS-No: 2808 00 00 00

Assay	min. 65 %	Calcium (Ca)	max. 0.001 %
Chloride (Cl)	max. 0.0003 %	Iron (Fe)	max. 0.0004 %
Nitrogen Oxides (as N_2O_3)	max. 0.003 %	Ammonium (NH_4)	max. 0.001 %
Sulfate (SO_4)	max. 0.001 %	Non Volatile Matter	max. 0.01 %
Heavy Metals (as Pb)	min. 0.0005 %	Appearance of Solution	passes test
Arsenic (As)	max. 0.0001 %	Iodate, Bromate	passes test

Code	Capacity
N3115-3-2501	2.5L

NITRIC ACID 69%


C

- HNO_3
- M = 63.01 g/mol
- CAS [7697-37-2]
- EC number: 231-714-2

Physical data:
- Density: 1,41 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -41 °C
- Boiling point: 122 °C
- Vapour pressure: (20 °C) 9,4 hPa
- pH (20 °C) < 1

Toxicological data:
- MAK: 2 ml/m³ , 5,2 mg/m³
- WGK: 1

Safety:
- EC Index no.: 007-004-00-1
- R: 35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 CO1 II UN 2031
- IMDG: 8 II UN 2031
- IATA/ICAO: Forbidden UN 2031
- PAX: F
- CAO: 813
- LGK: 8 B
- Disposal: 12

N

N3105-1, Nitric acid 69%, reagent grade

HS-No: 2808 00 00 00

Assay	68.5 ± 0.5 %	Germanium (Ge)	max. 0.1 ppm
Chloride (Cl)	max. 0.5 ppm	Indium (In)	max. 0.02 ppm
Phosphate (PO_4)	max. 0.5 ppm	Potassium (K)	max. 0.1 ppm
Sulfate (SO_4)	min. 0.5 ppm	Lithium (Li)	max. 0.02 ppm
Arsenic and Antimony (as As)	max. 0.01 ppm	Magnesium (Mg)	max. 0.1 ppm
Silver (Ag)	max. 0.02 ppm	Manganese (Mn)	max. 0.02 ppm
Aluminium (Al)	max. 0.5 ppm	Molybdenum (Mo)	max. 0.05 ppm
Gold (Au)	max. 0.1 ppm	Sodium (Na)	max. 0.3 ppm
Boron (B)	max. 0.05 ppm	Nickel (Ni)	max. 0.02 ppm
Barium (Ba)	max. 0.05 ppm	Lead (Pb)	max. 0.05 ppm
Beryllium (Be)	max. 0.02 ppm	Platinum (Pt)	max. 0.2 ppm
Bismuth (Bi)	max. 0.1 ppm	Tin (Sn)	max. 0.1 ppm
Calcium (Ca)	max. 0.1 ppm	Strontium (Sr)	max. 0.05 ppm
Cadmium (Cd)	max. 0.05 ppm	Titanium (Ti)	max. 0.1 ppm
Cobalt (Co)	max. 0.02 ppm	Thallium (Tl)	max. 0.05 ppm
Chromium (Cr)	max. 0.02 ppm	Vanadium (V)	max. 0.05 ppm
Copper (Cu)	max. 0.02 ppm	Zinc (Zn)	max. 0.1 ppm
Iron (Fe)	max. 0.2 ppm	Zirconium (Zr)	max. 0.1 ppm
Gallium (Ga)	max. 0.02 ppm	Residue after ignition	max. 5 ppm

Code	Capacity
N3105-1-1000	1.0L
N3105-1-2500	2.5L

N3105-7, Nitric acid 69%, EC-10

Assay	69.0 – 71.0 %	Titration
Residue after ignition	max. 5 ppm	Gravimetric
Chloride (Cl)	max. 0.5 ppm	Ion Chromatography
Sulphate (SO_4)	min 0.5 ppm	Ion Chromatography
Phosphate (PO_4)	max. 0.5 ppm	Ion Chromatography
Arsenic and Antimony (as As)	max. 0.01 ppm	ICP-MS
Silver (Ag)	max. 0.02 ppm	ICP-MS
Aluminium (Al)	max. 0.05 ppm	ICP-MS
Gold (Au)	max. 0.1 ppm	ICP-MS
Boron (B)	max. 0.05 ppm	ICP-MS
Barium (Ba)	max. 0.05 ppm	ICP-MS
Beryllium (Be)	max. 0.02 ppm	ICP-MS
Bismuth (Bi)	max. 0.1 ppm	ICP-MS
Calcium (Ca)	max. 0.1 ppm	ICP-MS
Cadmium (Cd)	max. 0.05 ppm	ICP-MS
Cobalt (Co)	max. 0.02 ppm	ICP-MS
Chromium (Cr)	max. 0.02 ppm	ICP-MS
Copper (Cu)	max. 0.02 ppm	ICP-MS
Iron (Fe)	max. 0.2 ppm	ICP-MS
Gallium (Ga)	max. 0.02 ppm	ICP-MS
Germanium (Ge)	max. 0.1 ppm	ICP-MS
Indium (In)	max. 0.02 ppm	ICP-MS
Potassium (K)	max. 0.1 ppm	ICP-MS
Lithium (Li)	max. 0.02 ppm	ICP-MS
Magnesium (Mg)	max. 0.1 ppm	ICP-MS
Manganese (Mn)	max. 0.02 ppm	ICP-MS
Molybdenum (Mo)	max. 0.05 ppm	ICP-MS
Sodium (Na)	max. 0.3 ppm	ICP-MS
Nickel (Ni)	max. 0.02 ppm	ICP-MS
Lead (Pb)	max. 0.03	ICP-MS
Platinum (Pt)	max. 0.2 ppm	ICP-MS
Tin (Sn)	max. 0.1	ICP-MS
Strontium (Sr)	max. 0.05	ICP-MS
Titanium (Ti)	max. 0.1	ICP-MS
Thallium (Tl)	max. 0.05 ppm	ICP-MS
Vanadium (V)	max. 0.05 ppm	ICP-MS
Zinc (Zn)	max. 0.1 ppm	ICP-MS
Zirconium (Zr)	max. 0.1 ppm	ICP-MS

Code	Capacity
N3105-7-2500	2.5 L

N NITRIC ACID, VOLUMETRIC SOLUTIONS

C

N3120-0, Nitric acid, solution 0.1 mol/l (0.1N)

- HNO_3
- M = 63.01 g/mol
- CAS [7697-37-2]
- EC number: 231-714-2

Physical data:
- Density: ~ 1,002 g/cm³

Safety:
- EC Index no.: 007-004-00-1
- S: 24/25
- Poison class CH (Swiss): 3

1 ml = 0.006301 g HNO_3

HS-No: 2808 00 00 00

Code	Capacity
N3120-01-1000	1L

N3121-0, Nitric acid, solution 1 mol/l (1N)

- HNO_3
- M = 63.01 g/mol
- CAS [7697-37-2]
- EC number: 231-714-2

Physical data:
- Density: 1,036 g/cm³

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 007-004-00-1
- R: 34
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 CO1 II UN 2031
- IMDG: 8 II UN 2031
- IATA/ICAO: 8 II UN 2031
- PAX: 807
- CAO: 813
- LGK: 8 B
- Disposal: 12

1 ml = 0.06301 g HNO_3

HS-No: 2808 00 00 00

Code	Capacity
N3121-0-1000	1L

N3122-0, Nitric acid, solution 2 mol/l (2N)

- HNO_3
- M = 63.01 g/mol
- CAS [7697-37-2]
- EC number: 231-714-2

Physical data:
- Density: ~ 1,07 g/cm³

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 007-004-00-1
- R: 34
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 CO1 II UN 2031
- IMDG: 8 II UN 2031
- IATA/ICAO: 8 II UN 2031
- LGK: 8
- Disposal: 12

1 ml = 0.12602 g HNO_3

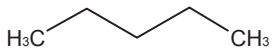
HS-No: 2808 00 00 00

Code	Capacity
N3122-0-1000	1L

N-PENTANE

F+ Xn N

1,3-Dimethylpropane,
Diethyl methane



- C_5H_{12}
- M = 72.15 g/mol
- CAS [109-66-0]
- EC number: 203-692-4

Physical data:
- Density: 0,63 g/cm³
- Solub. in water (25 °C): 0,04 g/l
- Melting point: -129,7 °C
- Boiling point: 36,1 °C
- Flash point: -49,4 °C
- Ignition temp.: 285 °C
- Vapour pressure: (20 °C) 573 hPa
- Dielectric const.: (20 °C) 1,8
- Evap. heat: (36 °C) 383 KJ/kg
- Saturation conc.: (20 °C) 1689 g/m³
- Expl. limit (upper): 8 Vol%
- Expl. limit (lower): 1,4 Vol%

Toxicological data:
- MAK: 1000 ml/m³ , 3000 mg/m³
- WGK: 1

Safety:
- EC Index no.: 601-006-00-1 [1]
- R: 12-51/53-65-66-67
- S: 9-16-29-33-61-62
- VbF class: AI
- Poison class CH (Swiss): 5

Transport/storage:
- ADR: 3 F1 II UN 1265
- IMDG: 3 II UN 1265
- IATA/ICAO: 3 II UN 1265
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

N6015-1, n-Pentane 99%, reagent grade

HS-No: 2901 10 90 00

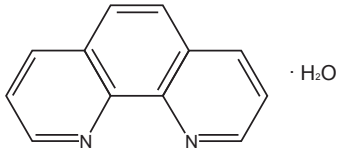
Assay (G.C)	min. 99 %	Iron (Fe)	max. 0.00001 %
Colour	max. 10 Hazen	Lead (Pb)	max. 0.00001 %
Acidity	max. 0.0002 meq/g	Magnesium (Mg)	max. 0.00001 %
Aluminium (Al)	max. 0.00005 %	Manganese (Mn)	max. 0.000002 %
Barium (Ba)	max. 0.00001 %	Nickel (Ni)	max. 0.000002 %
Boron (B)	max. 0.000002 %	Tin (Sn)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Zinc (Zn)	max. 0.00001 %
Calcium (Ca)	max. 0.00005 %	Sulphur compounds (as S)	max. 0.005 %
Chromium (Cr)	max. 0.000002 %	Substances darkened by H_2SO_4	passes test
Cobalt (Co)	max. 0.000002 %	Non-volatile matter	max. 0.0005 %
Copper (Cu)	max. 0.000002 %	Water	max. 0.01 %

Code	Capacity
N6015-1-2501	2.5L

O-PHENANTHROLINE MONOHYDRATE

T N

1,10-Phenanthroline



- $C_{12}H_8N_2 \cdot H_2O$
- M = 198.24 g/mol
- CAS [5144-89-8]
- EC number: 200-629-2

Physical data:
- Bulk density: ~ 300 kg/m³
- Solub. in water (20 °C): ~ 3,3 g/l
- Melting point: 93 - 94 °C

Toxicological data:
- LD 50 (oral, rat): 132 mg/kg
- WGK: 3*

Safety:
- EC Index no.: 613-092-00-8
- R: 25-50/53
- S: 45-60-61

Transport/storage:
- ADR: 6.1 T2 III UN 2811
- IMDG: 6.1 III UN 2811
- IATA/ICAO: 6.1 III UN 2811
- PAX: 619
- CAO: 619
- LGK: 6.1 B
- Disposal: 9

O6002-1, o-Phenanthroline monohydrate, reagent grade

HS-No: 2933 99 90 90

Assay (titr. with $HClO_4$)	min. 99.5 %	Sulfated ash	max. 0.05 %
Suitability for determination of Fe	passes test	Water	8.5 - 9.5 %
Suitability as redox indicator	passes test		

Code	Capacity
O6002-1-0005	5 g

ORTHO-PHOSPHORIC ACID, 85 %

C

Orthophosphoric acid

- H_3PO_4
- M = 98.00 g/mol
- CAS [7664-38-2]
- EC number: 231-633-2

Physical data:
- Density: 1,71 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ 21 °C
- Boiling point: ~ 158 °C
- Vapour pressure: (25 °C) 2,2 hPa
- pH (100 g/l H_2O, 20 °C) < 0,5

Toxicological data:
- LD 50 (oral, rat): 1530 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- EC Index no.: 015-011-00-6
- R: 34
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C1 III UN 1805
- IMDG: 8 III UN 1805
- IATA/ICAO: 8 III UN 1805
- PAX: 819
- CAO: 821
- LGK: 8 B
- Disposal: 12

O6021-1, ortho-Phosphoric acid 85%, reagent grade

HS-No: 2809 20 00 00

Assay (acidimetric)	min. 85.0 %	Cobalt (Co)	max. 0.5 ppm
Chlorides (Cl)	max. 2 ppm	Copper (Cu)	max. 0.5 ppm
Flouride (F)	max. 1 ppm	Iron (Fe)	max. 10 ppm
Nitrate (NO_3)	max. 3 ppm	Potassium (K)	max. 5 ppm
Sulphate (SO_4)	max. 20 ppm	Magnesium (Mg)	max. 5 ppm
Phosphite and Hypophosphite (as H_3PO_3)	max. 20 ppm	Manganese (Mn)	max. 0.5 ppm
		Sodium (Na)	max. 200 ppm
Antimony (Sb)	max. 5 ppm	Nickel (Ni)	max. 1 ppm
Arsenic (As)	max. 0.5 ppm	Lead (Pb)	max. 0.5 ppm
Calcium (Ca)	max. 50 ppm	Zinc (Zn)	max. 2 ppm
Cadmium (Cd)	max. 0.5 ppm		

Code	Capacity
O6021-1-2500	2.5L

O6021-3, ortho-Phosphoric acid 85%, extra pure

HS-No: 2809 20 00 00

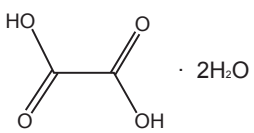
Assay (acidimetric)	min. 85 - 88 %	Copper (Cu)	max. 0.002 %
Volatile acids (as CH_3COOH)	max. 0.001 %	Iron (Fe)	max. 0.005 %
Chlorides (Cl)	max. 0.0005 %	Heavy Metals (as Pb)	max. 0.001 %
Flouride (F)	max. 0.001 %	Lead (Pb)	max. 0.001 %
Nitrate (NO_3)	max. 0.0003 %	Potassium (K)	max. 0.005 %
Phosphite and Hypophosphite		Sodium (Na)	max. 0.03 %
(as H_3PO_3)	max. 0.02 %	Zinc (Zn)	max. 0.002 %
Sulfates (SO_4)	max. 0.005 %	Precipitable compounds with ammonia	passes test
Arsenic (As)	max. 0.0002 %	Residual Solvents (Ph Eur/ICH)	Excluded by production process
Calcium (Ca)	max. 0.01 %		

Code	Capacity
O6021-3-2500	2.5L

OXALIC ACID DIHYDRATE

Xn

Ethanedioic acid



- $C_2H_2O_4 2H_2O$
- M = 126.07 g/mol
- CAS [6153-56-6]
- EC number: 205-634-3

Physical data:
- Spec. density: 1,65 g/cm³
- Bulk density: ~ 900 kg/m³
- Solub. in water (20 °C): 102 g/l
- Melting point: 101 °C

Toxicological data:
- LD 50 (oral, rat): 7500 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- EC Index no.: 607-006-00-8
- R: 21/22
- S: 24/25-37-46
- Poison class CH (Swiss): 2

Transport/storage:
- LGK: 10-13
- Disposal: 4

O9006-1, Oxalic acid dihydrate, reagent grade

HS-No: 2917 11 00 90

Assay (permanganometric)	min. 99.5 %	Copper (Cu)	max. 0.0005 %
Chlorides (Cl)	max. 0.0005 %	Heavy Metals (as Pb)	max. 0.0005 %
Sulfates (SO_4)	max. 0.002 %	Iron (Fe)	max. 0.0002 %
Total N	max. 0.001 %	Lead (Pb)	max. 0.0005 %
Calcination Residue (as SO_4)	max. 0.01 %	Nickel (Ni)	max. 0.0005 %
Cadmium (Cd)	max. 0.0005 %	Zinc (Zn)	max. 0.0005 %
Calcium (Ca)	max. 0.0005 %	Foreign Organic Substances	passes test
Cobalt (Co)	max. 0.0005 %	Substances Darkened by H_2SO_4	passes test

Code	Capacity
O9006-1-1000	1 kg

PETROLEUM ETHER, BOILING RANGE 40 - 60 EC

 F  Xn

Petroleum benzine,
Petroleum spirit

- CAS [64742-49-0]
- EC number: 265-151-9

Physical data:
- Density: (15 °C) 0,65 g/cm³
- Solub. in water (20 °C): almost non-miscible
- Melting point: < -100 °C
- Boiling point: 40 - 60 °C
- Flash point: < -21 °C
- Ignition temp.: 250 °C
- Vapour pressure: (20 °C) 350 hPa
- Viscosity: (20 °C) 0,45 mPas
- Expl. limit (upper): 8 Vol%
- Expl. limit (lower): 0,8 Vol%

Toxicological data:
- LD 50 (oral, rat): > 5000 mg/kg
- MAK: 50 ml/m³ , 180 mg/m³
- WGK: 1

Safety:
- EC Index no.: 649-328-00-1
- R: 11-52/53-65
- S: 9-16-23.2-51-24-33-46-62
- VbF class: AI
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 II UN 1268
- IMDG: 3 II UN 1268
- IATA/ICAO: 3 II UN 1268
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

P2049-1, Petroleum ether 40 - 60EC, reagent grade

HS-No: 2710 11 25 00

Boiling range	40 - 60 °C	Acidity	max. 0.0005 meq/g
Water (by coulometry)	max. 0.006 %	Residue on Evaporation	max. 0.001 %
Color	max. 10 APHA	Sulphur compounds (S)	max. 0.002 %

Code	Capacity
P2049-1-2501	2.5 L
P2049-1-4001	4.0 L

PETROLEUM ETHER 60 – 80°C

 F  Xn  N

Petroleum benzine, petroleum spirit

- CAS [64742-49-0]
- EC number: 265-151-9

Physical data
- Form: Liquid
- Density: 0.68 g/cm³
- Solub. in water (20°C): non-miscible
- Boiling point: ~ 60 - 80 °C
- Flash point: - < -20 °C
- Ignition temp.: 260 °C
- Vapour pressure: (20 °C) ~ 200 hPa
- Expl. limit (upper): 7.5 Vol%
- Expl. limit (lower): 1.0 Vol%

Toxicological data:
- MAK: 50ml/m³ , 180 mg/m³
- WGK: 1

Safety:
- EC Index no.: 649-328-00-1
- R: 11-38-48/20-51/53-62-65-67
- S: 16-23.2-51-33-36/37-61-62
- VbF class: AI
- Poison class CH (swiss): 4

Transport/storage:
- ADR: 3 F1 II UN 1268
- IMDG: 3 II UN 1268
- IATA/ICAO: 3 II UN 1268
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

Special regulations:
- Product submitted to special taxes law

P2053-1, Petroleum ether 60 – 80°C , reagent grade

HS-No: 2710 11 25 00

Boiling range	60 – 80 °C	Iron (Fe)	max. 0.00001 %
Acidity	max. 0.0003 meg/g	Magnesium (Mg)	max. 0.00001 %
Aluminium (Al)	max. 0.00005 %	Manganese (Mn)	max. 0.000002 %
Barium (Ba)	max. 0.000001 %	Nickel (Ni)	max. 0.000002 %
Boron (B)	max. 0.000002 %	Lead (Pb)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Iodine Number	max. 0.3 %
Calcium (Ca)	max. 0.00005 %	S compounds (as S)	max. 0.005 %
Zinc (Zn)	max. 0.00001 %	Aromatic s (as benzene)	max. 0.005 %
Cobalt (Co)	max. 0.000002 %	Non-volatile matter	max. 0.0005 %
Copper (Cu)	max. 0.000002 %	Substances darkened by H_2SO_4	passes test %
Chromium (Cr)	max. 0.000002 %	Water (K.F.)	max. 0.01 %
Tin (Sn)	max. 0.00001 %		

Code	Capacity
P2053-1-2501	2.5 L
P2053-1-4001	4.0 L

P

PERCHLORIC ACID 70%


F

C

$HClO_4$

- $HClO_4$
- M = 100.46 g/mol
- CAS [7601-90-3]
- EC number: 231-512-4

Physical data
- Form: Solid
- Density: ~ 1.36 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -18 °C
- Boiling point: ~ 198.7 kg/m³
- pH (H_2O, 20 °C) < 1

Toxicological data:
- LD 50 (oral, rat): 1100 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- EC Index no.: 017-006-00-4
- R: 5-8-35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (swiss): 1

Transport/storage:
- ADR: 5.1 O2 I UN 1873
- IMDG: 5.1 I UN 1873
- IATA/ICAO: 5.1 I UN 1873
- PAX: F
- CAO: 501
- LGK: 5.1 A
- Disposal: 12

P1005-1, Perchloric acid 70%, reagent grade

HS-No: 2811 19 80 90

Assay (acidimetric)	69 – 72 %	Germanium (Ge)	max. 0.000005 %
Identity	passes test	Heavy metals (as Pb)	max. 0.0001 %
Colour (Hazen)	max. 10 %	Iron (Fe)	max. 0.0001 %
Insoluble in Ethanol	max. 0.001 %	Lead (Pb)	max. 0.000005 %
Free Chlorine (Cl)	max. 0.00005 %	Lithium (Li)	max. 0.000002 %
Total N	max. 0.001 %	Magnesium (Mg)	max. 0.00005 %
Chlorates (ClO_3)	max. 0.001 %	Manganese (Mn)	max. 0.000002 %
Chlorides (Cl)	max. 0.0003 %	Molubdenum (Mo)	max. 0.000005 %
Phosphates, silicates (as SiO_2)	max. 0.0005 %	Nickel (Ni)	max. 0.00001 %
Sulfates (SO_4)	max. 0.001 %	Potassium (K)	max. 0.00001 %
Aluminium (Al)	max. 0.000005 %	Silver (Ag)	max. 0.00001 %
Arsenic (As)	max. 0.000005 %	Sodium (Na)	max. 0.00005 %
Barium (Ba)	max. 0.000002 %	Strontium (Sr)	max. 0.000002 %
Beryllium (Be)	max. 0.000002 %	Thallium (Tl)	max. 0.000005 %
Bismuth (Bi)	max. 0.00001 %	Titanium (Ti)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Vanadium (V)	max. 0.000005 %
Calcium (Ca)	max. 0.00005 %	Zinc (Zn)	max. 0.00001 %
Cobalt (Co)	max. 0.000005 %	Zirconium (Zr)	max. 0.00001 %
Copper (Cu)	max. 0.00001 %	Calcination residue (as SO_4)	max. 0.003 %

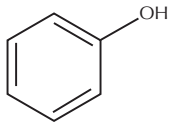
Code	Capacity
P1005-1-0500	500 ml
P1005-1-1001	1 Lit

PHENOL


T

C

Phenic acid, Hydroxybenzene, Carbolic acid



- C_6H_5OH
- M = 94.11 g/mol
- CAS [108-95-2]
- EC number: 2907 11 00 00

Physical data
- Form: Solid
- Spec. density: ~ 1.06 g/cm³
- Bulk. density: ~ 620 kg/m³
- Solub. in water (20 °C): 84 g/l
- Melting point: 40.8 °C
- Boiling point: 181.8 °C
- Flash point: 81 °C
- Ignition temp: 595 °C
- Vapour pressure: (20 °C) 0.2 hPa
- Expl. limit (upper): 9.5 Vol %
- Expl. limit (lower): 1.3 Vol %
- pH (50 g/l H_2O, 20 °C) ~ 5

Toxicological data:
- LD 50 (oral, rat): 317 mg/kg
- MAK: 5 ml/m³
- WGK: 2

Safety:
- EC Index no.: 604-001-00-2
- R: 23/24/25-34-48/20/21/22-68

Transport/storage:
- ADR: 6.1 T2 II UN 1671
- IMDG: 6.1 II UN 1671
- IATA/ICAO: 6.1 II UN 1671
- PAX: 613
- CAO: 615
- LGK: 6.1 A
- Disposal: 9

P

P3009-8, Phenol, molecular biology grade

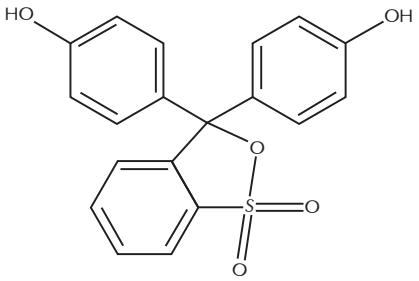
HS-No: 2836 29 80 00

Assay (by GC)	min. 99.5 %	DNase and RNase	none detected
Melting point	40.5 °C	Iron (Fe)	1 ppm
Preservative	none	Magnesium (Mg)	1 ppm
Water (H_2O)	0.5 %	Heavy metals (Pb)	5 ppm

Code	Capacity
P3009-8-0500	500 g

PHENOL RED

Phenolsulfonphthalein, PR



- $C_{19}H_{14}O_5S$
- M = 354.38 g/mol
- CAS [143-74-8]
- EC number: 205-609-7

Physical data:
- Form: Solid
- Bulk density: 200 - 300 kg/m³
- Solub. in water (20°C): miscible

Toxicological data:
- WGK: 1

Transport/storage:
- LGK: 10-13
- Disposal: 3

P3001-0, Phenol red, indicator

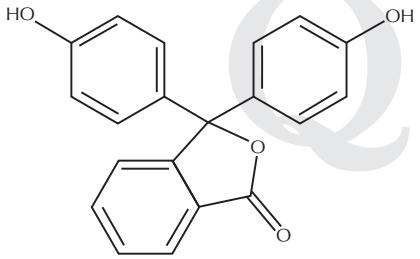
HS-No:

pH range (yellow-red)	6.5 – 8.0
Absorption maximum λ1 (pH 1.2)	503 – 506 nm
Absorption maximum λ2 (pH 3.0)	430 – 435 nm
Absorption maximum λ3 (pH 6.5)	430 – 435 nm
Absorption maximum λ4 (pH 8.8)	557 – 560 nm
Absorptivity (A1%/1cm; λ1, on dried material)	900 – 1100
Absorptivity (A1%/1cm; λ2, on dried material)	500 – 700
Absorptivity (A1%/1cm; λ3, on dried material)	500 – 700
Absorptivity (A1%/1cm; λ4, on dried material)	1000 – 1200
Insoluble in ethanol	passes test
Copper (Cu)	max. 0.005 %
Iron (Fe)	max. 0.005 %
Lead (Pb)	max. 0.005 %
Nickel (Ni)	max. 0.005 %
Transition range acc. ACS	passes test
Loss on drying (110ºC)	max. 5 %

Code	Capacity
P3001-0-0025	2.5 g

PHENOLPHTHALEIN

3,3-Bis(p-hydroxyphenyl)phthalide



- $C_{20}H_{14}O_4$
- M = 318.33 g/mol
- CAS [77-09-8]
- EC number: 201-004-7

Physical data:
- Spec. density: 1,3 g/cm³
- Bulk density: 350 - 450 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: 261 - 263 °C

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 3

P3017-1, Phenolphthalein indicator, reagent grade

HS-No: 2932 29 10 00

pH range (colourless to violet-red)	8.2 - 9.8
Absorption maximum (pH 9.8)	551 - 554 nm
Absorptivity (A1%/1 cm; max, pH 9.8 on dried material)	700 - 750
Loss on drying (110°C)	max. 1 %

Code	Capacity
P3017-1-0100	100 g

PHENOLPHTHALEIN, ETHANOLIC SOLUTIONS

F

- $C_{20}H_{14}O_4$
- M = 318.33 g/mol
- CAS [77-09-8]

Physical data:
- Density: 0,89 g/cm³
- Solub. in water (20°C): miscible
- Flash point: 23°C
- Ignition temp.: ~ 425 °C

Toxicological data:
- LD 50 (oral, rat): 6200 mg/kg (ethanol)
- MAK: 500 ml/m³ , 960 mg/m³
- WGK: 1

Safety:
- R: 11
- S: 7-16
- VbF class: B
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 3 F1 III UN 1993
- IMDG: 3 III UN 1993
- IATA/ICAO: 3 III UN 1993
- PAX: 309
- CAO: 310
- LGK: 3 A
- Disposal: 1

P3021-0, **Phenolphthalein indicator,** solution in 1% ethanol

HS-No: 3822 00 00 00

Specification : pH range (colourless to violet-red) ..... pH 8.2 - 9.8

Code	Capacity
P3021-0-1000	1.0 L

PHOSPHOTUNGSTIC ACID HYDRATE

Tungstophosphoric acid hydrate

$H_3[PW_3O_{10})_4] \cdot XH_2O$

- $H_3O_{40}PW_{12}XH_2O$
- M = 2880.17 g/mol
- CAS [12501-23-4]
- EC number: 215-682-7

Physical data
- Form: Solid
- Bulk. density: ~ 960 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 107 °C
- pH (20g/l H_2O_1 20 °C) ~ 5

Toxicological data:
- WGK: 1

Safety:
- R: 34
- S: 26-36/37/39-45

Transport/storage:
- ADR: 8 C2 III UN 3260
- IMDG: 8 III UN 3260
- IATA/ICAO: 8 III UN 3260
- PAX: 822
- CAO: 823
- LGK: 10-13
- Disposal: 15

P3050-1, Phosphotungstic acid hydrate, reagent grade

HS-No: 2811 19 80 90

Chlorides (Cl)	max. 0.005 %	Lead (Pb)	max. 0.002 %
Sulfates (SO_4)	max. 0.01 %	Potassium (K)	max. 0.02 %
Total N	max. 0.002 %	Sodium (Na)	max. 0.02 %
Copper (Cu)	max. 0.001 %	Water (K.F.)	max. 17 %
Iron (Fe)	max. 0.002 %		

Code	Capacity
P3050-1-0101	100 g

PHOSPHORUS RED

F

P

- P
- M = 30.97 g/mol
- CAS [7723-14-0]
- EC number: 231-768-7

Physical data
- Form: Powder
- Spec. density: 2.34 g/cm³
- Bulk. density: 1100 kg/m³
- Solub. in water (20 °C): 84 g/l
- Ignition temp: 300 °C

Toxicological data:
- WGK: 3*

Safety:
- EC Index no.: 015-002-00-7
- R: 11-16-52/53
- S: 7-43,1-61
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 4.1 F3 III UN 1338
- IMDG: 4.1 III UN 1338
- IATA/ICAO: 4.1 III UN 1338
- PAX: 422
- CAO: 421
- LGK: 4.1B
- Disposal: 25

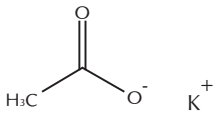
P3051-1, Phosphorus red, reagent grade

HS-No: 2804 70 00 00

Assay	min. 97 %	Yellow phosphorus	passes test
Iron (Fe)	max. 0.2 %		

Code	Capacity
P3051-1-0500	500 g

POTASSIUM ACETATE



- CH_3COOK
- M = 98.15 g/mol
- CAS [127-08-2]
- EC number: 204-822-2

Physical data:
- Spec. density: (25 °C) 1,57 g/cm³
- Bulk density: ~ 500 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 292 °C
- Flash point: > 250 °C
- pH (50 g/l H_2O, 20 °C) 7,5 - 8,5

Toxicological data:
- LD 50 (oral, rat): 3250 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13

P5021-1, Potassium acetate, reagent grade

HS-No: 2915 29 00 90

Assay (titr. with $HClO_4$)	min. 99 %	Copper (Cu)	max. 0.0005 %
pH (5%, H_2O)	7 - 9	Iron (Fe)	max. 0.0005 %
Chlorides (Cl)	max. 0.002 %	Lead (Pb)	max. 0.0005 %
Phosphates (PO_4)	max. 0.0005 %	Magnesium (Mg)	max. 0.001 %
Sulfates (SO_4)	max. 0.005 %	Sodium (Na)	max. 0.1 %
Calcium (Ca)	max. 0.005 %	Zinc (Zn)	max. 0.0005 %

Code	Capacity
P5021-1-0500	500 g

P5021-3, Potassium acetate, extra pure

HS-No: 2915 29 00 90

Assay (perchloric acid)	min. 99 %	Arsenic (As)	max. 0.0001 %
Insoluble matter in water	max. 0.005 %	Calcium (Ca)	max. 0.01 %
pH (5%, H_2O)	6.5 – 9.0	Copper (Cu)	max. 0.0005 %
HAcidity (as CH_3COO)	max. 0.25 %	Iron (Fe)	max. 0.0005 %
Alkalinity (as KOH)	max. 0.015 %	Lead (Pb)	max. 0.0005 %
Chlorides (Cl)	max. 0.002 %	Magnesium (Mg)	max. 0.01 %
Phosphate (PO_4)	max. 0.001 %	Nickel (Ni)	max. 0.0005 %
Sulphates (SO_4)	max. 0.002 %	Sodium (Na)	max. 0.25 %

Code	Capacity
P5021-3-0500	500 g

POTASSIUM BROMATE

Bromic acid potassium salt

$KBrO_3$

- $BrKO_3$
- M = 167.01 g/mol
- CAS [7758-01-2]
- EC number: 231-829-8

Physical data
- Form: Solid
- Spec. density: ~ 3.42 g/cm³
- Bulk. density: ~ 1400 kg/m³
- Solub. in water (20 °C): 70 g/l
- Melting point: 434 °C
- pH (50 g/l H_2O, 20 °C) 5 - 9

Toxicological data:
- LD 50 (oral,rat): 157 mg/kg
- WGK: 3

Safety:
- EC Index no.: 035-003-00-6
- R: 45-9-E25
- S: 53-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 O2 II UN 1484
- IMDG: 5.1 II UN 1484
- IATA/ICAO: 5.1 II UN 1484
- PAX: 508
- CAO: 511
- LGK: 5.1A
- Disposal: 22

Applications: Analytical chemistry, laboratory reagent, in food industry

P3035-1-0500, Potassium bromate, reagent grade

HS-No: 2829 90 40 00

Assay (iodometric, on dried sample) ..	min. 99.8 %	Sulfates (SO_4)	max. 0.005 %
Insoluble in water	max. 0005 %	Total (N)	max. 0.001 %
pH (5%, H_2O	5 – 9	Heavy metals (as Pb)	max. 0.0005 %
Free acid (as $HBrO_3$)	max. 0.005 %	Iron (Fe)	max. 0.0005 %
Free alkali (as KOH)	max. 0.003 %	Sodium (Na)	max. 0.01 %
Bromides (Br)	max. 0.02 %		

Code	Capacity
P3035-1-0500	500 g

POTASSIUM BROMIDE

- KBr
- M = 119.01 g/mol
- CAS [7758-02-3]
- EC number: 231-830-3

Physical data:
- Spec. density: 2.75 g/cm³
- Bulk density: ~ 900 - 1000 kg/m³
- Solub. in water (20 °C): 540 g/l
- Melting point: 730 °C
- Boiling point: 1380 °C
- Vapour pressure: (795 °C) 1,3 hPa
- pH (50 g/l H_2O, 20 °C) 5,5 - 8,5

Toxicological data:
- LD 50 (oral, rat): 3070 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 14

P5038-1, Potassium bromide, reagent grade

HS-No: 2827 51 00 00

Assay (argentometric)	min. 99.5 %	Calcium (Ca)	max. 0.001 %
pH (5%, H_2O)	5 - 8	Copper (Cu)	max. 0.0005 %
Bromates (BrO_3)	max. 0.001 %	Heavy metals (as Pb)	max. 0.0005 %
Chlorides (Cl)	max. 0.1 %	Iron (Fe)	max. 0.0005 %
Iodides (I)	max. 0.001 %	Lead (Pb)	max. 0.0005 %
Sulfates (SO_4)	max. 0.005 %	Magnesium (Mg)	max. 0.001 %
Total N	max. 0.001 %	Sodium (Na)	max. 0,02 %
Arsenic (As)	max. 0.0001 %	Zinc (Zn)	max. 0.0005 %
Barium (Ba)	max. 0.001 %	Loss on drying (105°C)	max. 0.3 %
Cadmium (Cd)	max. 0.0005 %		

Code	Capacity
P5038-1-1000	1 kg

POTASSIUM CARBONATE

Xn

Potash

- K_2CO_3
- M = 138.21 g/mol
- CAS [584-08-7]
- EC number: 209-529-3

Physical data:
- Spec. density: 2.43 g/cm³
- Bulk density: ~ 750 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 891 °C
- pH (50 g/l H_2O, 20 °C) ~ 11,5 - 12,5

Toxicological data:
- LD 50 (oral, rat): 1870 mg/kg
- WGK: 1

Safety:
- R: 22-36/37/38
- S: 22-26-46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 14

P5048-1, Potassium carbonate, reagent grade

HS-No: 2836 40 00 00

Assay (acidimetric)	min. 99 %	Copper (Cu)	max. 0.005 %
Insoluble matter	max. 0.005 %	Iron (Fe)	max. 0.0005 %
Total N	max. 0.001 %	Lead (Pb)	max. 0.0005 %
Chlorides (Cl)	max. 0.002 %	Magnesium (Mg)	max. 0.001 %
Phosphates (PO_4)	max. 0.001 %	Sodium (Na)	max. 0.02 %
Silicates (SiO_2)	max. 0.003 %	Substances precipitable by ammonia ...	max. 0.01 %
Heavy Metals (as Pb)	max. 0.0005 %	Total S (as SO_4)	max. 0.003 %
Aluminium (Al)	max. 0.001 %	Loss on calcinations (600°C)	max. 1 %
Arsenic (As)	max. 0.0001 %		
Calcium (Ca)	max. 0.002 %		

Code	Capacity
P5048-1-1000	1 kg

POTASSIUM CHLORIDE

Chloro potassium

- KCl
- M = 74.56 g/mol
- CAS [7447-40-7]
- EC number: 231-211-8

Physical data:
- Spec. density: 1.98 g/cm³
- Bulk density: ~ 1000 kg/m³
- Solub. in water (20 °C): 330 g/l
- Melting point: 773 °C
- Boiling point: 1413 °C
- pH (50 g/l H_2O, 20 °C) ~ 5,5 - 8,5

Toxicological data:
- LD 50 (oral, rat): 2600 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

P5067-1, Potassium chloride, reagent grade

HS-No: 3104 20 90 00

Assay (acidimetric)	min. 99.5 %	Barium (Ba)	max. 0.001 %
pH (5%, H_2O)	5.5 - 8.0	Calcium (Ca)	max. 0.001 %
Total N	max. 0.001 %	Heavy Metals (as Pb)	max. 0.0005 %
Bromides (Br)	max. 0.05 %	Iron (Fe)	max. 0.0003 %
Iodides (I)	max. 0.002 %	Magnesium (Mg)	max. 0.001 %
Phosphates (PO_4)	max. 0.0005 %	Sodium (Na)	max. 0.02 %
Sulfates (SO_4)	max. 0.003 %		

Code	Capacity
P5067-1-1000	1 kg

POTASSIUM CHROMATE

 T  N

Chromic acid potassium salt

- K_2CrO_4
- M = 194.21 g/mol
- CAS [7789-00-6]
- EC number: 232-140-5

Physical data:
- Spec. density: (18 °C) 2,6 g/cm³
- Bulk density: ~ 1400 kg/m³
- Solub. in water (20 °C): 637 g/l
- Melting point: 985 °C
- Boiling point: 1000 °C
- pH (50 g/l H_2O, 20 °C) 8,6 - 9,8

Toxicological data:
- LD 50 (oral, rat): 180 mg/kg
- WGK: 3

Safety:
- EC Index no.: 024-006-00-8
- R: 49-46-36/37/38-43-50/53
- S: 53-24/37-45-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 T5 II UN 3288
- IMDG: 6.1 II UN 3288
- IATA/ICAO: 6.1 II UN 3288
- PAX: 613
- CAO: 615
- LGK: 6.1B
- Disposal: 22

P5072-1, Potassium chromate, reagent grade

HS-No: 2841 50 00 00

Assay (acidimetric)	min. 99.5 %	Copper (Cu)	max. 0.001 %
Insoluble in water	max. 0.005 %	Iron (Fe)	max. 0.002 %
pH (5%, H_2O)	8.6 - 9.8	Lead (Pb)	max. 0.005 %
Chlorides (Cl)	max. 0.001 %	Sodium (Na)	max. 0.02 %
Sulfates (SO_4)	max. 0.005 %	Calcium (Ca)	max. 0.005 %
Aluminium (Al)	max. 0.003 %		

Code	Capacity
P5072-1-0500	500 g
P5072-1-1000	1 kg

POTASSIUM CYANIDE

 T+  N

Cyanogen potassium

- KCN
- M = 65.12 g/mol
- CAS [151-50-8]
- EC number: 205-792-3

Physical data:
- Spec. density: 1,55 g/cm³
- Bulk density: ~ 750 kg/m³
- Solub. in water (25 °C): 716 g/l
- Melting point: 634 °C
- Boiling point: 1625 °C
- Vapour pressure: (634,5 °C) 1,8 hPa
- pH (20 g/l H_2O, 20 °C) ~ 11 - 12

Toxicological data:
- LD 50 (oral, rat): 5 mg/kg
- MAK: 5 mg/m³
- WGK: 3

Safety:
- EC Index no.: 006-007-00-5
- R: 26/27/28-32-50/53
- S: 7-28.1-29-36/37-45-60-61
- Poison class CH (Swiss): 1

Transport/storage:
- ADR: 6.1 T5 I UN 1680
- IMDG: 6.1 I UN 1680
- IATA/ICAO: 6.1 I UN 1680
- PAX: 606
- CAO: 607
- LGK: 6.1B
- Disposal: 21

P5078-1, Potassium cyanide, reagent grade

HS-No: 2837 19 00 90

Appearance	Solid	Sulphide (S)	max. 0.001 % wt
Assay (argentometric)	min. 97.0 % wt	Iron (Fe)	max. 0.01 % wt
Phosphate (PO_4)	max. 0.01 % wt	Sodium (Na)	max. 1.0 % wt
Sulphate (SO_4)	max. 0.01 % wt	Lead (Pb)	max. 0.0005 % wt

Code	Capacity
P5078-1-1000	1 kg

P5078-3, Potassium cyanide, extra pure

HS-No: 2837 19 00 90

Assay (argentometric)	min 97 %	Thiocyanates (SCN)	max. 0.05 %
Insoluble in water	max. 0.02 %	Iron (Fe)	max. 0.01 %
Chlorides (Cl)	max. 0.05 %	Lead (Pb)	max. 0.001 %
Phosphate (PO_4)	max. 0.02 %	Sodium (Na)	max. 0.5 %
Sulphate (SO_4)	max. 0.02 %	Zinc (Zn)	max. 0.05 %
Sulphide (S)	max. 0.001 %		

Code	Capacity
P5078-3-0500	500 g

POTASSIUM DICHROMATE

 T+  N  O

P

Potassium bichromate,
Potassium pyrochromate

- $K_2Cr_2O_7$
- M = 294.19 g/mol
- CAS [7778-50-9]
- EC number: 231-906-6

Physical data:
- Spec. density: 2,69 g/cm³
- Bulk density: 1250 kg/m³
- Solub. in water (20 °C): 130 g/l
- Melting point: 398 °C
- Boiling point: > 500 °C
- pH (100 g/l H_2O, 20 °C) 3,57

Toxicological data:
- LD 50 (oral, rat): 25 mg/kg
- WGK: 3

Safety:
- EC Index no.: 024-002-00-6
- R:49-46-E21-E25-E26-37/38-41-43-50/53
- S: 53-36/37-45-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 T5 III UN 3288
- IMDG: 6.1 III UN 3288
- IATA/ICAO: 6.1 III UN 3288
- PAX: 619
- CAO: 619
- LGK: 6.1B
- Disposal: 22

P5082-1, Potassium dichromate, reagent grade

HS-No: 2841 50 00 00

Assay (iodometric)	min. 99.9 %	Copper (Cu)	max. 0.001 %
Insoluble matter	max. 0.005 %	Iron (Fe)	max. 0.001 %
Chlorides (Cl)	max. 0.001 %	Lead (Pb)	max. 0.005 %
Sulfates (SO_4)	max. 0.005 %	Sodium (Na)	max. 0.01 %
Calcium (Ca)	max. 0.002 %	Loss on drying (105 °C)	max. 0.05 %

Code	Capacity
P5082-1-0500	500 g
P5082-1-1000	1 kg

POTASSIUM DICHROMATE, VOLUMETRIC SOLUTIONS


T

P5091-0, Potassium dichromate, solution 1/120 mol/l (0.05N)

Potassium bichromate, Potassium pyrochromate

- $K_2Cr_2O_7$
- M = 294.19 g/mol
- CAS [7778-50-9]
- EC number: 231-906-6

Toxicological data:
- WGK: 3

Safety:
- EC Index no.: 024-002-00-6
- R: 49-46-52/53
- S: 53-45-61
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 6.1 T4 III UN 3287
- IMDG: 6.1 III UN 3287
- IATA/ICAO: 6.1 III UN 3287
- LGK: 6.1B
- Disposal: 22

1ml = 0.002452 g $K_2Cr_2O_7$

HS-No: 2841 50 00 00

Code	Capacity
P5091-0-1000	1.0 L

P5092-0, Potassium dichromate, solution 1/24 mol/l (0.25N)


T

Potassium bichromate, Potassium pyrochromate

- $K_2Cr_2O_7$
- M = 294.19 g/mol
- CAS [7778-50-9]
- EC number: 231-906-6

Physical data:
- Density: 1,01 g/cm³
- pH (20 °C) ~ 3,8

Toxicological data:
- LD 50 (oral, rat): 95 mg/kg (toxic component)
- WGK: 3

Safety:
- EC Index no.: 024-002-00-6
- R: 49-46-43-52/53
- S: 53-24-37-45-61
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 6.1 T4 III UN 3287
- IMDG: 6.1 III UN 3287
- IATA/ICAO: 6.1 III UN 3287
- LGK: 6.1B
- Disposal: 22

1ml = 0.012258 g $K_2Cr_2O_7$

HS-No: 2841 50 00 00

Code	Capacity
P5092-0-1000	1.0 L

P5093-0, Potassium dichromate, solution 1/6 mol/l (1N)


T

N

Potassium bichromate, Potassium pyrochromate

- $K_2Cr_2O_7$
- M = 294.19 g/mol
- CAS [7778-50-9]
- EC number: 231-906-6

Toxicological data:
- WGK: 3

Safety:
- EC Index no.: 024-002-00-6
- R: 49-46-43-51/53
- S: 53-24-37-45-60-61
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 6.1 T4 III UN 3287
- IMDG: 6.1 III UN 3287
- IATA/ICAO: 6.1 III UN 3287
- LGK: 6.1B
- Disposal: 22

1ml = 0.04903 g $K_2Cr_2O_7$

HS-No: 2841 50 00 00

Code	Capacity
P5093-0-1000	1.0 L

P5094-0, Potassium dichromate, solution 1/60 mol/l (0.1N)


T

N

Potassium bichromate, Potassium pyrochromate

- $K_2Cr_2O_7$
- M = 294.19 g/mol
- CAS [7778-50-9]
- EC number: 231-906-6

Physical data:
- Density: 1,06 g/cm³
- pH (20 °C) ~ 4,1

Toxicological data:
- WGK: 3

Safety:
- EC Index no.: 024-002-00-6
- R: 49-46-52/53
- S: 53-45-61
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 6.1 T4 III UN 3287
- IMDG: 6.1 III UN 3287
- IATA/ICAO: 6.1 III UN 3287
- PAX: 619
- CAO: 619
- LGK: 6.1B
- Disposal: 22

1ml = 0.004903 g $K_2Cr_2O_7$

HS-No: 2841 50 00 00

Code	Capacity
P5094-0-1000	1.0 L

POTASSIUM DIHYDROGEN PHOSPHATE

Potassium biphosphate, Potassium phosphate monobasic, Primary potassium phosphate ,Mono-potassium phosphate

- KH_2PO_4
- M = 136,09 g/mol
- CAS [7778-77-0]
- EC number: 231-913-4

Physical data:
- Spec. density: 2,34 g/cm³
- Bulk density: ~ 1200 kg/m³
- Solub. in water (20 °C): 222 g/l
- Melting point: ~ 253 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) ~ 4,4

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

P5104-1, Potassium dihydrogen phosphate, reagent grade

HS-No: 2835 24 00 00

Assay (acidimetric)	min. 99.5 %	Arsenic (As)	max. 0.00005 %
pH (5%, H_2O)	4.2 - 4.5	Heavy Metals (as Pb)	max. 0.0005 %
Appearance of solution 10% in water	clear and colourless	Iron (Fe)	max. 0.0005 %
Total N	max. 0.001 %	Sodium (Na)	max. 0.02 %
Chlorides (Cl)	max. 0.0005 %	$KMnO_4$ red matter (as O)	passes test
Sulfates (SO_4)	max. 0.003 %	Loss on drying (105 °C)	max. 0.1 %

Code	Capacity
P5104-1-0500	500 g
P5104-1-1000	1 kg

POTASSIUM DISULFITE


Xi

Potassium metabisulfite, Potassium pyrosulfite

- $K_2S_2O_5$
- M = 222.33 g/mol
- CAS [16731-55-8]
- EC number: 240-795-3

Physical data:
- Bulk density: ~ 1000 - 1200 kg/m³
- Solub. in water (20 °C): 450 g/l
- Melting point: 190 °C
- pH (400 g/l H_2O, 20 °C) 3,5 - 5,0

Toxicological data:
- LD 50 (oral, rat): 2300 mg/kg
- WGK: 1

Safety:
- R: 31-37-41
- S: 26-39
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 14

P5110-3, Potassium disulfite, extra pure

HS-No: 2832 20 00 00

Assay (iodometric)	min. 95 %	Heavy metals (as Pb)	max. 0.001 %
Assay (iodometric, SO_2)	54.8 - 57.6 %	Lead (Pb)	max. 0.0005 %
Appearance of solution	passes test	Mercury (Hg)	max. 0.0001 %
Chlorides (Cl)	max. 0.01 %	Selenium (Se)	max. 0.0005 %
Thiosulfates (S_2O_3)	passes test	Zinc (Zn)	max. 0.0025 %
Arsenic (As)	max. 0.0002 %	Organic volatile matter	passes test
Copper (Cu)	max. 0.0025 %	Residual solvent (according to ICH)	excluded by production process
Iron (Fe)	max. 0.001 %		

Code	Capacity
P5110-3-0500	500 g

POTASSIUM FLUORIDE


T

Fluorine potassium

- KF
- M = 58.10 g/mol
- CAS [7789-23-3]
- EC number: 232-151-5

Physical data:
- Spec. density: 2,49 g/cm³
- Bulk density: ~ 400 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: ~ 855 °C
- Boiling point: 1500 °C
- Vapour pressure: (885 °C) 1,3 hPa
- pH (20 °C) > 7

Toxicological data:
- LD 50 (oral, rat): 245 mg/kg
- MAK: 2,5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 009-005-00-2
- R: 23/24/25
- S: 26-36/37-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 T5 III UN 1812
- IMDG: 6.1 III UN 1812
- IATA/ICAO: 6.1 III UN 1812
- PAX: 619
- CAO: 619
- LGK: 6.1B
- Disposal: 23

P5114-1, Potassium fluoride, reagent grade

HS-No: 2826 19 00 00

Assay	min. 99 %	Arsenic (As)	max. 0.001 %
Potassium hexafluorosilicate (K_2SiF_6)	max. 0.1 %	Lead (Pb)	max. 0.001 %
Chloride (Cl)	max. 0.005 %	Iron (Fe)	max. 0.002 %
Sulfates (SO_4)	max. 0.05 %	Loss on ignition (500°C. 15 min)	max. 0.3 %

Code	Capacity
P5114-1-0500	500 g
P5114-1-1000	1 kg

P5114-3, Potassium fluoride, extra pure

HS-No: 2826 19 00 00

Assay	min. 99 %	Sulfates (SO_4)	max. 0.05 %
Free Acid (as HF)	max. 0.1 %	Arsenic (As)	max. 0.001 %
Free Alkali (as KOH)	max. 0.1 %	Heavy Metals (as Pb)	max. 0.003 %
Insoluble in Water	max. 0.1 %	Iron (Fe)	max. 0.002 %
Chlorides (Cl)	max. 0.005 %	Lead (Pb)	max. 0.001 %
Hexafluorosilicate (SiF_6)	max. 0.1 %	Calcination Residue (500°C. 15 min)...	max. 0.3 %

Code	Capacity
P5114-3-0500	500 g

POTASSIUM HEXACYANOFERRATE (II) TRIHYDRATE

Potassium ferrocyanide, Yellow prussiate of potash, Ferrocyanpotassium, Potassium cyanoferrate(II), Potassium ferric cyanide

$K_4[Fe(CN)_6]\cdot 3H_2O$

- $C_6FeK_4N_6\cdot 3H_2O$
- M = 422.39 g/mol
- CAS [14459-95-1]
- EC number: 237-722-2

Physical data
- Form: Solid
- Spec. density: 1.85 g/cm³ (anhydrous substance)
- Bulk. density: ~ 950-1050 kg/m³
- Solub. in water (20 °C): 289 g/l
- Melting point: ~ 70 °C (release of crystalline water)
- pH (100 g/l H_2O, 20 °C) ~ 9.5 (anhydrous substance)

Toxicological data:
- LD 50 (oral,rat): 3613 mg/kg (anhydrous substance)
- WGK: 2

Safety:
- R: 52/53
- S: 50.1-61
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 28

P5117-1, Potassium hexacyanoferrate (II) trihydrate, reagent grade

HS-No: 2837 20 00 00

Assay (permanganometric)	99 – 102 %	Cadmium (Cd)	max. 0.0005 %
Insoluble in water	max. 0.005 %	Copper (Cu)	max. 0.002 %
Carbonates (CO_3)	max. 0.0015 %	Lead (Pb)	max. 0.002 %
Chlorides (Cl)	max. 0.01 %	Sodium (Na)	max. 0.01 %
Sulfates (SO_4)	max. 0.005 %		

Code	Capacity
P5117-1-0500	500 g
P5117-1-1000	1 kg

POTASSIUM HEXACYANOFERRATE (III)

Potassium ferricyanotassium, Potassium cyanoferrate(lll) Potassium ferric(lll) cyanide

$K_3[Fe(CN)_6]$

- $C_6FeK_3N_6$
- M = 329.26 g/mol
- CAS [13746-66-2]
- EC number: 237-323-3

Physical data:
- Form: Solid
- Spec. density: 1.85 g/cm³
- Bulk density: ~ 900 - 1000 kg/m³
- Solub. in water (20 °C): 464 g/l
- pH (50 g/l H_2O, 20 °C) ~ 6

Toxicological data:
- WGK: 2

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 28

P5125-1, Potassium hexacyanoferrate (III), reagent grade

HS-No: 2837 20 00 00

Assay (Iodometric)	min. 99.0 %	Cobalt (Co)	max. 0.005 %
Insoluble in water	max. 0.005 %	Copper (Cu)	max. 0.005 %
Chloride (Cl)	max. 0.01 %	Lead (Pb)	max. 0.002 %
Hexacyanoferrate (II) $[Fe(CN_6)]$	max. 0.02 %	Nickel (Ni)	max. 0.001 %
Sulfates (SO_4)	max. 0.005 %	Sodium (Na)	max. 0.02 %
Cadmium (Cd)	max. 0.0005 %	Zinc (Zn)	max. 0.0005 %
Calcium (Ca)	max. 0.0005 %		

Code	Capacity
P5125-1-0500	500 g
P5125-1-1000	1 kg

POTASSIUM HYDROGEN CARBONATE

Potassium bicarbonate

- $KHCO_3$
- M = 100.12 g/mol
- CAS [298-14-6]
- EC number: 206-059-0

Physical data:
- Spec. density: 2,17 g/cm³
- Bulk density: ~ 900 - 1100 kg/m³
- Solub. in water (20 °C): 224 g/l
- Melting point: 292 °C
- pH (50 g/l H_2O, 20 °C) ~ 8,0 - 8,6

Toxicological data:
- LD 50 (oral, rat): > 2000 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

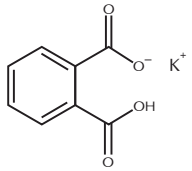
P5135-1, Potassium hydrogen carbonate, reagent grade

HS-No: 2836 40 00 00

Assay (acidimetric)	min. 99.5 %	Aluminium (Al)	max. 0.0005 %
Total N	max. 0.001 %	Calcium (Ca)	max. 0.0005 %
Chlorides (Cl)	max. 0.001 %	Heavy Metals (as Pb)	max. 0.0005 %
Phosphates, silicates (as SiO_2)	max. 0.001 %	Iron (Fe)	max. 0.0005 %
Sulfates (SO_4)	max. 0.001 %	Sodium (Na)	max. 0.02 %

Code	Capacity
P5135-1-0500	500 g
P5135-1-1000	1 kg

POTASSIUM HYDROGEN PHTHALATE



Potassium biphthalate, Phthalic acid monopotassium salt

- $C_8H_5KO_4$
- M = 204.22 g/mol
- CAS [877-24-7]
- EC number: 212-889-4

Physical data:
- Spec. density: 1,636 g/cm³
- Bulk density: ~ 900 kg/m³
- Solub. in water (20 °C): 80 g/l
- Melting point: 295 - 300 °C
- pH (50 g/l H_2O, 20 °C) ~ 4,0

Toxicological data:
- LD 50 (oral, rat): > 3200 mg/kg
- WGK: 1

Transport/storage:
- LGK: 10-13
- Disposal: 3

P5141-1, Potassium hydrogen phthalate, reagent grade

HS-No: 2917 39 80 80

Assay (acidimetric)	min. 99.9 %	Copper (Cu)	max. 0.0005 %
Insoluble in water	max. 0.005 %	Heavy Metals (as Pb)	max. 0.0005 %
Phtahalic acid	max. 0.005 %	Iron (Fe)	max. 0.0005 %
Chlorides (Cl)	max. 0.001 %	Nickel (Ni)	max. 0.0005 %
Sulfates (SO_4)	max. 0.005 %	Sodium (Na)	max. 0.005 %
Cadmium (Cd)	max. 0.0005 %	Zinc (Zn)	max. 0.0005 %
Cobalt (Co)	max. 0.0005 %	Loss on drying (105 °C)	max. 0.2 %

Code	Capacity
P5141-1-0500	500 g
P5141-1-1000	1 kg

POTASSIUM HYDROGEN SULFATE

C

Potassium bisulfate

- $KHSO_4$
- M = 136.17 g/mol
- CAS [7646-93-7]
- EC number: 231-594-1

Physical data:
- Spec. density: 2,32 g/cm³
- Bulk density: ~ 1140 kg/m³
- Solub. in water (20 °C): 490 g/l (exothermic process)
- Melting point: 210 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) ~ 1

Toxicological data:
- LD 50 (oral, rat): 2340 mg/kg
- WGK: 1

Safety:
- EC Index no.: 016-056-00-4
- R: 34-37
- S: 26-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C2 II UN 2509
- IMDG: 8 II UN 2509
- IATA/ICAO: 8 II UN 2509
- PAX: 815
- CAO: 817
- LGK: 8
- Disposal: 14

P5144-3, Potassium hydrogen sulfate, extra pure

HS-No: 2833 29 90 00

Assay (acidimetric)	min. 99 %	Calcium (Ca)	max. 0.01 %
Chlorides (Cl)	max. 0.003 %	Copper (Cu)	max. 0.005 %
Nitrates (NO_3)	max. 0.005 %	Heavy Metals (as Pb)	max. 0.004 %
Phosphates (PO_4)	max. 0.005 %	Iron (Fe)	max. 0.005 %
Aluminium (Al)	max. 0.002 %	Magnesium (Mg)	max. 0.01 %
Arsenic (As)	max. 0.0005 %	Nickel (Ni)	max. 0.01 %

Code	Capacity
P5144-3-0500	500 g

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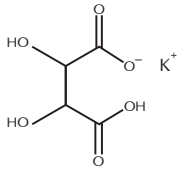
POTASSIUM HYDROGEN TARTRATE



Potassium bitartrate, Tartaric acid monopotassium salt

- $C_4H_5KO_6$
- M = 188.14 g/mol
- CAS [868-14-4]
- EC number: 212-769-1

Physical data:
- Bulk density: ~ 720 kg/m³
- Solub. in water (20 °C): 5,7 g/l
- Melting point: ~ 250 °C (decomposes)
- pH (saturated solution H_2O, 20 °C) 3,4 - 3,7

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 3

P5146-3, Potassium hydrogen tartrate, extra pure

HS-No: 2918 13 00 90

Assay (acidimetric)	min. 99.5 %	Barium (Ba)	max. 0.15 %
pH (0.5%, H_2O)	3.0 - 3.8	Calcium (Ca)	max. 0.01 %
Free acid (as Tartaric acid)	max. 0.2 %	Copper (Cu)	max. 0.0025 %
Specific rotation ([ ]20°/d)	8.0 - 9.2 °	Heavy Metals (as Pb)	max. 0.001 %
Chlorides (Cl)	max. 0.02 %	Iron (Fe)	max. 0.002 %
Oxalates (C_2O_4)	max. 0.05 %	Lead (Pb)	max. 0.001 %
Sulfates (SO_4)	max. 0.008 %	Nickel (Ni)	max. 0.002 %
Ammonium (NH_4)	max. 0.005 %	Zinc (Zn)	max. 0.0025 %
Arsenic (As)	max. 0.0001 %	Loss on drying (105°C)	max. 0.5 %

Code	Capacity
P5146-3-1000	1 kg

POTASSIUM HYDROXIDE


C

Caustic potash, Potassium hydrate, Potassium oxide hydrate

- KOH
- M = 56.11 g/mol
- CAS [1310-58-3]
- EC number: 215-181-3

Physical data:
- Spec. density: 2,04 g/cm³
- Solub. in water (20 °C): soluble
- Melting point: 360 °C
- Boiling point: 1320 °C
- pH (56 g/l H_2O, 20 °C) ~ 14

Toxicological data:
- LD 50 (oral, rat): 273 mg/kg
- WGK: 1

Safety:
- EC Index no.: 019-002-00-8
- R: 22-35
- S: 26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C6 II UN 1813
- IMDG: 8 II UN 1813
- IATA/ICAO: 8 II UN 1813
- PAX: 814
- CAO: 816
- LGK: 8 B
- Disposal: 13

P5158-1, Potassium hydroxide pellets, reagent grade

HS-No: 2815 20 10 00

Assay (acidimetric)	min. 85.0 %	Calcium (Ca)	max. 5.0 ppm
Carbonate (as potassium carbonate)	max. 1.0 %	Cobalt (Co)	max. 1.0 ppm
Chloride (Cl)	max. 10 ppm	Chromium (Cr)	max. 1.0 ppm
Phosphate (PO_4)	max. 5.0 ppm	Copper (Cu)	max. 1.0 ppm
Sulphate (SO_4)	max. 5.0 ppm	Iron (Fe)	max. 5.0 ppm
Total nitrogen (N)	max. 5.0 ppm	Manganese (Mn)	max. 0.5 ppm
Heavy metals (as Pb)	max. 5.0 ppm	Nickel (Ni)	max. 1.0 ppm
Aluminium (Al)	max. 10 ppm	Zinc (Zn)	max. 1.0 ppm

Code	Capacity
P5158-1-0500	500 g
P5158-1-1000	1 kg

P5159-1, Potassium hydroxide solution 10%, reagent grade

HS-No: 2815 20 10 00

Assay (acidimetric)	min. 10.0 %	Sulphate (SO_4)	max. 0.003 %
Carbonate (as Na_2CO_3)	max. 1 %	Total (N)	max. 0.005 %
Chloride (Cl)	max. 0.002 %	Aluminium (Al)	max. 0.001 %
Phosphate (PO_4)	max. 0.002 %	Heavy metals (as Pb)	max. 0.001 %
Silicates (SiO_2)	max. 0.005 %	Iron (Fe)	max. 0.001 %

Code	Capacity
P5159-1-1000	1 Lit

P

POTASSIUM HYDROXIDE, VOLUMETRIC SOLUTIONS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P5161-0, Potassium hydroxide, solution 0.1 mol/l (0.1N)

Caustic potash, Potassium hydrate, Potassium oxide hydrate

- KOH
- M = 56.11 g/mol
- CAS [1310-58-3]
- EC number: 215-181-3

Physical data:
- Density: 1,01 g/cm³
- Boiling point: ~ 100 °C
- pH (20 °C) ~ 13

Toxicological data:
- LD 50 (oral, rat): 273 mg/kg (pure substance)
- WGK: 0

Safety:
- EC Index no.: 019-002-00-8
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 8 C5 II UN 1814
- IMDG: 8 II UN 1814
- IATA/ICAO: 8 II UN 1814
- PAX: 809
- CAO: 813
- LGK: 8 B

1ml = 0.005611 g KOH

HS-No: 2815 20 90 00

Code	Capacity
P5161-0-1000	1.0 L

P5168-0, Potassium hydroxide, solution 0.5 mol/l (0.5N)


C

Caustic potash, Potassium hydrate, Potassium oxide hydrate

- KOH
- M = 56.11 g/mol
- CAS [1310-58-3]
- EC number: 215-181-3

Physical data:
- Density: 1,02 g/cm³
- pH (20 °C) ~ 13,5

Toxicological data:
- LD 50 (oral, rat): 273 mg/kg (pure substance)
- WGK: 0

Safety:
- EC Index no.: 019-002-00-8
- R: 34
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C5 II UN 1814
- IMDG: 8 II UN 1814
- IATA/ICAO: 8 II UN 1814
- PAX: 809
- CAO: 813
- LGK: 8 B

1ml = 0.02806 g KOH

HS-No: 2815 20 90 00

Code	Capacity
P5168-0-1000	1.0 L

P5172-0, Potassium hydroxide, solution 1 mol/l (1N)


C

Caustic potash, Potassium hydrate, Potassium oxide hydrate

- KOH
- M = 56.11 g/mol
- CAS [1310-58-3]
- EC number: 215-181-3

Physical data:
- Density: 1,05 g/cm³
- pH (20 °C) ~ 14

Toxicological data:
- LD 50 (oral, rat): 273 mg/kg (pure substance)
- WGK: 0

Safety:
- EC Index no.: 019-002-00-8
- R: 35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C5 II UN 1814
- IMDG: 8 II UN 1814
- IATA/ICAO: 8 II UN 1814
- PAX: 809
- CAO: 813
- LGK: 8 B
- Disposal: 13

1ml = 0.05611 g KOH

HS-No: 2815 20 90 00

Code	Capacity
P5172-0-1000	1.0 L

P5175-0, Potassium hydroxide, solution 2 mol/l (2N)


C

Caustic potash, Potassium hydrate, Potassium oxide hydrate

- KOH
- M = 56.11 g/mol
- CAS [1310-58-3]
- EC number: 215-181-3

Physical data:
- Density: ~ 1,09 g/cm³

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 019-002-00-8
- R: 35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C5 II UN 1814
- IMDG: 8 II UN 1814
- IATA/ICAO: 8 II UN 1814
- PAX: 809
- CAO: 813
- LGK: 8 B
- Disposal: 13

1ml = 0.11222 g KOH

HS-No: 2815 20 90 00

Code	Capacity
P5175-0-1000	1.0 L

POTASSIUM IODATE


O

- KIO_3
- M = 214.00 g/mol
- CAS [7758-05-6]
- EC number: 231-831-9

Physical data:
- Spec. density: 3,98 g/cm³
- Bulk density: ~ 2000 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 560 °C
- pH (50 g/l H_2O, 20 °C) ~ 6

Toxicological data:
- WGK: 1

Safety:
- R: 8
- S: 17
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 O2 II UN 1479
- IMDG: 5.1 II UN 1479
- IATA/ICAO: 5.1 II UN 1479
- PAX: 508
- CAO: 511
- LGK: 5.1 B
- Disposal: 22

P5180-3, Potassium iodate, extra pure

HS-No: 2829 90 80 00

Assay (iodometric)	min. 99 %	Arsenic (As)	max. 0.0003 %
pH (5%, H_2O)	5 - 8	Copper (Cu)	max. 0.001 %
Acidity/alkalinity	passes test	Iron (Fe)	max. 0.005 %
Chlorides, chlorates, bromides (as Cl)	max. 0.02 %	Lead (Pb)	max. 0.001 %
Iodides (I)	max. 0.002 %	Zinc (Zn)	max. 0.001 %
Sulfates (SO_4)	max. 0.05 %	Loss on drying (105 °C, 3 h)	max. 0.5 %

Code	Capacity
P5180-3-0500	500 g

POTASSIUM IODIDE

P

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- KI
- M = 166. 01 g/mol
- CAS [7681-11-0]
- EC number: 231-659-4

Physical data:
- Spec. density: 3,13 g/cm³
- Bulk density: ~ 1500 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 686 °C
- Boiling point: 1330 °C
- Vapour pressure: (745 °C) 1,3 hPa
- pH (50 g/l H_2O, 20 °C) ~ 6,9

Toxicological data:
- LD 50 (oral, rat): 2779 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 14

P5182-1, Potassium iodide, reagent grade

HS-No: 2827 60 00 90

Assay (argentometric)	min. 99.5 %	Barium (Ba)	max. 0.002 %
pH (5% solution)	7 - 9	Calcium (Ca)	max. 0.0010 %
Alkalinity (as KOH)	max. 220 ppm	Copper (Cu)	max. 0.0002 %
Chloride and Bromide (as Cl)	max. 0.01 %	Iron (Fe)	max. 5 ppm
Iodates (IO_3)	max. 2 ppm	Magnesium (Mg)	max. 0.001 %
Sulphates (SO_4)	max. 50 ppm	Sodium (Na)	max. 0.030 %
Nitrogen compounds (as N)	max. 10 ppm	Lead (Pb)	max. 0.0002 %
Heavy metals (as Pb)	max. 10 ppm	Insoluble matter	max. 50 ppm
Arsenic (As)	max. 1 ppm	Loss on drying	max. 0.2 %

Code	Capacity
P5182-1-0500	500 g
P5182-1-1000	1 kg

POTASSIUM NITRATE

O

Nitric acid potassium salt, Saltpeter

- KNO_3
- M = 101.11 g/mol
- CAS [7757-79-1]
- EC number: 231-818-8

Physical data:
- Spec. density: 2,11 g/cm³
- Bulk density: ~ 800 kg/m³
- Solub. in water (20 °C): 320 g/l
- Melting point: 334 °C
- pH (50 g/l H_2O, 20 °C) ~ 5,5 - 8,0

Toxicological data:
- LD 50 (oral, rat): 3750 mg/kg
- WGK: 1

Safety:
- R: 8
- S: 16-41
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 5.1 O2 III UN 1486
- IMDG: 5.1 III UN 1486
- IATA/ICAO: 5.1 III UN 1486
- PAX: 516
- CAO: 518
- LGK: 5.1 B
- Disposal: 14

P5196-1, Potassium nitrate, reagent grade

HS-No: 2834 21 00 00

Assay (acidimetric)	min. 99 %	Calcium (Ca)	max. 0.001 %
pH (5%, H_2O)	6 - 8	Copper (Cu)	max. 0.0001 %
Chlorides (Cl)	max. 0.001 %	Heavy Metals (as Pb)	max. 0.0005 %
Iodates (IO_3)	max. 0.0005 %	Iron (Fe)	max. 0.0003 %
Nitrites (NO_2)	max. 0.001 %	Lead (Pb)	max. 0.0001 %
Phosphates (PO_4)	max. 0.0005 %	Sodium (Na)	max. 0.02 %
Sulfates (SO_4)	max. 0.002 %	Zinc (Zn)	max. 0.0005 %
Ammonium (NH_4)	max. 0.001 %		

Code	Capacity
P5196-1-1000	1 kg

P5196-3, Potassium nitrate, extra pure

HS-No: 2834 21 00 00

Assay (acidimetric)	min. 99 %	Calcium (Ca)	max. 0.005 %
Insoluble in Water	max. 0.025 %	Copper (Cu)	max. 0.001 %
Acidity/Alkalinity	passes test	Heavy Metals (as Pb)	max. 0.001 %
pH (5%, H_2O)	4.5 - 8.5	Iron (Fe)	max. 0.001 %
Chlorides (Cl)	max. 0.001 %	Lead (Pb)	max. 0.001 %
Nitrites (NO_2)	max. 0.001 %	Magnesium (Mg)	max. 0.001 %
Phosphates (PO_4)	max. 0.003 %	Sodium (Na)	max. 0.1 %
Sulfates (SO_4)	max. 0.01 %	Zinc (Zn)	max. 0.001 %
Ammonium (NH_4)	max. 0.004 %	Loss on Drying (105°C, 4h)	max. 0.5 %
Arsenic (As)	max. 0.0001 %		

Code	Capacity
P5196-3-1000	1 kg

POTASSIUM NITRITE

Nitrous acid potassium salt

KNO_2

- KNO_2
- M = 85.11 g/mol
- CAS [7758-09-0]
- EC number: 231-832-4

Physical data:
- Form: Solid
- Spec. density: 1.92 g/cm³
- Bulk density: ~ 700 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 440 °C
- pH (50 g/l H_2O, 20 °C) ~ 7 - 10

Toxicological data:
- WGK: 2

Safety:
- EC Index no.: 007-011-00-X
- R: 8-25-50
- S: 45-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 5.1 O2 II UN 1488
- IMDG: 5.1 II UN 1488
- IATA/ICAO: 5.1 II UN 1488
- PAX: 508
- CAO: 511
- LGK: 5.1 B
- Disposal: 14

P5204-1, Potassium nitrite, reagent grade

HS-No: 2834 10 00 00

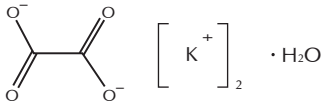
Assay (permanganometric)	min 98 %	Copper (Cu)	max. 0.0005 %
Insoluble in water	max. 0.01 %	Heavy Metals (as Pb)	max. 0.0005 %
pH (5%, H_2O)	7.0 – 10.0	Iron (Fe)	max. 0.0005 %
Chlorides (Cl)	max. 0.005 %	Lead (Pb)	max. 0.0005 %
Sulfates (SO_4)	max. 0.005 %	Magnesium (Mg)	max. 0.002 %
Cadmium (Cd)	max. 0.0005 %	Sodium (Na)	max. 0.25 %
Calcium (Ca)	max. 0.003 %	Zinc (Zn)	max. 0.0005 %

Code	Capacity
P5204-1-0500	500 g

P

POTASSIUM OXALATE MONOHYDRATE

Xn



Oxalic acid dipotassium salt monohydrate

- $C_2K_2O_4 \cdot H_2O$
- M = 184.24 g/mol
- CAS [6487-48-5]
- EC number: 209-506-8

Physical data:
- Spec. density: 2,13 g/cm³
- Bulk density: ~ 700 - 1100 kg/m³
- Solub. in water (20 °C): 360 g/l
- pH (50 g/l H_2O, 20 °C) ~ 7,0 - 8,5

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 607-007-00-3
- R: 21/22
- S: 24/25-37-46
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 6.1 T3 III UN 3282
- IMDG: 6.1 III UN 3282
- IATA/ICAO: 6.1 III UN 3282
- PAX: 619
- CAO: 619
- LGK: 10-13
- Disposal: 3

P5212-3, Potassium oxalate monohydrate, extra pure

HS-No: 2917 11 00 90

Assay (permanganometric)	min. 99 %	Copper (Cu)	max. 0.003 %
Insoluble in Water	max. 0.025 %	Heavy Metals (as Pb)	max. 0.002 %
pH (5%, H_2O)	7 - 8.5	Iron (Fe)	max. 0.001 %
Chlorides (Cl)	max. 0.002 %	Lead (Pb)	max. 0.002 %
Sulfates (SO_4)	max. 0.02 %	Nickel (Ni)	max. 0.003 %
Ammonium (NH_4)	max. 0.005 %		

Code	Capacity
P5212-3-0500	500 g

POTASSIUM PERMANGANATE

O Xn N

Permanganic acid potassium salt

- $KMnO_4$
- M = 158.04 g/mol
- CAS [7722-64-7]
- EC number: 231-760-3

Physical data:
- Spec. density: 2,70 g/cm³
- Bulk density: ~ 1300 - 1600 kg/m³
- Solub. in water (20 °C): 64 g/l
- Melting point: > 240 °C (decomposes)
- Vapour pressure: (20 °C) < 0,01 hPa
- pH (20 g/l H_2O, 20 °C) ~ 7 - 9

Toxicological data:
- LD 50 (oral, rat): 1090 mg/kg
- WGK: 2

Safety:
- EC Index no.: 025-002-00-9
- R: 8-22-50/53
- S: 46-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 O2 II UN 1490
- IMDG: 5.1 II UN 1490
- IATA/ICAO: 5.1 II UN 1490
- PAX: 508
- CAO: 511
- LGK: 5.1 B
- Disposal: 22

P5219-1, Potassium permanganate, reagent grade

HS-No: 2841 61 00 00

Assay (permanganometric)	min. 99 %	Copper (Cu)	max. 0.0005 %
Insoluble in water	max. 0.1 %	Heavy Metal (as Pb)	max. 0.003 %
Chlorides (Cl)	max. 0.005 %	Iron (Fe)	max. 0.002 %
Chlorides, Chlorates (as Cl)	max. 0.005 %	Lead (Pb)	max. 0.002 %
Sulfates (SO_4)	max. 0.005 %	Loss on drying	max. 0.2 %
Total (N)	max. 0.005 %		

Code	Capacity
P5219-1-1000	1 kg

P5219-3, Potassium permanganate, extra pure

HS-No: 2841 61 00 00

Assay (iodometric)	min. 99 %	Sulfates (SO_4)	max. 0.03 %
Appearance of solution	passes test	Loss on drying	max. 0.02 %
Insoluble in water	max. 0.2 %	Residual solvents (Ph Eur/ICH)	Excluded by production process
Chlorides (Cl)	max. 0.01 %		

Code	Capacity
P5219-3-0500	500 g

POTASSIUM PERMANGANATE, VOLUMETRIC SOLUTIONS

N

P5226-0, Potassium permanganate, solution 0.002 mol/l (0.01N)

Permanganate acid potassium salt

- $KMnO_4$
- M = 158.04 g/mol
- CAS [7722-64-7]
- EC number: 231-760-3

Physical data:
- Density: 1,00 g/cm³

Safety:
- EC Index no.: 025-002-00-9
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 22

1ml = 0.000316 g $KMnO_4$

HS-No: 2841 61 00 00

Code	Capacity
P5226-0-1000	1.0 L

P5227-0, Potassium permanganate, solution 0.02 mol/l (0.1N)

Permanganate acid potassium salt

- $KMnO_4$
- M = 158.04 g/mol
- CAS [7722-64-7]
- EC number: 231-760-3

Physical data:
- Density: 1,01 g/cm³
- pH (20 °C) ~ 8

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 025-002-00-9
- R: 52/53
- S:61
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 22

1ml = 0.00316 g $KMnO_4$

HS-No: 2841 61 00 00

Code	Capacity
P5227-0-1000	1.0 L

P5228-0, Potassium permanganate, solution 0.2 mol/l (1N)

Permanganate acid potassium salt

- $KMnO_4$
- M = 158.04 g/mol
- CAS [7722-64-7]
- EC number: 231-760-3

Physical data:
- Density: 1,01 g/cm³

Safety:
- EC Index no.: 025-002-00-9
- R: 51/53
- S: 61
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 22

1ml = 0.0316 g $KMnO_4$

HS-No: 2841 61 00 00

Code	Capacity
P5228-0-1000	1.0 L

P

POTASSIUM PEROXODISULFATE

O Xn

Potassium persulfate, Peroxydisulfuric acid dipotassium salt

- $K_2S_2O_8$
- M = 270.33 g/mol
- CAS [7727-21-1]
- EC number: 231-781-8

Physical data:
- Spec. density: 2,48 g/cm³
- Bulk density: ~ 780 kg/m³
- Solub. in water (20 °C): 47 g/l
- Melting point: 100 °C (decomposese)
- pH (50 g/l H_2O, 20 °C) ~ 4 - 5

Toxicological data:
- LD 50 (oral, rat): 802 mg/kg
- WGK: 1

Safety:
- R: 8-22-36/37/38-42/43
- S: 22-24-26-37-45
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 5.1 O2 III UN 1492
- IMDG: 5.1 III UN 1492
- IATA/ICAO: 5.1 III UN 1492
- PAX: 561
- CAO: 518
- LGK: 5.1 B
- Disposal: 22

P5230-3, Potassium peroxodisulfate, extra pure

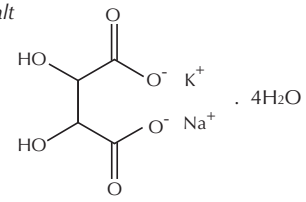
HS-No: 2833 40 00 10

Assay (iodometric)	min. 98 %	Iron (Fe)	max. 0.002 %
Insoluble in water	max. 0.02 %	Lead (Pb)	max. 0.005 %
Chlorides (Cl)	max. 0.005 %	Nickel (Ni)	max. 0.005 %
Copper (Cu)	max. 0.005 %	Manganese (Mn)	max. 0.0005 %
Heavy metals (as Pb)	max. 0.005 %		

Code	Capacity
P5230-3-0500	500 g

POTASSIUM SODIUM TARTRATE TETRAHYDRATE

Sodium potassium tartrate, Tartaric acid potassium sodium salt



- $C_4H_4KNaO_6 \cdot 4H_2O$
- M = 282.23 g/mol
- CAS [6381-59-5]
- EC number: 205-698-2

Physical data:
- Bulk density: ~ 1000 kg/m³
- Solub. in water (20 °C): 630 g/l
- Melting point: 70 - 80 °C
- pH (50 g/l H_2O, 20 °C) ~ 6,5 - 8,5

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 3

P5234-1, Potassium sodium tartrate tetrahydrate, reagent grade

HS-No: 2918 13 00 90

Assay	min. 99 %	Ammonium (NH_4)	max. 0.002 %
Insoluble in water	max. 0.005 %	Calcium (Ca)	max. 0.004 %
pH (0.5%, H_2O)	7 - 8.5	Copper (Cu)	max. 0.0005 %
Chlorides (Cl)	max. 0.0005 %	Iron (Fe)	max. 0.0005 %
Phosphates (PO_4)	max. 0.001 %	Lead (Pb)	max. 0.0002 %
Sulfates (SO_4)	max. 0.005 %	Nickel (Ni)	max. 0.0005 %
Total N	max. 0.001 %	Zinc (Zn)	max. 0.0005 %

Code	Capacity
P5234-1-0500	500 g
P5234-1-1000	1 kg

POTASSIUM SULFATE

Sulfuric acid potassium salt

- K_2SO_4
- M = 174.27 g/mol
- CAS [7778-80-5]
- EC number: 231-915-5

Physical data:
- Spec. density: 2.66 g/cm³
- Bulk density: ~ 1050 kg/m³
- Solub. in water (20 °C): 110 g/l
- Melting point: 1069 °C
- Boiling point: 1689 °C
- pH (50 g/l H_2O, 20 °C) 5,5, - 7,5

Toxicological data:
- LD 50 (oral, rat): 6600 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

P5249-1, Potassium sulfate, reagent grade

HS-No: 3104 30 00 00

Assay (acidimetric)	min. 99 %	Calcium (Ca)	max. 0.005 %
Insoluble In Water	max. 0.01 %	Copper (Cu)	max. 0.0005 %
pH (5%, H_2O)	5.5 - 7.5	Iron (Fe)	max. 0.0005 %
Chlorides (Cl)	max. 0.0005 %	Lead (Pb)	max. 0.0005 %
Phosphate (PO_4)	max. 0.001 %	Magnesium (Mg)	max. 0.002 %
Total N	max. 0.0005 %	Sodium (Na)	max. 0.005 %
Arsenic (As)	max. 0.0001 %	Zinc (Zn)	max. 0.0005 %
Cadmium (Cd)	max. 0.0005 %		

Code	Capacity
P5249-1-0500	500 g
P5249-1-1000	1 kg

POTASSIUM THIOCYANATE

Xn

Potassium sulfocyanate, Potassium rhodanide, Potassium sulfocyanide

- KSCN
- M = 97.18 g/mol
- CAS [333-20-0]
- EC number: 206-370-1

Physical data:
- Spec. density: 1,89 g/cm³
- Bulk density: ~ 750 - 1000 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 175 °C
- Boiling point: 500 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) ~ 5 - 7

Toxicological data:
- LD 50 (oral, rat): 854 mg/kg
- WGK: 1

Safety:
- EC Index no.: 615-004-00-3
- R: 20/21/22-32
- S: 13-36/37-46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 14

P5258-1, Potassium thiocyanate, reagent grade

HS-No: 2838 00 00 00

Assay (argentometric)	min. 99 %	Sulfides (S)	max. 0.001 %
Insoluble in ethanol	max. 0.01 %	Ammonium (NH_4)	max. 0.001 %
Insoluble in Water	max. 0.003 %	Copper (Cu)	max. 0.0002 %
Matter consuming I (as I)	max. 0.013 %	Iron (Fe)	max. 0.0001 %
pH (5%, H_2O)	5.3 - 8.5	Lead (Pb)	max. 0.0002 %
Chlorides (Cl)	max. 0.005 %	Sodium (Na)	max. 0.005 %
Sulfates (SO_4)	max. 0.001 %		

Code	Capacity
P5258-1-0500	500 g

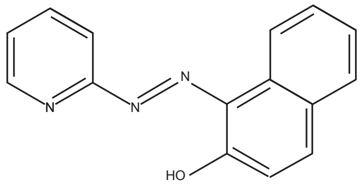
P5258-3, Potassium thiocyanate, extra pure

HS-No: 2838 00 00 00

Assay (argentometric)	min. 98 %	Ammonium (NH_4)	max. 0.001 %
Insoluble in Water	max. 0.002 %	Copper (Cu)	max. 0.002 %
pH (5%, H_2O)	5.0 – 8.7	Iron (Fe)	max. 0.002 %
Chlorides (Cl)	max. 0.001 %	Lead (Pb)	max. 0.002 %
Sulfates (SO_4)	max. 0.005 %	Nickel (Ni)	max. 0.002 %

Code	Capacity
P5258-3-0500	500 g
P5258-3-1000	1 kg

1-(2-PYRIDYLAZO)-2-NAPHTHOL PAN, INDICATOR



- $C_{15}H_{11}N_3O$
- M = 249.27 g/mol
- CAS [85-85-8]
- EC number: 201-637-9

Physical data:
- Solub. in water (20 ºC) insoluble
- Melting Point 137 - 140 ºC
- Bulk density - 190 kg/m³

Toxicological data:
- WGK: 3

Transport/storage:
- LCK 10-13
- Disposal: 3
- Use as metal indicator: 0.01% - 0.1% in ethanol (96%)

P9000-1, 1-(2-Pyridylazo)-2-naphthol PAN, indicator, reagent grade

HS-No: 2933 39 95 00

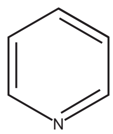
Spectral effective content	min. 90 %	Solubility test in ethanol	passes test
Sensitivity test to copper	passes test	Residue after ignition (as sulfate)	max. 0.1 %
Melting point	138 ~ 142 ºC		

Code	Capacity
P9000-1-0005	5 g

PYRIDINE


F

Xn



- C_5H_5N
- M = 79.10 g/mol
- CAS [110-86-1]
- EC number: 237-323-3

Physical data:
- Form: Liquid
- Density: 0.98 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -42 °C
- Boiling point: 115 °C
- Flash point: 17 °C
- Ignition temp: 550 °C
- Vapour pressure: (20 °C) 0.20 hPa
- Refraction index: (20 °C/D) 1.5092
- Viscosity: (20 °C) 0.95 mPas
- Dipolar moment: (20 °C) 2.2 Debye
- Dielectric const: (25 °C) 12.3
- Evap. heat: (115 °C) 511 KJ/kg
- Saturation conc: (20 °C) 65 g/m³
- Expl. limit (upper): 12.4 Vol%
- Expl. limit (lower): 1.7 Vol%
- pH (16 g/l H_2O, 20 °C) 8.5

Toxicological data:
- LD 50 (oral, rat): 891 mg/kg
- MAK: 5 ml/m³ , 16 ml/m³
- WGK: 2

Safety:
- EC Index no.: 613-002-00-7
- R: 11-20/21/22
- S: 26-28.1-36/37-46
- VbF class: B
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 II UN 1282
- IMDG: 3 II UN 1282
- IATA/ICAO: 3 II UN 1282
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 5

P9005-1, Pyridine, reagent grade

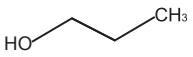
HS-No: 2837 20 00 00

Assay (G.C)	min. 99.5 %	Copper (Cu)	max. 0.000002 %
Identity (IR-spectrum)	passes test	Iron (Fe)	max. 0.00001 %
Density (20º/4º)	0.982 – 0.984	Lead (Pb)	max. 0.00001 %
Appearance	clear	Magnesium (Mg)	max. 0.00001 %
Colour	max. 10 Hazen	Manganese (Mn)	max. 0.000002 %
Solubility in Water	passes test	Nickel (Ni)	max. 0.000002 %
Chlorides (Cl)	max. 0.0005 %	Tin (Sn)	max. 0.00001 %
Sulfates (SO_4)	max. 0.0005 %	Zinc (Zn)	max. 0.00001 %
Aluminium (Al)	max. 0.00005 %	2-picoline (G.C)	max. 0.2 %
Barium (Ba)	max. 0.00001 %	Piperidine (G.C)	max. 0.01 %
Boron (B)	max. 0.000002 %	Ammonia (NH_3)	max. 0.002 %
Cadmium (Cd)	max. 0.000005 %	Reducing Substances	passes test %
Calcium (Ca)	max. 0.00005 %	Non-volatile matter	max. 0.001 %
Chromium (Cr)	max. 0.000002 %	Water	max. 0.1 %
Cobalt (Co)	max. 0.000002 %		

Code	Capacity
P9005-1-2501	2.5 L

1-PROPANOL

n-propyl alcohol, Ethylcarbinol, 1-Hydroxypropane, n-propanal



- C_3H_8O
- M = 60.10 g/mol
- CAS [71-23-8]
- EC number: 237-323-3

Physical data:
- Form: Liquid
- Density: 0.80 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -127 °C
- Boiling point: 96.5 -98 °C
- Flash point: 15 °C
- Ignition temp: 405 °C
- Vapour pressure: (20 °C) 19 hPa
- Viscosity: (20 °C) 0.95 mPas
- Dipolar moment: (20 °C) 1.7 Debye
- Dielectric const: (25 °C) 20.1
- Saturation conc: (20 °C) 46 g/m³
- Expl. limit (upper): 13.5 Vol%
- Expl. limit (lower): 2.1 Vol%
- pH (200 g/l H_2O, 20 °C) 7

Toxicological data:
- LD 50 (oral, rat): 1870 mg/kg
- WGK: 1

Safety:
- EC Index no.: 6.3-003-00-0
- R: 11-41-67
- S: 7-16-24-39
- VbF class: B
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 II UN 1274
- IMDG: 3 II UN 1274
- IATA/ICAO: 3 II UN 1274
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 5

PR101-1, 1-Propanol, reagent grade

HS-No: 2837 20 00 00

Assay (GC)	min. 99.5 %		Iron (Fe)	max. 0.00001	%
Identity (IR-spectrum)	passes test		Lead (Pb)	max. 0.00001	%
Density (20°/4°)	0.803 – 0.804		Magnesium (Mg)	max. 0.00001	%
Appearance	clear		Manganese (Mn)	max. 0.000002	%
Colour	max. 10 Hazen		Nickel (Ni)	max. 0.000002	%
Solubility in Water	passes test		Tin (Sn)	max. 0.00001	%
Acidity	max. 0.0004 meq/g		Zinc (Zn)	max. 0.00001	%
Alkalinity	max. 0.002 meq/g		Acetone (G.C)	max. 0.01	%
Aluminium (Al)	max. 0.00005 %		Ethanol (G.C)	max. 0.01	%
Barium (Ba)	max. 0.00001 %		Methanol (G.C)	max. 0.01	%
Boron (B)	max. 0.000002 %		2-Propanol (G.C)	max. 0.05	%
Cadmium (Cd)	max. 0.000005 %		Aldehydes and Ketone (as C_3H_6O)	max. 0.03	%
Calcium (Ca)	max. 0.00005 %		Substance darkened by H_2SO_4	passes test	
Chromium (Cr)	max. 0.000002 %		Non-volatile matter	max. 0.0005	%
Cobalt (Co)	max. 0.000002 %		Water (K.F)	max. 0.05	%
Copper (Cu)	max. 0.000002 %				

Code	Capacity
PR101-1-2500	2.5 L
PR101-1-4000	4.0 L

PR101-3, 1-Propanol, extra pure

HS-No: 2837 20 00 00

Assay	min. 99 %		Iron (Fe)	max. 0.0005	%
Acidity	max. 0.001 meq/g		Lead (Pb)	max. 0.0002	%
Alkalinity	max. 0.001 meq/g		Nickel (Ni)	max. 0.0002	%
Ethanol (G.C)	max. 0.1 %		Substances Darkened by H_2SO_4	passes test	
Methanol (G.C)	max. 0.1 %		Non-volatile matter	max. 0.001 %	
2-Propanol (G.C)	max. 0.1 %		Water	max. 0.2 %	
Copper (Cu)	max. 0.0002 %				

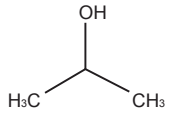
Code	Capacity
PR101-3-2500	2.5 L

2-PROPANOL

 F  Xi

P

Isopropyl alcohol, Isopropanol, Dimethylcarbinol, 2-Hydroxypropane



- C_3H_8O
- M = 60.10 g/mol
- CAS [67-63-0]
- EC number: 200-661-7

Physical data:
- Density: 0,78 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -89.5 °C
- Boiling point: 82.4 °C
- Flash point: 12 °C
- Ignition temp.: 425 °C
- Vapour pressure: (20 °C) 43 hPa
- Viscosity: (20 °C) 2,27 mPas
- Dipolar moment: (20 °C) 1,66 Debye
- Dielectric const.: (25 °C) 18,3
- Saturation conc.: (20 °C) 105 g/m³
- Expl. limit (upper): 12,7 Vol%
- Expl. limit (lower): 2 Vol%
- pH (20 °C) ~ 7

Toxicological data:
- LD 50 (oral, rat): 5045 mg/kg
- MAK: 200 ml/m³ , 500 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-117-00-0
- R: 11-36-67
- S: 7-16-24/25-26
- VbF class: B
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 3 F1 II UN 1219
- IMDG: 3 II UN 1219
- IATA/ICAO: 3 II UN 1219
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

PR141-1, 2-Propanol, reagent grade

HS-No: 2905 12 00 00

Assay	min. 99.7 %	Calcium (Ca)	max. 0.5 ppm
Color	max. 10 Hazen	Cadmium (Cd)	max. 0.05 ppm
Acidity	max. 0.0001 meq/g	Cobalt (Co)	max. 0.02 ppm
Carbonyl compounds (as CO)	max. 0.002 ppm	Chromium (Cr)	max. 0.02 ppm
Matter discoloured (H_2SO_4)	min. 10 ppm	Copper (Cu)	max. 0.02 ppm
Acetone (GC)	max. 0.01 ppm	Iron (Fe)	max. 0.1 ppm
Ethanol (GC)	max. 0.01 ppm	Magnesium (Mg)	max. 0.1 ppm
Methanol (GC)	max. 0.1 ppm	Manganese (Mn)	max. 0.02 ppm
Evaporation residue	max. 0.001 ppm	Nickel (Ni)	max. 0.02 ppm
Water	max. 0.1 ppm	Lead (Pb)	max. 0.1 ppm
Aluminium (Al)	max. 0.5 ppm	Tin (Sn)	max. 0.1 ppm
Boron (B)	max. 0.02 ppm	Zinc (Zn)	max. 0.1 ppm
Barium (Ba)	max. 0.1 ppm		

Code	Capacity
PR141-1-1000	1.0 L
PR141-1-2500	2.5 L
PR141-1-4000	4.0 L
PR141-1-920E	200 L

PR141-4, 2-Propanol, HPLC grade

HS-No: 2905 12 00 00

Code	Capacity
PR141-4-2501	2.5 L

Assay (G.C.)	min. 99.8 %
Colour	max. 10 Hazen
Solubility in water	passes test
Titrable acid or base	max. 0.0001 meq/g
Non-volatile matter	max. 0.0005 %
Water (K.F.)	max. 0.05 %

Maximum absorbance in a 1.0cm cell at wavelength:

205 nm	1.00
220 nm	0.30
230 nm	0.15
254 nm	0.02
280 nm	0.01
350 nm	0.01

PR141-6, 2-Propanol, EC-100

HS-No: 2905 12 00 00

Code	Capacity
PR141-6-2500	2.5 L
PR141-6-4000	4.0 L
PR141-7-2500	2.5 L

Purity (GC)	min. 99.8 %	Indium (In)	max. 10 ppb
Color	max. 10 Hazen	Potassium (K)	max. 10 ppb
Free Acid (as C_2H_5COOH)	max. 10 ppm	Lithium (Li)	max. 5 ppb
Spec. resistance	min 10 MΩ cm	Magnesium (Mg)	max. 5 ppb
Chloride (Cl)	max. 0.02 ppm	Manganese (Mn)	max. 5 ppb
Phosphate (PO_4)	max. 0.005 ppm	Molybdenum (Mo)	max. 10 ppb
Sulphate (SO_4)	max. 0.1 ppm	Sodium (Na)	max. 100 ppb
Heavy metals (as Pb)	max. 20 ppm	Nickel (Ni)	max. 5 ppb
Alkalinity (as NH_3)	max. 10 ppm	Lead (Pb)	max. 10 ppb
Silver (Ag)	max. 5 ppb	Platinum (Pt)	max. 20 ppb
Aluminium (Al)	max. 50 ppb	Antimony (Sb)	max. 10 ppb
Arsenic (As)	max. 10 ppb	Tin (Sn)	max. 20 ppb
Gold (Au)	max. 20 ppb	Strontium (Sr)	max. 5 ppb
Boron (B)	max. 10 ppb	Titanium (Ti)	max. 20 ppb
Barium (Ba)	max. 20 ppb	Thallium (Tl)	max. 10 ppb
Beryllium (Be)	max. 10 ppb	Vanadium (V)	max. 10 ppb
Bismuth (Bi)	max. 20 ppb	Zinc (Zn)	max. 5 ppb
Calcium (Ca)	max. 10 ppb	Zirconium (Zr)	max. 10 ppb
Cadmium (Cd)	max. 5 ppb	Aldehydes And Ketones (as C_3H_6O)	max. 50 ppm
Cobalt (Co)	max. 5 ppb	Evaporation Residue	max. 3 ppm
Chromium (Cr)	max. 5 ppb	Substances Reducing Potassium Permanganate (as O)	max. 2.5 ppm
Copper (Cu)	max. 5 ppb	Water	max. 0.05 %
Iron (Fe)	max. 5 ppb		
Gallium (Ga)	max. 10 ppb		

PR142-6, I.P. A. , EC-100

HS-No: 2905 12 00 00

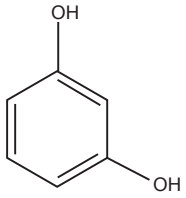
Code	Capacity
PR142-6-9025	2.5 L

Purity (GC)	min. 99.9 %	Indium (In)	max. 10 ppb
Color	max. 10 Hazen	Potassium (K)	max. 10 ppb
Free Acid (as C_2H_5COOH)	max. 10 ppm	Lithium (Li)	max. 5 ppb
Spec. resistance	min 10 MΩ cm	Magnesium (Mg)	max. 5 ppb
Chloride (Cl)	max. 0.02 ppm	Manganese (Mn)	max. 5 ppb
Phosphate (PO_4)	max. 0.005 ppm	Molybdenum (Mo)	max. 10 ppb
Sulphate (SO_4)	max. 0.1 ppm	Sodium (Na)	max. 100 ppb
Heavy metals (as Pb)	max. 20 ppm	Nickel (Ni)	max. 5 ppb
Alkalinity (as NH_3)	max. 10 ppm	Lead (Pb)	max. 10 ppb
Silver (Ag)	max. 5 ppb	Platinum (Pt)	max. 20 ppb
Aluminium (Al)	max. 50 ppb	Antimony (Sb)	max. 10 ppb
Arsenic (As)	max. 10 ppb	Tin (Sn)	max. 20 ppb
Gold (Au)	max. 20 ppb	Strontium (Sr)	max. 5 ppb
Boron (B)	max. 10 ppb	Titanium (Ti)	max. 20 ppb
Barium (Ba)	max. 20 ppb	Thallium (Tl)	max. 10 ppb
Beryllium (Be)	max. 10 ppb	Vanadium (V)	max. 10 ppb
Bismuth (Bi)	max. 20 ppb	Zinc (Zn)	max. 5 ppb
Calcium (Ca)	max. 10 ppb	Zirconium (Zr)	max. 10 ppb
Cadmium (Cd)	max. 5 ppb	Aldehydes And Ketones (as C_3H_6O)	max. 50 ppm
Cobalt (Co)	max. 5 ppb	Evaporation Residue	max. 3 ppm
Chromium (Cr)	max. 5 ppb	Substances Reducing Potassium Permanganate (as O)	max. 2.5 ppm
Copper (Cu)	max. 5 ppb	Water	max. 0.05 %
Iron (Fe)	max. 5 ppb		
Gallium (Ga)	max. 10 ppb		

RESORCINOL

Xn N

1,3-Dihydroxybenzene



- $C_6H_6O_2$
- M = 110.11 g/mol
- CAS [108-46-3]
- EC number: 203-585-2

Physical data:
- Spec. density: ~ 1,28 g/cm³
- Bulk density: ~ 600 - 700 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 109 - 111 °C
- Boiling point: (20 hPa) 177 °C
- Flash point: 127 °C
- Ignition temp.: 605 °C
- Vapour pressure: (20 °C) 0,1 hPa
- pH (100 g/l H_2O, 20 °C) ~ 4 - 6

Toxicological data:
- LD 50 (oral, rat): 301 mg/kg
- WGK: 1

Safety:
- EC Index no.: 604-010-00-1
- R: 22-36/38-50
- S: 26-46-61
- Poison class CH (Swiss): 3

R2003-3, Resorcinol, extra pure

HS-No: 2907 21 00 10

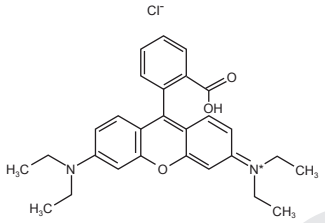
Assay (G.C)	min. 98.5 %
Appearance of solution	passes test
Free acid (as H_2SO_4)	max. 0.01 %
Free alkali (as NH_3)	max. 0.01 %
Chlorides (Cl)	min. 0.01 %
Sulfates (SO_4)	max. 0.05 %
Heavy metals (as Pb)	max. 0.001 %
Pyrocatechol	max. 0.01 %
Organic volatile impurities	passes test
Sulfated ash	max. 0.05 %
Loss on drying (on silica gel)	max. 1 %
Dichloromethane (HS-GC)	max. 0.06 %
Phenol	passes test
Other residual solvents (Ph Eur/ICH)	
	excluded by production process

Code	Capacity
R2003-3-0250	250 g

RHODAMINE B

Xi

Tetraethylrhodamine, Brilliant pink B



- $C_{28}H_{31}ClN_2O_3$
- M = 479.02 g/mol
- CAS [81-88-9]
- EC number: 201-383-9

Physical data:
- Spec. density: 1.31 g/cm³ (20 °C)
- Solub. in water 34 g/l (20 °C)
- pH Value 2.0 (50 g/l, H_2O, 20 °C)
- Melting point: 199 - 201 °C
- Bulk density: ~ 240 kg/m³

Toxicological data:
- LD 50 (oral, rat) > 2000 mg/kg

Safety:
- Irritant dangerous for the environment
- R: 41-52/53
- S: 22-26-39-61
- Poison class (CH) 3
- WGK 3*

Transport/storage:
- LGK 10-13

R2050-1, Rhodamine B, extra pure

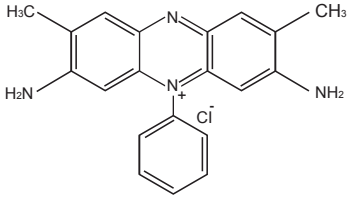
HS-No: 3204 13 00 00

Dye content (spectrophotometrically)	min. 90 %
Identity (UV/VIS-Spectrum)	passes test
Absorption maximum λ max (ethanol 50%)	550 - 552 nm
Spec. Absorptivity A1%/1cm (λmax; 0.0003%, ethanol 50%)	2115 - 2350
TLC-Test	passes test
Loss on drying (110°C)	max. 5.0 %
Suitability for microscopy	passes test

Code	Capacity
R2050-1-0100	100 g

R

SAFRANINE O, C.I. 50240



- $C_{20}H_{19}ClN_4$
- M = 350.88 g/mol
- CAS [477-73-6]
- EC number: 207-518-8

Physical data:
- Form: Solid
- Bulk density: ~ 400 kg/m³
- Solub. in water (20 °C): 50 g/l
- pH (10 g/l, 20 °C) ~ 10

Toxicological data:
- WGK: 2

Transport/storage:
- LGK: 10-13

S1001-1, Safranine O, C.I. 50240, for microscopy

HS-No: 3204 13 00 00

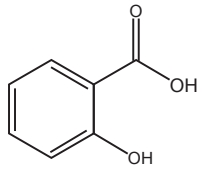
Absorption maximum λ in ethanol 50%	530 – 534 nm
Absorptivity (A1%/1 cm; λ, max)	875 – 1450
Loss on drying (110ºC)	max. 15 %

Code	Capacity
S1001-1-0010	10 g
S1001-1-0025	25 g

SALICYLIC ACID

Xn

2-Hydroxybenzoic acid



- $C_7H_6O_3$
- M = 138.12 g/mol
- CAS [69-72-7]
- EC number: 200-712-3

Physical data:
- Spec. density: 1,443 g/cm³
- Bulk density: ~ 400 - 500 kg/m³
- Solub. in water (20 °C): 2 g/l
- Melting point: 158 - 161 °C
- Boiling point: 211 °C
- Flash point: 157 °C
- Ignition temp.: 500 °C
- Vapour pressure: (100 °C) < 1hPa
- pH (saturated solution H_2O, 20 °C) ~ 3

Toxicological data:
- LD 50 (oral, rat): 891 mg/kg
- WGK: 1

Safety:
- R: 22-37/38-41
- S: 26-39-46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 4

S1009-3, Salicylic acid, extra pure

HS-No: 2918 21 00 00

Assay (acidimetric)	min. 99.5 %	Iron (Fe)	max. 0.0001 %
Appearance of solution (10%, ethanol 96%)	passes test	Reaction to H_2SO_4	passes test
Chlorides (Cl)	max. 0.001 %	Sulfated ash	max. 0.05 %
Sulfates (SO_4)	max. 0.005 %	Loss on drying	max. 0.3 %
Heavy metals (as Pb)	max. 0.0001 %	Residual solvents (Ph Eur/ICH)	excluded by production process

Code	Capacity
S1009-3-0250	250 g
S1009-3-0500	500 g

SELENIUM STANDARD SOLUTION 1000MG/L FOR AA

Xi

Physical data:
- Density: 1.01 g/cm³
- Solub. in water (20 °C): miscible
- pH (20 °C) < 1

Toxicological data:
- WGK: 3

Safety:
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C1 III UN 3264
- IDMG: 8 III UN 3264
- IATA/ICAO: 8 III UN 3264
- PAX 818
- CAO: 820
- LGK: 8

S1003-0, Selenium standard solution 1000mg/l for AA
(selenium dioxide in nitric acid 0.5 mol/l)

HS-No: 3822 00 00 00

Composition	1000±5 mg/l

Code	Capacity
S1003-0-0500	500 ml

SILICON DIOXIDE

SiO_2

- O_2Si
- M = 60.08 g/mol
- CAS [7631-86-9]
- EC number: 231-545-4

Physical data:
- Form: Solid
- Spec. density: ~ 2.2 g/m³
- Solub. in water (20 °C): Insoluble
- Melting point: 1726 °C
- pH (40 g/l H_2O suspension, 20 °C) ~ 3.7 - 4.7

Toxicological data:
- LD 50 (oral, rat): > 10000 mg/kg
- MAK 4 mg/m³
- WGK: 0

Safety:
- S: 22
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

Applications: Painting, in the coating industry, in the rubber industry, manufacture of adhesives, manufacturimg of inks, cosmetics, in food industry.

S2040-1, Silicon dioxide

HS-No: 2834 29 80 00

Assay (on dried sample)	min. 99.8 %	Aluminium (as Al_2O_3)	max. 0.05 %
Specific surface area (BET)	200 ± 25 m²/g	Iron (as Fe_2O_3)	max. 0.003 %
HCl content	max. 0.025 %	Titanium (as TiO_2)	max. 0.03 %
pH (4%, H_2O)	3.7 – 4.7	Loss on drying (195ºC)	max. 1.5 %

Code	Capacity
S2040-1-0500	500 g

S

SILVER NITRATE

 C  N

- $AgNO_3$
- M = 169.87 g/mol
- CAS [7761-88-8]
- EC number: 231-853-9

Physical data:
- Spec. density: 4,35 g/cm³
- Bulk density: ~ 2350 kg/m³
- Solub. in water (20°C): soluble
- Melting point: 212 °C
- Boiling point: 444 °C (decomposes)
- pH (100 g/l H_2O, 20 °C) 5,4 - 6,4

Toxicological data:
- LD 50 (oral, rat): 1173 mg/kg
- MAK: 0,01 mg/m³
- WGK: 3

Safety:
- EC Index no.: 047-001-00-2
- R: 34-50/53
- S: 26-36/37/39-45-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 O2 II UN 1493
- IMDG: 5.1 II UN 1493
- IATA/ICAO: 5.1 II UN 1493
- PAX: 508
- CAO: 511
- LGK: 5.1 B
- Disposal: 27

S3052-1, Silver nitrate, reagent grade

HS-No: 2843 21 00 00

Assay ($AgNO_3$)	min. 99%	Lead (Pb)	max. 0.001 %
Clarity of solution	passes test	Chloride (Cl)	max. 2 ppm
Free acid	passes test	Copper (Cu)	max. 2 ppm
Substances not precipitated by HCl	max. 0.009 %	Iron (Fe)	max. 2 ppm
Sulfate (SO_4)	max. 0.002 %		

Code	Capacity
S3052-1-0100	100 g
S3052-1-0250	250 g

SILVER NITRATE, VOLUMETRIC SOLUTIONS

 C  N

S3055-0, Silver nitrate, solution 0.01 mol/l (0.01N)

- $AgNO_3$
- M = 169.87 g/mol
- CAS [7761-88-8]
- EC number: 231-853-9

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- WGK: 2

Safety:
- EC Index no.: 047-001-00-2
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

1ml = 0.001699 g $AgNO_3$

HS-No: 2843 21 00 00

Code	Capacity
S3055-0-1001	1.0 L

S3056-0, Silver nitrate, solution 0.02 mol/l (0.02N)

- $AgNO_3$
- M = 169.87 g/mol
- CAS [7761-88-8]
- EC number: 231-853-9

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- LD 50 (oral, rat): 1173 mg/kg (pure substance)
- WGK: 2

Safety:
- EC Index no.: 047-001-00-2
- R: 52/53
- S: 61
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

1ml = 0.003398 g $AgNO_3$

HS-No: 2843 21 00 00

Code	Capacity
S3056-0-1001	1.0 L

S3057-0, Silver nitrate, solution 0.05 mol/l (0.05N)

- $AgNO_3$
- M = 169.87 g/mol
- CAS [7761-88-8]
- EC number: 231-853-9

Physical data:
- Density: 1,00 g/cm³
- pH (20 °C) ~ 6

Toxicological data:
- LD 50 (oral, rat): 1173 mg/kg (pure substance)
- WGK: 2

Safety:
- EC Index no.: 047-001-00-2
- R: 52/53
- S: 61
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

1ml = 0.008495 g $AgNO_3$

HS-No: 2843 21 00 00

Code	Capacity
S3057-0-1001	1.0 L

S3059-0, Silver nitrate, solution 0.1 mol/l (0.1N)

S

- $AgNO_3$
- M = 169.87 g/mol
- CAS [7761-88-8]
- EC number: 231-853-9

Physical data:
- Density: 1,01 g/cm³
- pH (20 °C) ~ 4 - 5

Toxicological data:
- LD 50 (oral, rat): 1173 mg/kg (pure substance)
- MAK: 0,01 mg/m³
- WGK: 2

Safety:
- EC Index no.: 047-001-00-2
- R: 52/53
- S: 61
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

1ml = 0.01699 g $AgNO_3$

HS-No: 2843 21 00 00

Code	Capacity
S3059-0-1001	1.0 L
S3059-0-2501	2.5 L

S3062-0, Silver nitrate, solution 1 mol/l (1N)

- $AgNO_3$
- M = 169.87 g/mol
- CAS [7761-88-8]
- EC number: 231-853-9

Physical data:
- Density: 1,14 g/cm³
- pH (20 °C) ~ 7 - 9

Toxicological data:
- LD 50 (oral, rat): 1173 mg/kg (pure substance)
- MAK: 0,01 mg/m³
- WGK: 3

Safety:
- EC Index no.: 047-001-00-2
- R: 34-51/53
- S: 26-36/37/39-45-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C9 II UN 1760
- IMDG: 8 II UN 1760
- IATA/ICAO: 8 II UN 1760
- PAX: 808
- CAO: 812
- LGK: 8 B

1ml = 0.1699 g $AgNO_3$

HS-No: 2843 21 00 00

Code	Capacity
S3062-0-1001	1.0 L

SILVER STANDARD SOLUTION 1000MG/L FOR AA

Xi

Physical data:
- Density: 1.02 g/cm³
- Solub. in water (20 °C): miscible
- pH (20 °C) < 1

Toxicological data:
- WGK: 3

Safety:
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C1 III UN 3264
- IDMG: 8 III UN 3264
- IATA/ICAO: 8 III UN 3264
- PAX 818
- CAO: 820
- LGK: 8

S1005-0, Silver standard solution 1000mg/l for AA
(silver nitrate in nitric acid 0.5 mol/l)

HS-No: 3822 00 00 00

Composition ..... 1000±5 mg/l

Code	Capacity
S1005-0-0500	500 ml

SILVER SULFATE

Xi

Sulfuric acid silver salt

- Ag_2SO_4
- M = 311.79 g/mol
- CAS [10294-26-5]
- EC number: 233-653-7

Physical data:
- Spec. density: 5,45 g/cm³
- Bulk density: ~ 1200 kg/m³
- Solub. in water (25 °C): 8 g/l
- Melting point: 655 °C
- pH (5 g/l H_2O, 25 °C) ~ 5 - 6

Toxicological data:
- LD 50 (oral, rat): ~ 5000 mg/kg
- MAK: 0,01 mg/m³
- WGK: 3

Safety:
- R: 41
- S: 22-26-39
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 27

S3068-1, Silver sulfate, reagent grade

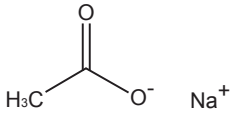
HS-No: 2843 29 00 00

Assay (argentometric)	min. 99.5 %	Nickel (Ni)	max. 0.001 %
Nitrates (NO_3)	max. 0.001 %	Zinc (Zn)	max. 0.0001 %
Chloride (Cl)	max. 0.001 %	Insoluble in water and silver chloride ..	max. 0.02 %
Copper (Cu)	max. 0.0001 %	Non precipitable in HCl	max. 0.01 %
Iron (Fe)	max. 0.0001 %		
Lead (Pb)	max. 0.001 %		

Code	Capacity
S3068-1-0250	250 g

SODIUM ACETATE ANHYDROUS

Acetic acid sodium salt



- CH_3COONa
- M = 82.03 g/mol
- CAS [127-09-3]
- EC number: 204-823-8

Physical data:
- Spec. density: 1,52 g/cm³
- Bulk density: ~ 320 - 470 kg/m³
- Solub. in water (20 °C): 365 g/l
- Melting point: 324 °C (decomposes)
- Boiling point: > 400 °C (decomposes)
- Flash point: > 250 °C
- Ignition temp.: 607 °C
- pH (50 g/l H_2O, 20 °C) 7,5 - 9,0

Toxicological data:
- LD 50 (oral, rat): 3530 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

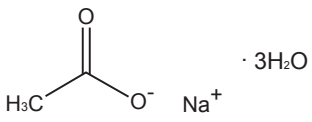
S5013-1, Sodium acetate anhydrous, reagent grade

HS-No: 2915 22 00 00

Assay (titr. With $HClO_4$)	min. 99 %	Aluminium (Al)	max. 0.001 %
Appearance of solution (10% in water) ..	passes test	Calcium (Ca)	max. 0.001 %
Insoluble in water	max. 0.01 %	Copper (Cu)	max. 0.0003 %
pH (5%, H_2O)	7.5 - 9.2	Heavy metals (as Pb)	max. 0.001 %
Chloride (Cl)	max. 0.001 %	Iron (Fe)	max. 0.0005 %
Phosphates (PO_4)	max. 0.0005 %	Magnesium (Mg)	max. 0.0005 %
Sulfates (SO_4)	max. 0.003 %	Potassium (K)	max. 0.02 %

Code	Capacity
S5013-1-0500	500 g
S5013-1-1000	1 kg

SODIUM ACETATE TRIHYDRATE



- $CH_3COONa·3H_2O$
- M = 136.08 g/mol
- CAS [6131-90-4]
- EC number: 204-823-8

Physical data:
- Spec. density: 1,42 g/cm³
- Bulk density: ~ 900 kg/m³
- Solub. in water (20 °C): 613 g/l
- Melting point: 58 °C
- Boiling point: > 400 °C (anhydrous substance) (decomposes)
- Flash point: > 250 °C (anhydrous substance)
- Ignition temp.: 607 °C
- pH (50 g/l H_2O, 20 °C) 7,5 - 9,2

Toxicological data:
- LD 50 (oral, rat): 3530 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

S5022-1, Sodium acetate trihydrate, reagent grade

HS-No: 2915 22 00 00

Assay (titr. With $HClO_4$)	min. 99.5 %	Cadmium (Cd)	max. 0.0005 %
Appearance of solution (10% in water) ..	passes test	Calcium (Ca)	max. 0.001 %
Insoluble in water	max. 0.005 %	Copper (Cu)	max. 0.0003 %
pH (5%, H_2O)	7.5 - 9.0	Iron (Fe)	max. 0.0005 %
Chloride (Cl)	max. 0.0005 %	Heavy metals (as Pb)	max. 0.0005 %
Phosphates (PO_4)	max. 0.0002 %	Lead (Pb)	max. 0.0005 %
Sulfates (SO_4)	max. 0.002 %	Magnesium (Mg)	max. 0.0005 %
Total N	max. 0.001 %	Potassium (K)	max. 0.005 %
Aluminium (Al)	max. 0.00002 %	Zinc (Zn)	max. 0.0005 %
Arsenic (As)	max. 0.0001 %	$KMnO_4$ red. matter (as HCOOH)	max. 0.005 %

Code	Capacity
S5022-1-0500	500 g
S5022-1-1000	1 kg

SODIUM BORATE DECAHYDRATE

 Xn

$Na_2B_4O_7 \cdot 10H_2O$

- $B_4Na_2O_7 \cdot 10H_2O$
- M = 381.37 g/mol
- CAS [1303-96-4]
- EC number: 215-540-4

Physical data:
- Form: Crystals
- Spec. density: 1,72 g/cm³
- Bulk density: ~ 750 kg/m³
- Solub. in water (20 °C): 51,4 g/l
- Melting point: 75 °C
- Boiling point: 1575 °C (anhydrous)
- Vapour pressure: (20 °C) 0,213 hPa
- pH (47 g/l H_2O, 20 °C) 9,2

Toxicological data:
- LD 50 (oral, rat): 2660 mg/kg
- WGK: 1

Safety:
- S: 24/25
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 28

S5030-1, Sodium borate decahydrate

HS-No: 2840 19 90 00

Assay (acidimetric)	99.5 – 103.0 %	Ammonium (NH_4)	max. 0.001 %
Identity	passes test	Manganese (Mn)	max. 0.0005 %
Appearance of solution	clear	Calcium (Ca)	max. 0.005 %
Insoluble in water	max. 0.005 %	Copper (Cu)	max. 0.0005 %
pH (0.01 M, H_2O)	9.15 – 9.20	Heavy metals (as Pb)	max. 0.001 %
Chlorides (Cl)	max. 0.001 %	Iron (Fe)	max. 0.0005 %
Phosphate (PO_4)	max. 0.001 %	Lead (Pb))	max. 0.0005 %
Sulfates (SO_4)	max. 0.005 %		

Code	Capacity
S5030-1-1000	1 kg

SODIUM BOROHYDRIDE

 F  T

Sodium tertrahydroborate

$NaBH_4$

- BH_4Na
- M = 37.83 g/mol
- CAS [16940-66-2]
- EC number: 241-004-4

Physical data:
- Form: Solid
- Spec. density: 1.07 g/cm³
- Bulk density: 350 - 500 kg/m³
- Solub. in water (25 °C): 550 g/l (decomposes slowly)
- Melting point: 400 °C (decomposes slowly)
- Flash point: 69 °C
- Ignition temp: ~ 220 °C
- Expl. limit (lower): 3.02 Vol%
- pH (10 g/l H_2O, 20 °C) ~ 11

Toxicological data:
- LD 50 (oral, rat): 891 mg/kg
- WGK: 2

Safety:
- R: 15-25-34
- S: 14.2-26-36/37/39-43.6-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 4.3 W2 I UN 1426
- IMDG: 4.3 I UN 1426
- IATA/ICAO: 4.3 I UN 1426
- PAX: F
- CAO: 412
- LGK: 4.3
- Disposal: 26

Applications: Reducing agent, synthesis of organic product.

S5032-1, Sodium borohydride, reagent grade

HS-No: 2850 00 20 90

Assay (Oxidimetric)	min. 96.0 %	Arsenic (As)	max. 0.001 %
Identity	passes test	Bismuth (Bi)	max. 0.0005 %
Chloride (Cl)	max. 0.5 %	Iron (Fe)	max. 0.005 %
Sulphate (SO_4)	max. 0.005 %	Mercury (Hg)	max. 0.001 %
Heavy metals (as Pb)	max. 0.005 %		

Code	Capacity
S5032-1-0101	100 g

SODIUM BROMIDE

Bromo sodium

- NaBr
- M = 102.90 g/mol
- CAS [7647-15-6]
- EC number: 231-599-9

Physical data:
- Spec. density: 3,20 g/cm³
- Bulk density: ~ 1400 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 755 °C
- Boiling point: 1393 °C
- Vapour pressure: (806 °C) 1,3 hPa
- pH (50 g/l H_2O, 20 °C) ~ 5,4

Toxicological data:
- LD 50 (oral, rat): 3500 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 14

S5029-1, Sodium bromide, reagent grade

HS-No: 2827 51 00 00

Assay (argentometric)	min. 99.5 %	Lithium (Li)	max. 0.00001 %
Aluminium (Al)	max. 0.000005 %	Magnesium (Mg)	max. 0.000005 %
Barium (Ba)	max. 0.0005 %	Manganese (Mn)	max. 0.000005 %
Calcium (Ca)	max. 0.000005 %	Nickel (Ni)	max. 0.000001 %
Copper (Cu)	max. 0.000005 %	Potassium (K)	max. 0.0005 %
Iron (Fe)	max. 0.000005 %	Thallium (Ti)	max. 0.000005 %
Lead (Pb)	max. 0.000005 %	Zinc (Zn)	max. 0.000005 %

Code	Capacity
S5029-1-0500	500 g

S5029-3, Sodium bromide, extra pure

HS-No: 2827 51 00 00

Assay (argentometric)	min. 99.5 %	Barium (Ba)	max. 0.001 %
Appearance of solution	passes test	Calcium (Ca)	max. 0.005 %
Acidly or alkalinely reacting or alkalinely reacting impurities	passes test	Heavy metals (as Pb)	max. 0.001 %
		Iron (Fe)	max. 0.001 %
Bromates (BrO_3)	max. 0.001 %	Magnesium (Mg)	max. 0.001 %
Chloride (Cl)	max. 0.2 %	Magnesium and earth alkali metals (as Ca)	max. 0.02 %
Iodides (I)	max. 0.02 %		
Sulfates (SO_4)	max. 0.005 %	Loss on drying (105°C)	max. 3 %
Arsenic (As)	max. 0.0002 %	Residual solvents (Ph Eur/ICH)	excluded by production process

Code	Capacity
S5029-3-1000	1 kg

SODIUM CARBONATE ANHYDROUS

Xi

Anhydrous soda

- Na_2CO_3
- M = 105.99 g/mol
- CAS [497-19-8]
- EC number: 207-838-8

Physical data:
- Spec. density: 2,53 g/cm³
- Bulk density: ~ 1100 kg/m³
- Solub. in water (20°C): 220 g/l
- Melting point: 854 °C
- Boiling point: 1600 °C (decomposes)
- pH (50 g/l H_2O, 25 °C) 11,5

Toxicological data:
- LD 50 (oral, rat): 4090 mg/kg
- MAK: 1,5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 011-005-00-2
- R: 36
- S: 22-26
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

S5039-1, Sodium carbonate anhydrous, reagent grade

HS-No: 2836 20 00 00

Assay	min. 99.9 %	Calcium (Ca)	max. 0.005 %
Chlorides (Cl)	max. 0.001 %	Iron (Fe)	max. 0.0005 %
Silicate (SiO_2)	max. 0.002 %	Lead (Pb)	max. 0.0005 %
Phosphate (PO_4)	max. 0.001 %	Magnesium (Mg)	max. 0.0005 %
Total S (as SO_4)	max. 0.003 %	Potassium (K)	max. 0.005 %
Total N	max. 0.001 %	Zinc (Zn)	max. 0.0005 %
Heavy metals (as Pb)	max. 0.0005 %	Loss on drying (300°C)	max. 0.5 %
Aluminium (Al)	max. 0.001 %		

Code	Capacity
S5039-1-0500	500 g

SODIUM CARBONATE DECAHYDRATE

Xi

Soda decahydrate

- $Na_2CO_3 \cdot 10H_2O$
- M = 286,14 g/mol
- CAS [6132-02-1]
- EC number: 207-838-8

Physical data:
- Spec. density: 1,44 g/cm³
- Bulk density: ~ 700 - 900 kg/m³
- Solub. in water (20 °C): ~ 210 g/l
- Melting point: 33 °C
- pH (50 g/l H_2O, 25 °C) 11 - 12

Toxicological data:
- LD 50 (oral, rat): 4090 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- EC Index no.: 011-005-00-2
- R: 36
- S: 22-26
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

S5046-1, Sodium carbonate decahydrate, reagent grade

HS-No: 2836 20 00 00

Assay (acidimetric)	min. 99.5 %	Copper (Cu)	max. 0.0005 %
Chlorides (Cl)	max. 0.0005 %	Heavy metals (as Pb)	max. 0.0005 %
Phosphates, Silicate (as SiO_2)	max. 0.001 %	Iron (Fe)	max. 0.0002 %
Total N	max. 0.0005 %	Lead (Pb)	max. 0.0002 %
Total S (as SO_4)	max. 0.002 %	Magnesium (Mg)	max. 0.0002 %
Aluminium (Al)	max. 0.0005 %	Potassium (K)	max. 0.005 %
Arsenic (As)	max. 0.00001 %	Zinc (Zn)	max. 0.0005 %
Calcium (Ca)	max. 0.002 %		

Code	Capacity
S5046-1-0500	500 g
S5046-1-1000	1 kg

SODIUM CARBONATE, VOLUMETRIC SOLUTIONS

S5048-0, Sodium carbonate, solution 0.05 mol/l (0.1N)

- Na_2CO_3
- M = 105.99 g/mol
- CAS [497-19-8]
- EC number: 207-838-8

Physical data:
- Density: ~ 1,1 g/cm³

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 011-005-00-2
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

1ml = 0.005299 g Na_2CO_3

HS-No: 2836 20 00 00

Code	Capacity
S5048-0-1000	1.0 L

S5049-0, Sodium carbonate, solution 0.5 mol/l (1N)

- Na_2CO_3
- M = 105.99 g/mol
- CAS [497-19-8]
- EC number: 207-838-8

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 011-005-00-2
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

1ml = 0.05299 g Na_2CO_3
S5049-0-1000

HS-No: 2836 20 00 00

Code	Capacity
S5049-0-1000	1.0 L

S

SODIUM CHLORIDE

Salt, Common salt, Rock Salt, Sea salt

- NaCl
- M = 58.44 g/mol
- CAS [7647-14-5]
- EC number: 231-598-3

Physical data:
- Spec. density: 2,17 g/cm³
- Bulk density: ~ 1140 kg/m³
- Solub. in water (20 °C): 358 g/l
- Melting point: 801 °C
- Boiling point: 1461 °C
- Vapour pressure: (865 °C) 1,3 hPa
- pH (100 g/l H_2O, 20 °C) ~ 4,5 - 7,0

Toxicological data:
- LD 50 (oral, rat): 3000 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

S5065-0, Sodium chloride, solution 0.1 mol/l (0.1N)

HS-No: 2836 20 00 00

- NaCl
- M = 58.44 g/mol
- CAS [7647-14-5]
- EC number: 231-598-3

Physical data:
- Form: Liquid
- Density: 1.004 g/m³

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

1ml = 0.005844 g NaCl

Code	Capacity
S5065-0-1000	1.0 L

S5068-1, Sodium chloride, reagent grade

HS-No: 2501 00 10 00

Assay	min. 99.8 %	Arsenic (As)	max. 0.00004 %
Insoluble in water	max. 0.005 %	Barium (Ba)	max. 0.001 %
pH (5%, H_2O)	5 - 8	Calcium (Ca)	max. 0.002 %
Bromides (Br)	max. 0.005 %	Copper (Cu)	max. 0.0002 %
Chlorates and Nitrates (as NO_3)	max. 0.003 %	Heavy metals (as Pb)	max. 0.0003 %
Hexacyanoferrate (II) ($Fe(CN)_6$)	max. 0.0001 %	Iron (Fe)	max. 0.0001 %
Iodides (I)	max. 0.001 %	Magnesium (Mg)	max. 0.0005 %
Phosphate (PO_4)	max. 0.0005 %	Nickel (Ni)	max. 0.0005 %
Sulfates (SO_4)	max. 0.001 %	Potassium (K)	max. 0.005 %
Total N	max. 0.0005 %		

Code	Capacity
S5068-1-0500	500 g
S5068-1-1000	1 kg

S5068-3, Sodium chloride, extra pure

HS-No: 2501 00 10 00

Assay (argentometric)	min. 99.5 %	Aluminium (Al)	max. 0.00002 %
Appearance of solution	clear and colourless	Ammonium (NH_4)	max. 0.001 %
pH (5%, H_2O)	5.0 - 7.5	Arsenic (As)	max. 0.0001 %
Free acid (as HCl)	max. 0.001 %	Barium (Ba)	max. 0.001 %
Free alkali (as NaOH)	max. 0.002 %	Calcium (Ca)	max. 0.002 %
Bromides (Br)	max. 0.005 %	Heavy metals (as Pb)	max. 0.0005 %
Hexacyanoferrate [$Fe(Cn)_6$]	max. 0.0001 %	Iron (Fe)	max. 0.0001 %
Iodides (I)	max. 0.001 %	Magnesium (Mg)	max. 0.001 %
Nitrites (absorbance of an aqueous)		Potassium (K)	max. 0.01 %
solution 10% at 354 nm	max. 0.01 A.U.	Loss on drying (130°C)	max. 0.3 %
Phosphates (PO_4)	max. 0.001 %	Residual solvents (Ph Eur/ICH)	excluded by production process
Sulfates (SO_4)	max. 0.005 %		

Code	Capacity
S5068-3-0500	500 g
S5068-3-1000	1 kg

SODIUM CHROMATE, ANHYDROUS

 T  N

- Na_2CrO_4
- M = 161.97 g/mol
- CAS [7775-11-3]
- EC number: 231-889-5

Physical data:
- Spec. density: 2,72 g/cm³
- Bulk density: ~ 1000 kg/m³
- Solub. in water (30°C): 873 g/l
- Melting point: ~ 792 °C
- pH (50 g/l H_2O, 20 °C) 8,5 - 10

Toxicological data:
- WGK: 3

Safety:
- EC Index no.: 024-017-00-8
- R: 49-43-50/53
- S: 53-24-37-45-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 9 M7 III UN 3077
- IMDG: 9 III UN 3077
- IATA/ICAO: 9 III UN 3077
- PAX: 911
- CAO: 911
- LGK: 6.1B
- Disposal: 15

S5069-1, Sodium chromate, anhydrous reagent grade

HS-No: 2841 50 00 00

Assay (iodometric)	min. 99.5%	Calcium (Ca)	max. 0.005 %
pH (5%, H_2O)	8.5 - 10.0	Copper (Cu)	max. 0.001 %
Chlorides (Cl)	max. 0.005 %	Iron (Fe)	max. 0.001 %
Sulfates (SO_4)	max. 0.01 %		

Code	Capacity
S5069-1-0500	500 g

SODIUM CHROMATE TETRAHYDRATE

 T+  N

$Na_2CrO_4 \cdot 4H_2O$

- $CrNa_2O_4 \cdot 4H_2O$
- M = 234.03 g/mol
- CAS [10034-82-9]
- EC number: 231-889-5

Physical data:
- Form: Solid
- Spec. density: 2,73 g/cm³
- Bulk density: 800 ~ 900 kg/m³
- Solub. in water (20°C): 443 g/l
- Melting point: ~ 792 °C
- pH (50 g/l H_2O, 20 °C) 8,5 - 10

Toxicological data:
- WGK: 3

Safety:
- EC Index no.: 024-018-00-3
- R: 45-46-60-61-E25-E26-34-42/43-E48/23-50/53
- S: 53-45-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 TC4 I UN 3290
- IMDG: 6.1 I UN 3290
- IATA/ICAO: 6.1 I UN 3290
- PAX: 606
- CAO: 607
- LGK: 6.1B
- Disposal: 15

S5070-3, Sodium chromate tetrahydrate, extra pure

HS-No: 2841 50 00 00

Assay (iodometric)	min. 99.5%	Calcium (Ca)	max. 0.005 %
pH (5%, H_2O)	8.5 - 10.0	Copper (Cu)	max. 0.001 %
Chlorides (Cl)	max. 0.01 %	Iron (Fe)	max. 0.001 %
Sulfates (SO_4)	max. 0.01 %		

Code	Capacity
S5070-3-0500	500 g

SODIUM DICHROMATE DIHYDRATE

 T+  N

Sodium bichromate,
Sodium pyrochromate

- $Na_2Cr_2O_7 \cdot 2H_2O$
- M = 298.00 g/mol
- CAS [7789-12-0]
- EC number: 234-190-3

Physical data:
- Spec. density: 2,52 g/cm³ (anhydrous substance)
- Bulk density: ~ 1200 kg/m³
- Solub. in water (20 °C): 731,8 g/l
- Melting point: 356,7 °C (anhydrous substance)
- Boiling point: 400 °C (decomposes)
- pH (100 g/l H_2O, 20 °C) 3,5

Toxicological data:
- LD 50 (oral, rat): 50 mg/kg
- WGK: 3

Safety:
- EC Index no.: 024-004-01-4
- R: 49-46-E21-E25-E26-37/38-41-43-50/53
- S: 53-36/37-45-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 T5 III UN 3288
- IMDG: 6.1 III UN 3288
- IATA/ICAO: 6.1 III UN 3288
- PAX: 619
- CAO: 619
- LGK: 6.1B
- Disposal: 15

S5087-1, Sodium dichromate dihydrate, reagent grade

HS-No: 2841 30 00 00

Assay (iodometric)	min. 99.5 %	Calcium (Ca)	max. 0.002 %
Insoluble matter and precipitable by ammonium hydroxide	max. 0.005 %	Copper (Cu)	max. 0.001 %
		Iron (Fe)	max. 0.002 %
Chlorides (Cl)	max. 0.001 %	Lead (Pb)	max. 0.002 %
Sulfates (SO_4)	max. 0.005 %	Potassium (K)	max. 0.01 %
Aluminium (Al)	max. 0.002 %		

Code	Capacity
S5087-1-0500	500 g
S5087-1-1000	1 kg

SODIUM DIHYDROGEN PHOSPHATE ANHYDROUS

Sodium biphosphate,
Sodium phosphate monobasic

- NaH_2PO_4
- M = 120.0 g/mol
- CAS [7558-80-7]
- EC number: 231-449-2

Physical data:
- Bulk density: ~ 940 kg/m³
- Solub. in water (20 °C): 850 g/l
- Melting point: 200 °C
- pH (50 g/l H_2O, 20 °C) ~ 4,5

Toxicological data:
- LD 50 (oral, rat): 8290 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

S5092-3, Sodium dihydrogen phosphate anhydrous, extra pure

HS-No: 2835 22 00 00

Assay (acidimetric)	min. 99 %	Arsenic (As)	max. 0.0002 %
Insoluble in water	max. 0.005 %	Heavy metals (as Pb)	max. 0.001 %
pH (5%,H_2O)	4.2 - 4.5	Iron (Fe)	max. 0.001 %
Chlorides (Cl)	max. 0.005 %	Organic volatile impurities	passes test
Sulfates (SO_4)	max. 0.03 %	Loss on drying (130°C)	max. 1 %
Aluminium, calcium and related elements	passes test		

Code	Capacity
S5092-3-1000	1 kg

SODIUM DIHYDROGEN PHOSPHATE DIHYDRATE

Sodium biphosphate,
mono-Sodium orthophosphate,
Sodium phosphate monobasic

- $NaH_2PO_4 \cdot 2H_2O$
- M = 156.01 g/mol
- CAS [13472-35-0]
- EC number: 231-449-2

Physical data:
- Spec. density: 1,92 g/cm³
- Bulk density: ~ 1000 kg/m³
- Solub. in water (20 °C): 850 g/l
- Melting point: 60 °C
- pH (50 g/l H_2O, 20 °C) ~ 4,2 - 4,5

Toxicological data:
- LD 50 (oral, rat): 8290 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

S5099-1, Sodium dihydrogen phosphate dihydrate, reagent grade

HS-No: 2835 22 00 00

Assay (acidimetric)	min. 99 %	Calcium (Ca)	max. 0.005 %
Insoluble in water	max. 0.005 %	Copper (Cu)	max. 0.0002 %
pH (5%, H_2O)	4.2 - 4.5	Heavy metals (as Pb)	max. 0.0005 %
N compounds (as N)	max. 0.001 %	Iron (Fe)	max. 0.0005 %
Chlorides (Cl)	max. 0.0005 %	Lead (Pb)	max. 0.0002 %
Sulfates (SO_4)	max. 0.003 %	Magnesium (Mg)	max. 0.005 %
Arsenic (As)	max. 0.0002 %	Nickel (Ni)	max. 0.001 %

Code	Capacity
S5099-1-0500	500 g
S5099-1-1000	1 kg

SODIUM DIHYDROGEN PHOSPHATE MONOHYDRATE

Sodium biphosphate,
Monosodium orthophosphate,
Primary sodium phosphate,
Sodium phosphate monobasic

- $NaH_2PO_4 \cdot H_2O$
- M = 137.99 g/mol
- CAS [10049-21-5]
- EC number: 231-449-2

Physical data:
- Spec. density: 2,04 g/cm³
- Bulk density: ~ 880 kg/m³
- Solub. in water (20 °C): 850 g/l
- Melting point: ~ 100 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) 4,1 - 4,5

Toxicological data:
- LD 50 (oral, rat): 8290 mg/kg (anhydrous substance)
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

S5108-1, Sodium dihydrogen phosphate monohydrate, reagent grade

HS-No: 2835 22 00 00

Assay	min. 98 %	Arsenic (As)	max. 0.0002 %
Insoluble in water	max. 0.005 %	Calcium (Ca)	max. 0.01 %
pH (5%, H_2O)	4.2 - 4.5	Heavy metals (as Pb)	max. 0.001 %
Chlorides (Cl)	max. 0.014 %	Iron (Fe)	max. 0.001 %
Sulfates (SO_4)	max. 0.03 %	Potassium (K)	max. 0.01 %
Total N	max. 0.005 %		

Code	Capacity
S5108-1-0250	250 g
S5108-1-0500	500 g
S5108-1-1000	1 kg

SODIUM DISULFITE


Xn

Sodium metabisulfite, Sodium pyrosulfite

- $Na_2S_2O_5$
- M = 190.10 g/mol
- CAS [7681-57-4]
- EC number: 231-673-0

Physical data:
- Form: Powder
- Spec. density: 1,48 g/cm³
- Bulk density: ~ 1100 - 1200 kg/m³
- Solub. in water (20 °C): ~ 650 g/l
- Melting point: ~ 150 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) 3,5 - 5,0

Toxicological data:
- LD 50 (oral, rat): 1540 mg/kg
- WGK: 1

Safety:
- R: 22-31-37-41
- S: 26-39-46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 14

S5110-1, Sodium disulfite, reagent grade

HS-No: 2832 10 00 00

Assay (Iodometric)	min. 98.0 %	Arsenic (As)	max. 0.0005 %
Identity	passes test	Copper (Cu))	max. 0.0005 %
Appearance of solution	passes test	Heavy metals (as Pb)	max. 0.001 %
Insoluble in water	max. 0.005 %	Iron (Fe)	max. 0.0005 %
pH (5%, H_2O)	3.5 – 5.0	Lead (Pb)	max. 0.0005 %
Chlorides (Cl)	max. 0.005 %	Zinc (Zn)	max. 0.001 %
Thiosulfates (S_2O_3)	max. 0.05 %		

Code	Capacity
S5110-1-0500	500 g

S5110-3, Sodium disulfite, extra pure

HS-No: 2832 10 00 00

Assay (iodometric)	min. 97 %	Iron (Fe)	max. 0.001 %
Appearance of solution	passes test	Lead (Pb)	max. 0.0005 %
pH (5%, H_2O)	3.5 - 5.0	Mercury (Hg)	max. 0.0001 %
Chlorides (Cl)	max. 0.01 %	Selenium (Se)	max. 0.0006 %
Thiosulfates (S_2O_3)	max. 0.02 %	Zinc (Zn)	max. 0.001 %
Arsenic (As)	max. 0.0002 %	Residual solvents (Ph Eur/ICH)	Excluded by production process
Copper (Cu)	max. 0.01 %		

Code	Capacity
S5110-3-0500	500 g
S5110-3-1000	1 kg

SODIUM FLUORIDE


T

Chemifluor, Ossalin, Ossin, Zymafluor

- NaF
- M = 41.99 g/mol
- CAS [7681-49-4]
- EC number: 231-667-8

Physical data:
- Spec. density: 2,8 g/cm³
- Bulk density: ~ 800 kg/m³
- Solub. in water (20 °C): 42 g/l
- Melting point: 933 °C
- Boiling point: 1704 °C
- Vapour pressure: (1077 °C) 1 hPa
- pH (40 g/l H_2O, 20 °C) ~ 10,2

Toxicological data:
- LD 50 (oral, rat): 52 mg/kg
- MAK: 2,5 mg/m³
- WGK: 1

Safety:
- EC Index no.: 009-004-00-7
- R: 25-32-36/38
- S: 22-36-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 6.1 T5 III UN 1690
- IMDG: 6.1 III UN 1690
- IATA/ICAO: 6.1 III UN 1690
- PAX: 619
- CAO: 619
- LGK: 6.1B
- Disposal: 23

S5115-3, Sodium fluoride, extra pure

HS-No: 2826 11 00 00

Assay (complexometric)	min. 98.5 %	Copper (Cu)	max. 0.002 %
Appearance of solution	clear and colourless	Heavy metals (as Pb)	max. 0.002 %
Free acid (as HF)	max. 0.2 %	Iron (Fe)	max. 0.005 %
Free alkali (as NaOH)	max. 0.1 %	Lead (Pb)	max. 0.002 %
Chlorides (Cl)	max. 0.001 %	Nickel (Ni)	max. 0.002 %
Phosphates (PO_4)	max. 0.002 %	Loss on drying (150°C)	max. 0.5 %
Sodium Hexafluorosilicate (Na_2SiF_6)	max. 0.1 %	Organic volatile impurities	passes test
Sulfates (SO_4)	max. 0.01 %	Residual solvents (Ph Eur/ICH)	Excluded by production process

Code	Capacity
S5115-3-1000	1 kg

SODIUM HEXAMETAPHOSPHATE

Sodium polyphosphate, Graham's salt

- $(NaPO_3)_n$
- CAS [10361-03-2]
- EC number: 233-782-9

Physical data:
- Spec. density: 2,48 g/cm³
- Bulk density: ~ 900 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 628 °C
- pH (10 g/l H_2O, 20 °C) ~ 5,7

Toxicological data:
- LD 50 (oral, rat): 5000 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

S5124-3, Sodium hexametaphosphate, extra pure

HS-No: 2835 39 00 90

Assay (in P_2O_5) (acidmetric)	min. 67 %	Copper (Cu)	max. 0.0025 %
Insoluble in water	max. 0.01 %	Iron (Fe)	max. 0.01 %
Chlorides (Cl)	max. 0.03 %	Lead (Pb)	max. 0.0025 %
Sulfates (SO_4)	max. 0.1 %	Nickel (Ni)	max. 0.0025 %
Arsenic (As)	max. 0.0002 %		

Code	Capacity
S5124-3-1000	1 kg

SODIUM HYDROGEN CARBONATE

Sodium bicarbonate

- $NaHCO_3$
- M = 84.01 g/mol
- CAS [144-55-8]
- EC number: 205-633-8

Physical data:
- Spec. density: 2,22 g/cm³
- Bulk density: ~ 1000 kg/m³
- Solub. in water (20 °C): 95,5 g/l
- Melting point: 270 °C (decomposes)
- Vapour pressure: (30 °C) 8,3 hPa
- pH (50 g/l H_2O, 20 °C) ≤ 8,6

Toxicological data:
- LD 50 (oral, rat): 4220 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

S5135-1, Sodium hydrogen carbonate, reagent grade

HS-No: 2836 30 00 00

Assay (acidimetric)	min. 99.7 %	Copper (Cu)	max. 0.0002 %
Insoluble in water	max. 0.015 %	Heavy metals (as Pb)	max. 0.005 %
Chlorides (Cl)	max. 0.001 %	Iron (Fe)	max. 0.0005 %
Phosphates (PO_4)	max. 0.001 %	Lead (Pb)	max. 0.0005 %
Phosphates and silicates (as SiO_2)	max. 0.005 %	Magnesium (Mg)	max. 0.005 %
S compounds as (SO_4)	max. 0.003 %	Potassium (K)	max. 0.005 %
Total N	max. 0.0005 %	Zinc (Zn)	max. 0.0005 %
Ammonium (NH_4)	max. 0.0005 %	I red. matter (as SO_2)	max. 0.005 %
Calcium (Ca)	max. 0.005 %	Loss on drying (silica gel)	max. 0.2 %
Cadmium (Cd)	max. 0.0005 %		

Code	Capacity
S5135-1-0500	500 g
S5135-1-1000	1 kg

SODIUM HYDROGEN SULFATE MONOHYDRATE


Xi

- $NaHSO_4 \cdot H_2O$
- M = 138.07 g/mol
- CAS [10034-88-5]
- EC number: 231-665-7

Physical data:
- Spec. density: 2,12 g/cm³ (20 °C)
- Solub. in water 670 g/l (20 °C)
- pH value - 1 (50 g/l H_2O, 20 °C)
- Melting point - 58.2 °C
- Bulk density 900 - 970 kg/m³

Toxicological data:
- WGK: 1

Safety:
- irritant
- R 41
- S 24-26
- Poison class (CH) 3
- EC-Index-No. 016-046-00-X

Transport/storage:
- LGK: 8B
- Packing-cat E
- Disposal: 14
- Road/Rail: 8/16
- IMDG-Code: 8/III UN 3260
- IATA/DGR: 8 III UN 3260
- CAO: 823
- PAX: 882

S5122-1, Sodium hydrogen sulfate monohydrate, reagent grade

HS-No: 2833 19 00 00

Assay	min. 99 %	Arsenic (As)	max. 0.00005 %
Substances insoluble in water	max. 0.005 %	Aluminium (Al)	max. 0.001 %
Nitrate (NO_3)	max. 0.00025 %	Magnesium (Mg)	max. 0.0004 %
Chloride (Cl)	max. 0.001 %	Potassium (K)	max. 0.002 %
Phosphates (PO_4)	max. 0.0005 %	Calcium (Ca)	max. 0.001 %
Heavy metals (as Pb))	max. 0.0005 %	Iron (Fe)	max. 0.0005 %

Code	Capacity
S5122-1-0500	500 g

SODIUM HYDROSULFITE


Xn

- $Na_2S_2O_4$
- M = 174.11 g/mol
- CAS [7775-14-6]
- EC number: 231-890-0

Physical data:
- Spec. density: 2.38 g/cm³ (20 °C)
- Solub. in water ~ 250 g/l (20 °C) (decomposes)
- pH value ~ 7 - 9 (50 g/l H_2O, 20 °C)
- Melting point ~ 100 °C (decomposes)
- Bulk density ~1250 kg/m³
- Ignition temp. > 200 °C

Toxicological data:
- WGK: 1
- LD 50 (oral, rat) ~ 2500 mg/kg

Safety:
- harmful
- R 7-22-31
- S 7/8-26-28.1-43.6
- Poison class (CH) 3
- EC-Index-No. 016-028-00-1

Transport/storage:
- LGK: 4.2
- Packing-cat E
- Disposal: 14
- Road/Rail: 4.2/13b
- IMDG-Code: 4.2/II UN 1384
- IATA/DGR: 4.2 II UN 1384
- CAO: 418
- PAX: 416

S5123-3, Sodium hydrosulfite, reagent grade

HS-No: 2826 11 00 00

Assay (iodometric)	min. 87 %	Chlorides (Cl)	max. 0.01 %
Identity	passes test	Iron (Fe)	max.0.002 %

Code	Capacity
S5123-3-0500	500 g

S

SODIUM HYDROXIDE

 C

Caustic soda

- NaOH
- M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Form Solid
- Spec. density: 2,13 g/cm³
- Solub. in water (20 °C): soluble
- Melting point: 323 °C
- Boiling point: 1390 °C
- pH (50 g/l H_2O, 20 °C) ~ 14

Toxicological data:
- MAK: 2 mg/m³
- WGK: 1

Safety:
- EC Index no.: 011-002-00-6
- R: 35
- S: 26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C6 II UN 1823
- IMDG: 8 II UN 1823
- IATA/ICAO: 8 II UN 1823
- PAX: 814
- CAO: 816
- LGK: 8 B
- Disposal: 13

S5158-1, Sodium hydroxide pellets, reagent grade

HS-No: 2815 11 00 00

Assay (acidimetric)	min. 99 %	Arsenic (As)	max. 0.0001 %
Carbonate (as potassium carbonate)	max. 1 %	Calcium (Ca)	max. 0.0005 %
Chloride (Cl)	max. 0.0005 %	Copper (Cu)	max. 0.0005 %
Phosphate (PO_4)	max. 0.0005 %	Iron (Fe)	max. 0.0005 %
Sulphate (SO_4)	max. 0.0005 %	Lead (Pb)	max. 0.0002 %
Silicates (SiO_2)	max. 0.001 %	Manganese (Mn)	max. 0.0005 %
Total nitrogen (N)	max. 0.0003 %	Mercury (Hg)	max. 0.000005 %
Heavy metals (as Pb)	max. 0.0005 %	Nickel (Ni)	max. 0.0005 %
Aluminium (Al)	max. 0.0005 %	Potassium (K)	max. 0.02 %
		Zinc (Zn)	max. 0.0005 %

Code	Capacity
S5158-1-1000	1 kg
S5158-1-5000	5 kg

S5158-3, Sodium hydroxide pellets, extra pure

HS-No: 2815 11 00 00

Assay (acidimetric)	98.0 – 100.5 %	Copper (Cu)	max. 0.0005 %
Carbonate (as Na_2CO_3)	max. 1 %	Iron (Fe)	max. 0.001 %
Chloride (Cl)	max. 0.005 %	Mercury (Hg)	max. 0.00001 %
Phosphate (PO_4)	max. 0.002 %	Lead (Pb)	max. 0.0005 %
Sulphate (SO_4)	max. 0.003 %	Potassium (K)	max. 0.10 %
Silicates (SiO_2)	max. 0.01 %	Zinc (Zn)	max. 0.0025 %
Total nitrogen (N)	max. 0.0005 %	Identity	passes test
Heavy metals (as Pb)	max. 0.0005 %	Appearance of solution	passes test
Aluminium (Al)	max. 0.001 %	Insoluble substances and organic matter	passes test
Arsenic (As)	max. 0.0003 %		

Code	Capacity
S5158-3-9050	50 kg

SODIUM HYDROXIDE 50 %

 C

- HNaO
- M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Form: Liquid
- Density: 1.4 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: 12 °C
- Boiling point: 143 °C
- Vapour pressure: (20 °C) 2 hPa
- pH (20 °C) > 14

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 011-002-00-6
- R: 35
- S: 23.2-51-26-36/37/39-45

Transport/storage:
- ADR: 8 C5 II UN 1824
- IMDG: 8 II UN 1824
- IATA/ICAO: 8 II UN 1824
- PAX: 809
- CAO: 813
- LGK: 8 B

S5159-1, Sodium hydroxide 50%, reagent grade

HS-No: 2815 12 00 00

Assay	min. 50.0 %	Copper (Cu)	max. 1 ppm
Colour	max. 10 Hazen	Iron (Fe)	max. 3 ppm
Silicates (SiO_2)	max. 10 ppm	Lead (Pb)	max. 2 ppm
Phosphate (PO_4)	max. 1 ppm	Magnesium (Mg)	max. 0.5 ppm
Aluminium (Al)	max. 5 ppm	Mercury (Hg)	max. 0.2 ppm
Cadmium (Cd)	max. 1 ppm	Nickel (Ni)	max. 3 ppm
Chromium (Cr)	max. 1 ppm	Potassium (K)	max. 200 ppm
Calcium (Ca)	max. 3 ppm		

Code	Capacity
S5159-1-9025	25 kg
S5159-1-930E	300 kg

S5159-10, Sodium Hydroxide 50%, Selective grade

HS-No: 2815 12 00 00

Assay	min. 49.0 %	Sulfate (SO_4)	max. 5 ppm
Sodium Carbonate (Na_2CO_3)	max. 0.05 %	Aluminium (Al)	max. 5 ppm
Colour	max. 10 Hazen	Calcium (Ca)	max. 3 ppm
Insoluble matter	max. 20 ppm	Copper (Cu)	max. 1 ppm
Chloride (Cl)	max. 10 ppm	Iron (Fe)	max. 3 ppm
Heavy Metals (as Ag)	max. 2 ppm	Lead (Pb)	max. 2 ppm
Nitrogen Compounds (as N)	max. 1 ppm	Magnesium (Mg)	max. 1 ppm
Phosphate (PO_4)	max. 1 ppm	Mercury (Hg)	max. 2 ppm
Potassium (K)	max. 200 ppm	Nickel (Ni)	max. 3 ppm

Code	Capacity
S5159-10-930E	300 kg

S5159-6, Sodium hydroxide 50%, LE

HS-No: 2815 12 00 00

Assay	min. 50.0 %	Copper (Cu)	max. 1 ppm
Colour	max. 10 Hazen	Iron (Fe)	max. 3 ppm
Silicates (SiO_2)	max. 10 ppm	Lead (Pb)	max. 2 ppm
Phosphate (PO_4)	max. 1 ppm	Magnesium (Mg)	max. 0.5 ppm
Aluminium (Al)	max. 5 ppm	Mercury (Hg)	max. 0.2 ppm
Cadmium (Cd)	max. 1 ppm	Nickel (Ni)	max. 3 ppm
Chromium (Cr)	max. 1 ppm	Potassium (K)	max. 200 ppm
Calcium (Ca)	max. 3 ppm		

Code	Capacity
S5159-6-9025	25 kg

S5159-6, Sodium Hydroxide 50%, EC-100 (EL Grade)

HS-No: 2815 12 00 00

Assay	min. 49.0 %	Calcium (Ca)	max. 1000 ppb
Colour	max. 10 Hazen	Copper (Cu)	max. 500 ppb
Chloride (Cl)	max. 10 ppm	Iron (Fe)	max. 1000 ppb
Silicate (SiO_2)	max. 10 ppm	Lead (Pb)	max. 1000 ppb
Phosphate (PO_4)	max. 1 ppm	Magnesium (Mg)	max. 500 ppb
Aluminium (Al)	max. 500 ppb	Nickel (Ni)	max. 500 ppb
Chromium (Cr)	max. 500 ppb	Zin (Zn)	max. 500 ppb

Code	Capacity
S5159-6-930E	300 kg

S5159-8, Sodium Hydroxide 50%, CMOS grade

HS-No: 2815 12 00 00

Assay	50.0 – 52.0 %	Aluminium (Al)	max. 100 ppb
Colour	max. 10 APHA	Calcium (Ca)	max.1500 ppb
Insoluble matter	max. 30 ppm	Chromium (Cr)	max. 500 ppb
Sodium Carbonate (Na_2CO_3)	max. 0.05 %	Copper (Cu)	max. 50 ppb
Ammonium Hydroxide Precipitate	max. 0.005 %	Iron (Fe)	max. 600 ppb
Chloride (Cl)	max. 20 ppm	Lead (Pb)	max. 250 ppb
Heavy Metals (as Ag)	max. 2 ppm	Magnesium (Mg)	max. 300 ppb
Nitrogen Compounds (as N)	max. 1 ppm	Mercury (Hg)	max. 50 ppb
Phosphate (PO_4)	max. 1 ppm	Nickel (Ni)	max. 100 ppb
Potassium (K)	max. 50 ppm	Silicon (Si)	max. 1000 ppb
Sulfate (SO_4)	max. 5 ppm	Zinc (Zn)	max. 250 ppb

Code	Capacity
S5159-8-920E	200 Lit

SODIUM HYDROXIDE, VOLUMETRIC SOLUTIONS

S5161-0, Sodium hydroxide, solution 0.01 mol/l (0.01N)

- NaOH
- M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: 1,00 g/cm³
- pH (20 °C) ~ 12,5

Toxicological data:
- MAK: 2 mg/m³ (pure substance)
- WGK: 0

Safety:
- EC Index no.: 011-002-00-6
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 8 B

1ml = 0.000400 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5161-0-1000	1.0 L

S5165-0, Sodium hydroxide, solution 0.02 mol/l (0.02N)

- NaOH
- M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: 1,00 g/cm³
- pH (20 °C) ~ 12,5

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 011-002-00-6
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 8 B

1ml = 0.00080 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5165-0-1000	1.0 L

S5166-0, Sodium hydroxide solution 0.025 mol/l (0.025N)

- NaOH
- M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 011-002-00-6
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 8 C5 III UN 1824
- IMDG: 8 III UN 1824
- IATA/ICAO: 8 III UN 1824
- PAX: 819
- CAO: 821
- LGK: 8 B

1ml = 0.0010 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5166-0-1000	1.0 L

S5167-0, Sodium hydroxide, solution 0.05 mol/l (0.05N)

- NaOH
- M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: 1,003 g/cm³

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 011-002-00-6
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 8 B

1ml = 0.0020 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5167-0-1000	1.0 L

S5168-0, Sodium hydroxide, solution 0.1 mol/l (0.1N)

- NaOH
- M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: 1,00 g/cm³
- pH (20 °C) ~ 12,7

Toxicological data:
- MAK: 2 mg/m³ (pure substance)
- WGK: 0

Safety:
- EC Index no.: 011-002-00-6
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 8 B

1ml = 0.00400 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5168-0-1000	1.0 L

S5171-0, Sodium hydroxide, solution 0.2 mol/l (0.2N)

Xi

- NaOH·M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: 1,01 g/cm³
- pH (20 °C) ~ 13

Toxicological data:
- MAK: 2 mg/m³ (pure substance)
- WGK: 0

Safety:
- EC Index no.: 011-002-00-6
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 8 C5 II UN 1824
- IMDG: 8 II UN 1824
- IATA/ICAO: 8 II UN 1824
- PAX: 809
- CAO: 813
- LGK: 8 B

1ml = 0.008002 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5171-0-1000	1.0 L

S5172-0, Sodium hydroxide, solution 0.25 mol/l (0.25N)

Xi

- NaOH · M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: 1,01 g/cm³
- pH (20 °C) ~ 13,5

Toxicological data:
- MAK: 2 mg/m³ (pure substance)
- WGK: 0

Safety:
- EC Index no.: 011-002-00-6
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 8 C5 II UN 1824
- IMDG: 8 II UN 1824
- IATA/ICAO: 8 II UN 1824
- PAX: 809
- CAO: 813
- LGK: 8 B

1ml = 0.0100 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5172-0-1000	1.0 L

S5175-0, Sodium hydroxide, solution 0.4 mol/l (0.4 N)

Xi

- NaOH · M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: 1,02 g/cm³
- pH (20 °C) ~ 13,5

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 011-002-00-6
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C5 II UN 1824
- IMDG: 8 II UN 1824
- IATA/ICAO: 8 II UN 1824
- PAX: 809
- CAO: 813
- LGK: 8 B

1ml = 0.01600 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5175-0-1000	1.0 L

S5176-0, Sodium hydroxide, solution 0.5 mol/l (0.5 N)

C

- NaOH · M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: 1,02 g/cm³
- pH (20 °C) ~ 13,5

Toxicological data:
- MAK: 2 mg/m³ (pure substance)
- WGK: 0

Safety:
- EC Index no.: 011-002-00-6
- R: 34
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C5 II UN 1824
- IMDG: 8 II UN 1824
- IATA/ICAO: 8 II UN 1824
- PAX: 809
- CAO: 813
- LGK: 8 B

1ml = 0.02000 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5176-0-1000	1.0 L

S5179-0, Sodium hydroxide, solution 1 mol/l (1N)

C

- NaOH · M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: 1,05 g/cm³
- pH (20 °C) ~ 13,7

Toxicological data:
- MAK: 2 mg/m³ (pure substance)
- WGK: 1

Safety:
- EC Index no.: 011-002-00-6
- R: 34
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C5 II UN 1824
- IMDG: 8 II UN 1824
- IATA/ICAO: 8 II UN 1824
- PAX: 809
- CAO: 813
- LGK: 8 B

1ml = 0.0400 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5179-0-1000	1.0 L

S5186-0, Sodium hydroxide, solution 2 mol/l (2N)

C

- NaOH
- M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: 1,09 g/cm³
- pH (20 °C) ~ 13,8

Toxicological data:
- MAK: 2 mg/m³ (pure substance)
- WGK: 1

Safety:
- EC Index no.: 011-002-00-6
- R: 35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C5 II UN 1824
- IMDG: 8 II UN 1824
- IATA/ICAO: 8 II UN 1824
- PAX: 809
- CAO: 813
- LGK: 8 B

1ml = 0.080 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5186-0-1000	1.0 L

S5199-0, Sodium hydroxide, solution 5 mol/l (5N)

C

- NaOH
- M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: ~ 1,18 g/cm³

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 011-002-00-6
- R: 35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C5 II UN 1824
- IMDG: 8 II UN 1824
- IATA/ICAO: 8 II UN 1824
- PAX: 809
- CAO: 813
- LGK: 8 B

1ml = 0.2000 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5199-0-1000	1.0 L

S5201-0, Sodium hydroxide, solution 6 mol/l (6N)


C

- NaOH
- M = 40.00 g/mol
- CAS [1310-73-2]
- EC number: 215-185-5

Physical data:
- Density: ~ 1,23 g/cm³

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 011-002-00-6
- R: 35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C5 II UN 1824
- IMDG: 8 II UN 1824
- IATA/ICAO: 8 II UN 1824
- PAX: 809
- CAO: 813
- LGK: 8 B

1ml = 0.24 g NaOH

HS-No: 2815 12 00 00

Code	Capacity
S5201-0-1000	1.0 L

SODIUM HYPOCHLORITE 10%


C

Clorox

NaClO

- ClNaO
- M = 74.44 g/mol
- CAS [7681-52-9]
- EC number: 231-853-9

Physical data:
- Form: Liquid
- Density: 1.22 - 1.25 g/cm³

Toxicological data:
- WGK: 2

Safety:
- EC Index no.: 017-011-00-1
- R: 15-25-34
- S: 26-28.1-36/37/39-45-50.1

Transport/storage:
- ADR: 8 C9 III UN 1791
- IMDG: 8 III UN 1791
- IATA/ICAO: 8 III UN 1791
- PAX: 819
- CAO: 821
- LGK: 8

S5024-3, Sodium hypochlorite 10%, extra pure

Assay (Iodometric) ..... approx. 10 %

HS-No: 2828 90 00 00

Code	Capacity
S5024-3-4000	4.0 L

SODIUM HYPOCHLORITE SOLUTION 5%


Xi

Clorox

NaClO

- ClNaO
- 74.44 g/mol
- CAS [7681-52-9]
- EC number: 231-668-3

Physical data:
- Form: Liquid
- Density: 1.094 g/cm³

Toxicological data:
- WGK: 2

Safety:
- EC Index no: 017-011-00-1
- R: 31-36/38
- S: 23.2-51-26-28.1-36/39-45-50-1
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C9 III UN 1791
- IMDG: 8 III UN 1791
- IATA/ICAO: 8 III UN 1791
- PAX: 891
- CAO: 821
- LGK: 8

S5203-3, Sodium hypochlorite solution 5%

Assay (iodometric) ..... approx. 5 %

HS-No: 2828 90 00 00

Code	Capacity
S5203-3-1000	1.0 L
S5203-3-4000	4.0 L

SODIUM HYPOPHOSPHITE MONOHYDRATE

- $NaH_2PO_2 \cdot H_20$
- M = 105.99 g/mol
- CAS [10039-56-2]
- EC number: 231-669-9

Physical data:
- Form: Crystals
- Bulk density: ~ 800 - 1000 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: > 90 °C (decomposes)
- pH (100 g/l H_2O, 20 °C) 5,5 - 7,0

Toxicological data:
- WGK: 3*

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

S5220-1, Sodium hypophosphite monohydrate, reagent grade

HS-No: 2835 10 00 00

Assay (bromometric)	min. 99 %	Sulfates (SO_4)	max. 0.02 %
Appearance of solution	passes test	Arsenic (As)	max. 0.0002 %
Acidly reacting impurities	passes test	Calcium (Ca)	max. 0.02 %
Chlorides (Cl)	max. 0.02 %	Heavy metals (as Pb)	max. 0.0005 %
Phosphates, phosphates	passes test	Iron (Fe)	max. 0.0005 %

Code	Capacity
S5220-1-0500	500 g

SODIUM IODIDE

NaI

- NaI
- M = 149.89 g/mol
- CAS [7681-82-5]
- EC number: 231-679-3

Physical data:
- Form: Powder
- Spec. density: 3.67 g/cm³
- Bulk density: ~ 1500 - 2000 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 662 °C
- Boiling point: 1304 °C
- Vapour pressure: (767 °C) 1.3 hPa
- pH (50 g/l H_2O, 20 °C) ~ 6 - 9

Toxicological data:
- LD 50 (oral,rat): 4340 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 14

S5211-1, Sodium iodide, reagent grade

HS-No: 2827 60 00 90

Assay (argentometric)	min. 99.5 %	Calcium (Ca)	max. 0.001 %
Insoluble in water	max. 0.01 %	Copper (Cu)	max. 0.0001 %
pH (5%, H_2O)	6.0 – 9.0	Heavy Metals (as Pb)	max. 0.0005 %
Chlorides, bromides (as Cl)	max. 0.01 %	Iron (Fe)	max. 0.0005 %
Iodates (IO3)	max. 0.0002 %	Lead (Pb)	max. 0.0001 %
Phosphates (PO_4)	max. 0.001 %	Magnesium (Mg)	max. 0.001 %
Sulfates (SO_4)	max. 0.002 %	Nickel (Ni)	max. 0.00001 %
Total N	max. 0.002 %	Potassium (K)	max. 0.01 %
Barium (Ba)	max. 0.002 %	Loss on drying (105°)	max. 0.5% %

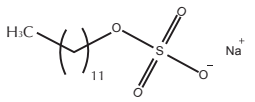
Code	Capacity
S5211-1-0500	500 g
S5211-3-0500	500 g

S

SODIUM LAURYL SULPHATE

Xn

Dodecy culfate sodium salf, SDS



- $C_{12}H_{25}NaO_4S$
- M = 288.38 g/mol
- CAS [151-21-3]
- EC number: 205-788-1

Physical data:
- Form: Powder
- Spec. density: 1.1 g/cm³
- Bulk density: ~ 490 - 560 kg/m³
- Solub. in water (20 °C): ~ 150 g/l
- Melting point: 204 - 207 °C
- Flash point: > 100 °C
- pH (10 g/l H_2O, 20 °C) 7.5 - 9.0

Toxicological data:
- LD 50 (oral, rat): 1288 mg/kg
- WGK: 2

Safety:
- R: 22-36/38
- S: 46
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

S5200-3, Sodium lauryl sulphate, purity grade

HS-No: 2920 90 10 90

Assay	min. 99.5 %	Chloride (Cl)	0.2 %
pH (1%, H_2O)	6.0 – 7.5	Lead (Pb)	2 ppm
C_{12} content	min. 99 %	A_{200} (3%, H_2O)	0.4
Water	1.0 %	A_{280} (3%, H_2O)	0.1
Phosphate (PO_4)	1 ppm		

Code	Capacity
S5200-3-0100	100 g
S5200-3-0500	500 g
S5200-3-1000	1 kg

SODIUM METAPERIODATE

O

Soduim periodate

$NaIO_4$

- $INaO_4$
- M = 213.89 g/mol
- CAS [7790-28-5]
- EC number: 232-197-6

Physical data:
- Form: Crystals
- Spec. density: 3.87 g/cm³
- Bulk density: 2000 - 2400 kg/m³
- Solub. in water (20 °C): 91 g/l
- Melting point: 300 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) ~ 5.2

Toxicological data:
- WGK: 1

Safety:
- R: 8
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 O2 I UN 1479
- IMDG: 5.1 I UN 1479
- IATA/ICAO: 5.1 I UN 1479
- PAX: 509
- CAO: 512
- LGK: 5.1 A
- Disposal: 22

S5233-1, Sodium metaperiodate, reagent grade

HS-No: 2829 90 80 00

Assay (argentometric)	99.8 – 100.3 %	Nitrates (NO_3)	max. 0,01 %
pH (5%, H_2O)	4.0 – 4.5	Sulfates (SO_4)	max. 0.005 %
Iodides (I)	max. 0.001 %	Manganese (Mn)	max. 0.0001 %
Other halogens (as Cl)	max. 0.01 %		

Code	Capacity
S5233-1-0101	100 g
S5233-1-0251	250 g

SODIUM MOLYBDATE DIHYDRATE

$Na_2M_0O_4{\cdot}2H_2O$

- $M_0Na_2O_4{\cdot}2H_2O$
- M = 241.95 g/mol
- CAS [10102-40-6]
- EC number: 231 551-7

Physical data:
- Form: Crystals
- Spec. density: 3.6 g/cm³
- Bulk density: ~ 1000 kg/m³
- Solub. in water (25 °C): 840 g/l
- pH (50 g/l H_2O, 20 °C) ~ 7.9 - 10.3

Toxicological data:
- LD 50 (oral, rat): 98 mg/kg
- MAK: 5 mg/m³
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 15

S5237-3, Sodium molybdate dihydrate, extra pure

HS-No: 2814 70 00 00

Assay	min. 99 %	Heavy metals (as Pb)	max. 0.001 %
Appearance of solution	passes test	Iron (Fe)	max. 0.001 %
Chlorides (Cl)	max. 0.005 %	Lead (Pb)	max. 0.001 %
Phosphates, arseniates, silicates (as PO_4)	max. 0.05 %	Loss on drying (140ºC, 3h)	14 – 16 %
Silicates (as PO_4)	max. 0.001 %	Residual solvents (Ph Eur/USP)	Excluded by production process
Ammonium (NH_4)	max. 0.001 %		

Code	Capacity
S5237-3-1000	1 kg

SODIUM NITRATE

O Xn

Nitric acid sodium salt

- $NaNO_3$
- M = 84.99 g/mol
- CAS [7631-99-4]
- EC number: 231-554-3

Physical data:
- Spec. density: 2,26 g/cm³
- Bulk density: ~ 1200 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 308 °C
- pH (50 g/l H_2O, 20 °C) 5,5 - 8,3

Toxicological data:
- LD 50 (oral, rat): 1267 mg/kg
- WGK: 1

Safety:
- R: 8-22-36
- S: 22-24-41-46
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 5.1 O2 III UN 1498
- IMDG: 5.1 III UN 1498
- IATA/ICAO: 5.1 III UN 1498
- PAX: 516
- CAO: 518
- LGK: 5.1 B
- Disposal: 14

S5248-1, Sodium nitrate, reagent grade

HS-No: 3102 50 90 00

Assay (acidimetric)	min. 99.5 %	Cadmium (Cd)	max. 0.0005 %
Insoluble in water	max. 0.005 %	Calcium (Ca)	max. 0.002 %
pH (5%, H_2O)	5.5 - 8.0	Copper (Cu)	max. 0.0005 %
Chlorides (Cl)	max. 0.0005 %	Heavy metals (as Pb)	max. 0.0005 %
Iodates (IO_3)	max. 0.0005 %	Iron (Fe)	max. 0.0002 %
Nitrites (NO_2)	max. 0.001 %	Lead (Pb)	max. 0.0005 %
Phosphates (PO_4)	max. 0.0002 %	Magnesium (Mg)	max. 0.001 %
Sulfates (SO_4)	max. 0.003 %	Potassium (K)	max. 0.005 %
Ammonium (NH_4)	max. 0.002 %	Zinc (Zn)	max. 0.0005 %

Code	Capacity
S5248-1-1000	1 kg

SODIUM NITRITE

 O  T  N

- $NaNO_2$
- M = 69.00 g/mol
- CAS [7632-00-0]
- EC number: 231-555-9

Physical data:
- Spec. density: 2,1 g/cm³
- Bulk density: ~ 1200 kg/m³
- Solub. in water (20°C): soluble
- Melting point: 280 °C (decomposes)
- Ignition temp.: 489 °C
- pH (100 g/l H_2O, 20 °C) 9

Toxicological data:
- LD 50 (oral, rat): 85 mg/kg
- WGK: 2

Safety:
- EC Index no.: 007-010-00-4
- R: 8-25-50
- S: 45-61
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 5.1 OT2 III UN 1500
- IMDG: 5.1 III UN 1500
- IATA/ICAO: 5.1 III UN 1500
- PAX: 516
- CAO: 518
- LGK: 5.1 B
- Disposal: 28

S5252-1, Sodium nitrite, reagent grade

HS-No: 2834 10 00 00

Assay (iodometric)	min. 99 %	Calcium (Ca)	max. 0.002 %
Insoluble in water	max. 0.01 %	Heavy metals (as Pb)	max. 0.001 %
Chlorides (Cl)	max. 0.005 %	Iron (Fe)	max. 0.001 %
Sulfates (SO_4)	max. 0.005 %	Magnesium (Mg)	max. 0.005 %

Code	Capacity
S5252-1-1000	1 kg

SODIUM PERSULFATE

 O  Xn

Sodium peroxodisulfate, Peroxydisulfuric acid disodium salt

- $Na_2S_2O_8$
- M = 238.09 g/mol
- CAS [7775-27-1]
- EC number: 231-892-1

Physical data:
- Spec. density: 1,10 g/cm³
- Bulk density: ~ 1150 kg/m³
- Solub. in water (20 °C): 545 g/l
- pH (100 g/l H_2O, 20 °C) 3,5 - 3,8

Toxicological data:
- LD 50 (oral, rat): 920 mg/kg
- WGK: 1

Safety:
- R: 8-22-36/37/38-42/43
- S: 22-24-26-37-45
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 5.1 O2 III UN 1505
- IMDG: 5.1 III UN 1505
- IATA/ICAO: 5.1 III UN 1505
- PAX: 516
- CAO: 518
- LGK: 5.1B
- Disposal: 22

S5230-3, Sodium persulfate, extra pure

HS-No: 2833 40 00 10

Assay (iodometric)	min. 98 %	Copper (Cu)	max. 0.002 %
Insoluble in water	max. 0.05 %	Iron (Fe)	max. 0.002 %
Chlorides compounds (as Cl)	max. 0.05 %	Lead (Pb)	max. 0.002 %
Nitrogen compounds (as N)	max. 0.05 %	Magnesium (Mg)	max. 0.01 %
Calcium (Ca)	max. 0.01 %	Nickel (Ni)	max. 0.001 %

Code	Capacity
S5230-3-1000	1 kg

SODIUM SILICATE

 Xi

- Na_2SiO_3
- M = 122.07 g/mol
- CAS [1344-09-8]
- EC number: 215-687-4

Physical data:
- Density: 1,37 g/cm³
- Solub. in water (20 °C): miscible
- pH (50 g/l H_2O, 20 °C) 11 - 11,5

Toxicological data:
- WGK: 1

Safety:
- R: 36/37/38
- S: 26-37

Transport/storage:
- LGK: 10-13

S5272-1, Sodium silicate, reagent grade

HS-No: 2839 10 00 90

Total Solids Content	37.8 - 39.5 % wt	Alkaline (as Na_2O)	8.8 - 9.4 % wt
Special Gravity (at 20°C,O, ° Be')	41.1 - 44.2	Silica (as SiO_2)	29.0 - 30.1 % wt
Weight Ration (SiO_2: Na_2O)	3.20 - 3.30	Viscosity (at 20 °C), cP	400 - 1200

Code	Capacity
S5272-1-1000	1 kg

SODIUM SULFATE ANHYDROUS

Sulfuric acid sodium salt

- Na_2SO_4
- M = 142.04 g/mol
- CAS [7757-82-6]
- EC number: 231-820-9

Physical data:
- Spec. density: 2,70 g/cm³
- Bulk density: ~ 1400 - 1600 kg/m³
- Solub. in water (20 °C): 160 g/l
- Melting point: 888 °C
- Boiling point: > 890 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) 5 - 8

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

S5281-1, Sodium sulfate anhydrous, reagent grade

HS-No: 2833 11 00 00

Assay	min. 99 %	Calcium (Ca)	max. 0.005 %
Free acid (as H_2SO_4)	max. 0.05 %	Heavy Metals (as Pb)	max. 0.0005 %
Free alkali (as NaOH)	max. 0.03 %	Iron (Fe)	max. 0.0005 %
pH (5%, H_2O)	5.2 - 8.0	Magnesium (Mg)	max. 0.001 %
Total N	max. 0.0005 %	Potassium (K)	max. 0.01 %
Chlorides (Cl)	max. 0.001 %	Zinc (Zn)	max. 0.01 %
Phosphates (PO_4)	max. 0.002 %	Loss on drying (800°C)	max. 0.5 %
Arsenic (As)	max. 0.0001 %		

Code	Capacity
S5281-1-0500	500 g
S5281-1-1000	1 kg

S5281-3, Sodium sulfate anhydrous, extra pure

HS-No: 2833 11 00 00

Assay	min. 99 %	Calcium (Ca)	max. 0.045 %
pH (5%, H_2O)	5.5 - 7.5	Heavy metals (as Pb)	max. 0.0045 %
Free Acid (as H_2SO_4)	max. 0.05 %	Iron (Fe)	max. 0.009 %
Free Alkali (as NaOH)	max. 0.04 %	Magnesium (Mg)	max. 0.02 %
Chlorides (Cl)	max. 0.05 %	Zinc (Zn)	max. 0.01 %
Arsenic (As)	max. 0.0005 %	Loss on drying (130°C)	max. 0.5 %

Code	Capacity
S5281-3-1000	1 kg

SODIUM SULFITE

- Na_2SO_3
- M = 126.04 g/mol
- CAS [7757-83-7]
- EC number: 231-821-4

Physical data:
- Spec. density: 2,63 g/cm³
- Bulk density: ~ 1480 kg/m³
- Solub. in water (20 °C): 220 g/l
- Melting point: > 500 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) ~ 8,8 - 10

Toxicological data:
- LD 50 (oral, rat): 2610 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 28

S5303-1, Sodium sulfite, reagent grade

HS-No: 2832 10 00 00

Assay (Iodometric)	min. 98 %	Copper (Cu)	max. 0.0005 %
Insoluble in water	max. 0.005 %	Heavy Metals (as Pb)	max. 0.001 %
Free Acid	passes test	Iron (Fe)	max. 0.001 %
Free Alkali (as Na_2CO_3)	max. 0.15 %	Lead (Pb)	max. 0.0005 %
Chlorides (Cl)	max. 0.02 %	Zinc (Zn)	max. 0.001 %
Arsenic (As)	max. 0.0001 %		

Code	Capacity
S5303-1-0500	500 g
S5303-1-1000	1 kg

SODIUM THIOSULFATE ANHYDROUS

Antichhlor

$Na_2S_2O_3$

- $Na_2O_3S_2$
- M = 158.10 g/mol
- CAS [77772-98-7]
- EC number: 231-867-5

Physical data:
- Spec. density:1.667 g/cm³
- Bulk density: ~ 1350 kg/m³
- Solub. in water (20 °C): 500 g/l
- Melting point: 48 °C
- Boiling point: 100 °C
- pH (50 g/l H_2O, 20 °C) ~ 6.0 - 8.5

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

S5314-1, Sodium thiosulfate anhydrous, reagent grade

HS-No: 2832 30 00 00

Assay (Iodometric, on dried substance)	min. 98.0 %	Copper (Cu)	max. 0.001 %
Insoluble in water	max. 0.01 %	Heavy metals (as Pb)	max. 0.005 %
pH (sol 5%, H_2O)	6.0 – 8.5	Iron (Fe)	max. 0.005 %
Chlorides (Cl)	max. 0.15 %	Lead (Pb)	max. 0.001 %
Sulfates and sulfites (as SO_4)	max. 0.2 %	Nickel (Ni)	max. 0.001 %
Sulfides (S)	max. 0.0005 %	Potassium (K)	max. 0,01 %
Calcium (Ca)	max. 0.004 %	Zinc (Zn)	max. 0.001 %
Cadmium (Cd)	max. 0.001 %	Loss on drying	max. 0.5 %
Cobalt (Co)	max. 0.001 %		

Code	Capacity
S5314-1-0500	500 g

SODIUM THIOSULFATE PENTAHYDRATE

- $Na_2S_2O_3 \cdot 5H_2O$
- M = 248.18 g/mol
- CAS [10102-17-7]
- EC number: 231-867-5

Physical data:
- Spec. density: 1,73 g/cm³
- Bulk density: ~ 1000 kg/m³
- Solub. in water (20 °C): 680 g/l
- Melting point: 48,5 °C
- pH (100 g/l H_2O, 20 °C) 6,0 - 8,4

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13
- Disposal: 28

S5316-1, Sodium thiosulfate pentahydrate, reagent grade

HS-No: 2832 30 00 00

Assay (Iodometric)	min. 99.5 %	Calcium (Ca)	max. 0.002 %
Insoluble in water	max. 0.005 %	Copper (Cu)	max. 0.0005 %
pH (5%, H_2O)	6.0 - 8.4	Iron (Fe)	max. 0.0005 %
Total N	max. 0.002 %	Lead (Pb)	max. 0.0005 %
Chlorides (Cl)	max. 0.008 %	Magnesium (Mg)	max. 0.001 %
Sulfates , sulfites (as SO_4)	max. 0.1 %	Potassium (K)	max. 0.001 %
Sulfides (S)	max. 0.0001 %		

Code	Capacity
S5316-1-0500	500 g
S5316-1-1000	1 kg

S

SODIUM THIOSULFATE, VOLUMETRIC SOLUTIONS

S5320-0, Sodium thiosulfate, solution 0.002 mol/l (0.02N)

Antichlor

- $Na_2S_2O_3 \cdot 5H_2O$
- M = 248.18 g/mol
- CAS [10102-17-7]
- EC number: 231-867-5

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

1 ml = 0.00496 g $Na_2S_2O_3 \cdot 5H_2O$

HS-No: 2832 30 00 00

Code	Capacity
S5320-0-2501	2.5 L

S5321-0, Sodium thiosulfate, solution 0.002 mol/l (0.002N)

Antichlor

- $Na_2S_2O_3 \cdot 5H_2O$
- M = 248.18 g/mol
- CAS [10102-17-7]
- EC number: 231-867-5

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

1ml = 0.0004964 g $Na_2S_2O_3 \cdot 5H_2O$

HS-No: 2832 30 00 00

Code	Capacity
S5321-0-1000	1.0 L

S5322-0, Sodium thiosulfate, solution 0.01 mol/l (0.01N)

Antichlor

- $Na_2S_2O_3 \cdot 5H_2O$
- M = 248.18 g/mol
- CAS [10102-17-7]
- EC number: 231-867-5

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

1ml = 0.002482 g $Na_2S_2O_3 \cdot 5H_2O$

HS-No: 2832 30 00 00

Code	Capacity
S5322-0-1000	1.0 L

S5323-0, Sodium thiosulfate, solution 0.05 mol/l (0.05N)

Antichlor

- $Na_2S_2O_3 \cdot 5H_2O$
- M = 248.18 g/mol
- CAS [10102-17-7]
- EC number: 231-867-5

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

1ml = 0.01241 g $Na_2S_2O_3 \cdot 5H_2O$

HS-No: 2832 30 00 00

Code	Capacity
S5323-0-1000	1.0 L

S5326-0, Sodium thiosulfate, solution 0.1 mol/l (0.1N)

Antichlor

- $Na_2S_2O_3 \cdot 5H_2O$
- M = 248.18 g/mol
- CAS [10102-17-7]
- EC number: 231-867-5

Physical data:
- Density: ~ 1,01 g/cm³
- pH (20 °C) ~ 9 - 10

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

1ml = 0.0248 g $Na_2S_2O_3 \cdot 5H_2O$

HS-No: 2832 30 00 00

Code	Capacity
S5326-0-1000	1.0 L

S5329-0, Sodium thiosulfate, solution 0.282 mol/l (0.282N)

Antichlor

- $Na_2S_2O_3 \cdot 5H_2O$
- M = 248.18 g/mol
- CAS [10102-17-7]
- EC number: 231-867-5

Physical data:
- Density: 1,03 g/cm³

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

1ml = 0.06999 g $Na_2S_2O_3 \cdot 5H_2O$

HS-No: 2832 30 00 00

Code	Capacity
S5329-0-1000	1.0 L

S5332-0, Sodium thiosulfate, solution 0.5 mol/l (0.5N)

Antichlor

- $Na_2S_2O_3 \cdot 5H_2O$
- M = 248.18 g/mol
- CAS [10102-17-7]
- EC number: 231-867-5

Physical data:
- Density: 1,06 g/cm³

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

1ml = 0.1241 g $Na_2S_2O_3 \cdot 5H_2O$

HS-No: 2832 30 00 00

Code	Capacity
S5332-0-1000	1.0 L

S5333-0, Sodium thiosulfate, solution 1 mol/l (1N)

Antichlor

- $Na_2S_2O_3 \cdot 5H_2O$
- M = 248.18 g/mol
- CAS [10102-17-7]
- EC number: 231-867-5

Physical data:
- Density: 1,12 g/cm³

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

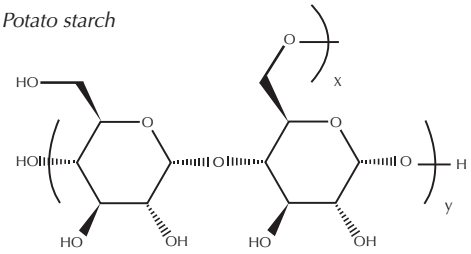
1ml = 0.2482 g $Na_2S_2O_3 \cdot 5H_2O$

HS-No: 2832 30 00 00

Code	Capacity
S5333-0-1000	1L

STARCH

Amylum, Potato starch



- $(C_6H_{10}O_5)_n$
- CAS [9005-84-9]
- EC number: 232-686-4

Physical data:
- Bulk density: ~ 300 kg/m³
- Solub. in water (90 °C): 50 g/l
- pH (20 g/l H_2O, 25 °C) 6,0 - 7,5

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

S7003-1, Starch soluble, reagent grade

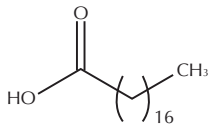
HS-No: 3505 10 90 00

pH (2%, H_2O)	5.0 - 7.0
Sensitivity to iodine	passes test
Loss on drying	10 - 20 %
Sulfated ash	0.1 - 1.0 %

Code	Capacity
S7003-1-0500	500 g

STEARIC ACID

Octadecanoic acid



- $C_{18}H_{36}O_2$
- M = 284,47 g/mol
- CAS [57-11-4]
- EC number: 200-313-4

Physical data:
- Spec. density: 0,94 g/cm³
- Bulk density: ~ 400 - 500 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: 67 °C
- Boiling point: (19,95 hPa) 232 °C
- Flash point: 196 °C
- Ignition temp.: 395 °C
- Vapour pressure: (148 °C) 0,13 hPa

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 4

S7007-3, Stearic acid, extra pure

HS-No: 2915 70 25 00

Total content (plamitic + stearic acid, G.C)	min. 90 %	Iodine index	max. 4
Appearance (Ph Eur)	passes test	Heavy metals (as Pb)	max. 0.001 %
Palitic acid (G.C.)	min 40 %	Nickel (Ni)	max. 0.0001 %
Stearic acid (G.C.)	min. 40 %	Neutral fat, mineral fat	passes test
Mineral acids	passes test	Organic volatile impurities (NF)	passes test
Acidity index	194 - 212	Sulfated ash (600°C)	max. 0.1 %

Code	Capacity
S7007-3-0500	500 g

STRONTIUM CHLORIDE HEXAHYDRATE

- $SrCl_2 \cdot 6H_2O$
- M = 266.62 g/mol
- CAS [10025-70-4]
- EC number: 233-971-6

Physical data:
- Spec. density: 1.95 g/cm³ (20 °C)
- Solub. in water 1062 g/l (0 °C)
- pH value ~ 5 - 7 (50 g/l, H_2O, 20 °C)
- Melting point: 61 °C
- Bulk density: ~ 1050 kg/m³
- Boiling point: 100 °C
- Water absorption hygroscopic

Toxicological data:
- WGK: 1
- LD 50 (oral, rat) 2250 mg/kg (anhydrous subtance)

Safety:
- Poison class CH 3

Transport/storage:
- LGK: 10-13
- Disposal: 14

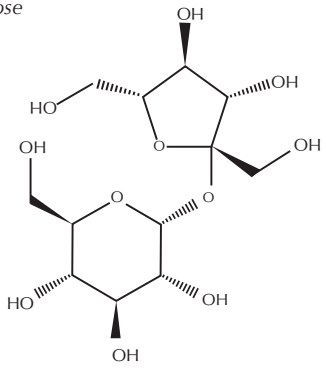
S7005-1, Strontium chloride hexahydrate, reagent grade

Assay	min. 99.5 %	Calcium	max. 0.03 %
pH value	4.6 – 6.5	Iron (Fe)	max. 0.0001 %
Clarity of solution	passes test	Barium (Ba)	max. 0.02 %
Insoluble matter in water	max. 0.003 %	Heavy metals (as Pb)	max. 0.0002 %
Nitrate (NO_3)	passes test	Alkali metals and magnesium (as sulfate)	max. 0.01 %

Code	Capacity
S7005-1-0100	100 g
S7005-1-0500	500 g

D(+)-SUCROSE

Cane sugar, Saccharose



- $C_{12}H_{22}O_{11}$
- M = 342.30 g/mol
- CAS [57-50-1]
- EC number: 200-334-9

Physical data:
- Bulk density: ~ 800 - 950 kg/m³
- Solub. in water (20 °C): freely soluble
- Melting point: 169 - 170 °C
- pH (100 g/l H_2O, 20 °C) ~ 7

Toxicological data:
- LD 50 (oral, rat): 29700 mg/kg
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

S7030-1, D(+)-Sucrose, reagent grade

HS-No: 1701 99 10 80

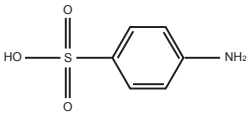
Special rotation (@25 °C)	+66.3 - +66.8 °	Glucose, invert sugar	passes test
Identity IR spectrum	passes test	Iron (Fe)	max. 0.001 %
Acidity or Alkalinity reacting impurities	passes test	Sulfite (SO_3)	max. 0.001 %
Barium (Ba)	passes test	Sulfated ash	max. 0.01 %
Dextines	passes test	TCL-test	passes test
Dye stuffs	passes test	Water	max. 0.01 %

Code	Capacity
S7030-1-0500	500 g

SULFANILIC ACID

Xi

4-Aminobenzenesulfonic acid, Aniline-4-sulfonic acid, p-Anilinesulfonic acid



- $C_6H_7NO_3S$
- M = 173.19 g/mol
- CAS [121-57-3]
- EC number: 204-482-5

Physical data:
- Form: Solid
- Spec. density: 1.48 g/cm³
- Bulk density: ~ 620 kg/m³
- Solub. in water (20 °C): 10g/l
- Melting point: 288 °C (decomposes)
- pH (10 g/l H_2O, 20 °C) ~ 2

Toxicological data:
- LD 50 (oral, rat): 12300 mg/kg
- WGK: 1

Safety:
- EC Index no.: 612-014-00-X
- R: 36/38-43
- S: 24-37
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10 - 13
- Disposal: 4

Applications: Analytical chemistry, laboratory reagent, for determination of: synthesis of organic products, manufacture of dyes, antibacterian.

S7037-1, Sulfanilic acid, reagent grade

HS-No: 2811 19 80 10

Assay (acidimetric)	min. 99 %	Sulphate (SO_4)	max. 0.005 %
Insoluble in sol. of Na_2CO_3	max. 0.01 %	Heavy Metals (as Pb)	max. 0.001 %
TCL test	passes test	Sulfated ash	max. 0.01 %
Chloride (Cl)	max. 0.002 %	Water	max. 0.3 %
Nitrites (NO_2)	max. 0.00005 %		

Code	Capacity
S7037-1-0100	100 g

SULPHAMIC ACID

Xi

Amidosulfonic acid, Sulfaminic acid, Sulfamidic acid, Sulfamic acid, Aminosulfonic acid

- NH_2SO_3H
- M = 97.09 g/mol
- CAS [5329-14-6]
- EC number: 226-218-8

Physical data:
- Spec. density: 2,13 g/cm³
- Bulk density: ~ 600 kg/m³
- Solub. in water (20 °C): 213 g/l
- Melting point: 205 °C (decomposes)
- pH (10 g/l H_2O, 25 °C) 1,18

Toxicological data:
- LD 50 (oral, rat): 3160 mg/kg
- WGK: 1

Safety:
- EC Index no.: 016-026-00-0
- R: 36/38-52/53
- S: 26-28.1-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C2 III UN 2967
- IMDG: 8 III UN 2967
- IATA/ICAO: 8 III UN 2967
- PAX: 822
- CAO: 823
- LGK: 8 B
- Disposal: 14

S7034-1, Sulphamic acid, reagent grade

HS-No: 2811 19 80 10

Assay (dried basis)	min. 99 %	Sulphate (SO_4)	max. 0.05 %
Insoluble in water	max. 0.01 %	Heavy Metals (as Pb)	max. 0.001 %
Residue After Ignition	max. 0.01 %	Iron (Fe)	max. 5 ppm
Chloride (Cl)	max. 0.0001 %		

Code	Capacity
S7034-1-1000	1 kg

SULPHURIC ACID 10%

Xi

Sulphuric acid

H_2SO_4

- H_2O_4S
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Form: Liquid

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 016-020-00-8
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C1 II UN 2796
- IMDG: 8 II UN 2796
- IATA/ICAO: 8 II UN 2796
- PAX: 809
- CAO: 813
- LGK: 8
- Disposal: 12

Special regulations:
- Drug precursor, cat 3

Applications: Analycal chemistry, laboratory reagent, neutralising agent

S7010-1, Sulphuric acid 10%, reagent grade

HS-No: 2837 20 00 00

Code	Capacity
S7010-1-2501	2.5 L

Assay	min. 10 %	Indium (In)	max. 0.02 ppm
Colour	max. 10 Hazen	Potassium (K)	max. 0.1 ppm
Chloride (Cl)	max. 0.1 ppm	Lithium (Li)	max. 0.02 ppm
Nitrate (NO_3)	max. 0.2 ppm	Magnesium (Mg)	max. 0.1 ppm
Phosphate (PO_4)	max. 0.5 ppm	Manganese (Mn)	max. 0.02 ppm
Arsenic and Antimony (as As)	max. 0.01 ppm	Molybdenum (Mo)	max. 0.05 ppm
Silver (Ag)	max. 0.02 ppm	Ammonium (NH4)	max. 2 ppm
Aluminium (Al)	max. 0.05 ppm	Sodium (Na)	max. 0.2 ppm
Gold (Au)	max. 0.1 ppm	Nickel (Ni)	max. 0.02 ppm
Boron (B)	max. 0.05 ppm	Lead (Pb)	max. 0.05 ppm
Barium (Ba)	max. 0.05 ppm	Platinum (Pt)	max. 0.2 ppm
Beryllium (Be)	max. 0.02 ppm	Selen (Se)	max. 0.1 ppm
Bismuth (Bi)	max. 0.1 ppm	Tin (Sn)	max. 0.1 ppm
Calcium (Ca)	max. 0.2 ppm	Strontium (Sr)	max. 0.05 ppm
Cadmium (Cd)	max. 0.05 ppm	Titanium (Ti)	max. 0.1 ppm
Cobalt (Co)	max. 0.02 ppm	Thallium (Tl)	max. 0.05 ppm
Chromium (Cr)	max. 0.02 ppm	Vanadium (V)	max. 0.05 ppm
Copper (Cu)	max. 0.01 ppm	Zinc (Zn)	max. 0.1 ppm
Iron (Fe)	max. 0.1 ppm	Zirconium (Zr)	max. 0.1 ppm
Gallium (Ga)	max. 0.02 ppm	KMnO4 – reducing substances (as SO_2)	max. 2 ppm
Germanium (Ge)	max. 0.1 ppm	Residue after ignition	max. 3 ppm

S7020-1, Sulphuric acid 20%, reagent grade

HS-No: 2837 20 00 00

Code	Capacity
S7020-1-2501	2.5 L

Assay	min. 20 %	Indium (In)	max. 0.02 ppm
Colour	max. 10 Hazen	Potassium (K)	max. 0.1 ppm
Chloride (Cl)	max. 0.1 ppm	Lithium (Li)	max. 0.02 ppm
Nitrate (NO_3)	max. 0.2 ppm	Magnesium (Mg)	max. 0.1 ppm
Phosphate (PO_4)	max. 0.5 ppm	Manganese (Mn)	max. 0.02 ppm
Arsenic and Antimony (as As)	max. 0.01 ppm	Molybdenum (Mo)	max. 0.05 ppm
Silver (Ag)	max. 0.02 ppm	Ammonium (NH4)	max. 2 ppm
Aluminium (Al)	max. 0.05 ppm	Sodium (Na)	max. 0.2 ppm
Gold (Au)	max. 0.1 ppm	Nickel (Ni)	max. 0.02 ppm
Boron (B)	max. 0.05 ppm	Lead (Pb)	max. 0.05 ppm
Barium (Ba)	max. 0.05 ppm	Platinum (Pt)	max. 0.2 ppm
Beryllium (Be)	max. 0.02 ppm	Selen (Se)	max. 0.1 ppm
Bismuth (Bi)	max. 0.1 ppm	Tin (Sn)	max. 0.1 ppm
Calcium (Ca)	max. 0.2 ppm	Strontium (Sr)	max. 0.05 ppm
Cadmium (Cd)	max. 0.05 ppm	Titanium (Ti)	max. 0.1 ppm
Cobalt (Co)	max. 0.02 ppm	Thallium (Tl)	max. 0.05 ppm
Chromium (Cr)	max. 0.02 ppm	Vanadium (V)	max. 0.05 ppm
Copper (Cu)	max. 0.01 ppm	Zinc (Zn)	max. 0.1 ppm
Iron (Fe)	max. 0.1 ppm	Zirconium (Zr)	max. 0.1 ppm
Gallium (Ga)	max. 0.02 ppm	KMnO4 – reducing substances (as SO_2)	max. 2 ppm
Germanium (Ge)	max. 0.1 ppm	Residue after ignition	max. 3 ppm

SULPHURIC ACID 50%

 C

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: 1,28 g/cm³
- Solub. in water (20 °C): miscible

Toxicological data:
- MAK: 0,1 mg/m³
- WGK: 1

Safety:
- EC Index no.: 016-020-00-8
- R: 35
- S: 26-30-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C1 II UN 2796
- IMDG: 8 II UN 2796
- IATA/ICAO: 8 II UN 2796
- LGK: 8 B
- Disposal: 12

S7050-6, Sulphuric acid 50%, EC-100

HS-No: 2807 00 10 00

Assay (Acidimetric)	min. 50 %	Lithium (Li)	max. 0.02 ppm
Colour	max. 10 Hazen	Magnesium (Mg)	max. 0.01 ppm
Nitrate (NO_3)	max. 0.2 ppm	Manganese (Mn)	max. 0.01 ppm
Phosphate (PO_4)	max. 0.5 ppm	Molybdenum (Mo)	max. 0.05 ppm
Ammonium (NH_4)	max. 1.0 ppm	Nickel (Ni)	max. 1.0 ppm
Aluminium (Al)	max. 0.05 ppm	Potassium (K)	max. 1.0 ppm
Arsenic (As)	max. 0.01 ppm	Silver (Ag)	max. 0.02 ppm
Barium (Ba)	max. 0.1 ppm	Sodium (Na)	max. 0.1 ppm
Beryllium (Be)	max. 0.02 ppm	Titanium (Ti)	max. 0.1 ppm
Bismuth (Bi)	max. 0.1 ppm	Thallium (Tl)	max. 0.05 ppm
Cadmium (Cd)	max. 0.05 ppm	Vanadium (V)	max. 0.05 ppm
Calcium (Ca)	max. 0.2 ppm	Zinc (Zn)	max. 0.1 ppm
Cobalt (Co)	max. 0.02 ppm	Zirconium (Zr)	max. 0.1 ppm
Copper (Cu)	max. 0.01 ppm	Substances reducing Potassium	
Germanium (Ge)	max. 0.1 ppm	Permanganate (as SO_2)	max. 2 ppm
Iron (Fe)	max. 1.0 ppm	Residue after ignition	max. 3 ppm
Lead (Pb)	max. 1.0 ppm		

Code	Capacity
S7050-6-930E	300 kg

SULPHURIC ACID 95 - 97%

C

Sulphuric acid

- H_2SO_4
- M = 98,08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: 1,84 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: ~ -15 °C
- Boiling point: ~ 310 °C
- Vapour pressure: (100 °C) ~ 0,0001 hPa
- pH (49 g/l H_2O, 25 °C) 0,3

Toxicological data:
- LD 50 (oral, rat): 2140 mg/kg
- MAK: 0,1 mg/m³
- WGK: 1

Safety:
- EC Index no.: 016-020-00-8
- R: 35
- S: 26-30-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C1 II UN 1830
- IMDG: 8 II UN 1830
- IATA/ICAO: 8 II UN 1830
- PAX: 809
- CAO: 813
- LGK: 8 B
- Disposal: 12

S7061-0, Sulphuric acid 96%, CP Grade

HS-No: 2807 00 10 00

H_2SO_4 % by mass	min. 96.0 %	Arsenic (as As)	max. 0.4 ppm
Specific Gravity (as 25 °C)	1.83 - 1.84	Manganese (as Mn)	max. 0.5 ppm
Free Chloride (as Cl)	max. 5 ppm	Copper (as Cu)	max. 10 ppm
Nitrate (NO_3)	max. 5 ppm	Iron (as Fe)	max. 20 ppm
Ammonium (as NH_4)	max. 5 ppm	Zinc (as Zn)	max. 5 ppm

Code	Capacity
S7061-0-2500	2.5 L

S7061-1, Sulphuric acid 95-97%, reagent grade

HS-No: 2807 00 10 00

Assay	min. 95 - 97 %	Potassium (K)	max. 0.1 ppm
Colour	max. 10 Hazen	Lithium (Li)	max. 0.02 ppm
Chloride (Cl)	max. 0.1 ppm	Magnesium (Mg)	max. 0.1 ppm
Nitrate (NO_3)	max. 0.2 ppm	Manganese (Mn)	max. 0.02 ppm
Phosphate (PO_4)	max. 0.5 ppm	Molybdenum (Mo)	max. 0.05 ppm
Arsenic and Antimony (as As)	max. 0.01 ppm	Ammonium (NH_4)	max. 2 ppm
Silver (Ag)	max. 0.02 ppm	Sodium (Na)	max. 0.2 ppm
Aluminium (Al)	max. 0.05 ppm	Nickel (Ni)	max. 0.02 ppm
Gold (Au)	max. 0.1 ppm	Lead (Pb)	max. 0.05 ppm
Boron (B)	max. 0.05 ppm	Platinum (Pt)	max. 0.2 ppm
Barium (Ba)	max. 0.05 ppm	Selen (Se)	max. 0.1 ppm
Beryllium (Be)	max. 0.02 ppm	Tin (Sn)	max. 0.1 ppm
Bismuth (Bi)	max. 0.1 ppm	Strontium (Sr)	max. 0.05 ppm
Calcium (Ca)	max. 0.2 ppm	Titanium (Ti)	max. 0.1 ppm
Cadmium (Cd)	max. 0.05 ppm	Thallium (Tl)	max. 0.05 ppm
Cobalt (Co)	max. 0.02 ppm	Vanadium (V)	max. 0.05 ppm
Chromium (Cr)	max. 0.02 ppm	Zinc (Zn)	max. 0.1 ppm
Copper (Cu)	max. 0.01 ppm	Zirconium (Zr)	max. 0.1 ppm
Iron (Fe)	max. 0.1 ppm	$KMnO_4$ - reducing substances (as SO_2)	
Gallium (Ga)	max. 0.02 ppm		max. 2 ppm
Germanium (Ge)	max. 0.1 ppm	Residue after ignition	max. 3 ppm
Indium (In)	max. 0.02 ppm		

Code	Capacity
S7061-1-1000	1.0 L
S7061-1-2500	2.5 L
S7061-1-2501	2.5 L

S7061-6, Sulphuric acid 95-97%, EC-100

HS-No: 2807 00 10 00

Assay	96.0 - 97.0 %	Copper (Cu)	max. 10 ppb
Color (Hazen)	max. 10 Hazen	Chromium (Cr)	max. 20 ppb
Residue after ignition	max. 2000 ppb	Iron (Fe)	max. 100 ppb
Reducing agent ($KMnO_4$)	max. 2000 ppb	Magnesium (Mg)	max. 100 ppb
Chloride (Cl)	max. 100 ppb	Manganese (Mn)	max. 20 ppb
Phosphate (PO_4)	max. 500 ppb	Molybdenum (Mo)	max. 50 ppb
Ammonium (NH_4)	max. 2000 ppb	Nickel (Ni)	max. 20 ppb
Nitrate (NO_3)	max. 200 ppb	Lead (Pb)	max. 50 ppb
Aluminium (Al)	max. 50 ppb	Lead (Pb)	max. 100 ppb
Arsenic (As)	max. 20 ppb	Tin (Sn)	max. 100 ppb
Barium (Ba)	max. 50 ppb	Titanium (Ti)	max. 100 ppb
Boron (B)	max. 50 ppb	Vanadium (V)	max. 50 ppb
Cadmium (Cd)	max. 50 ppb	Zinc (Zn)	max. 100 ppb
Calcium (Ca)	max. 200 ppb	Zirconium (Zr)	max. 100 ppb
Cobalt (Co)	max. 20 ppb		

Code	Capacity
S7061-6-2500	2.5 kg
S7061-6-9025	25 kg

S7061-7, Sulphuric acid 95-97%, EC-10

HS-No: 2807 00 10 00

Assay	96.0 - 97.0 %	Cobalt (Co)	max. 0.01 ppm
Color (Hazen)	max. 10 Hazen	Copper (Cu)	max. 0.01 ppm
Residue after ignition	max. 3 ppm	Chromium (Cr)	max. 0.01 ppm
Reducing agent ($KMnO_4$)	max. 1 ppm	Iron (Fe)	max. 0.05 ppm
Chloride (Cl)	max. 0.1 ppm	Magnesium (Mg)	max. 0.02 ppm
Phosphate (PO_4)	max. 0.2 ppm	Manganese (Mn)	max. 0.01 ppm
Ammonium (NH_4)	max. 0.5 ppm	Molybdenum (Mo)	max. 0.01 ppm
Nitrate (NO_3)	max. 0.2 ppm	Nickel (Ni)	max. 0.01 ppm
Aluminium (Al)	max. 0.02 ppm	Lead (Pb)	max. 0.01 ppm
Arsenic (As)	max. 0.005 ppm	Tin (Sn)	max. 0.02 ppm
Barium (Ba)	max. 0.01 ppm	Titanium (Ti)	max. 0.01 ppm
Boron (B)	max. 0.01 ppm	Vanadium (V)	max. 0.01 ppm
Cadmium (Cd)	max. 0.01 ppm	Zinc (Zn)	max. 0.05 ppm
Calcium (Ca)	max. 0.05 ppm	Zirconium (Zr)	max. 0.01 ppm

Code	Capacity
S7061-7-2500	2.5 L

S7064-1, Sulphuric acid 98%, reagent grade

HS-No: 2807 00 10 00

Assay (Acidimetric)	min. 98 %	Lithium (Li)	max. 0.01 ppm
Colour	max. 10 Hazen	Magnesium (Mg)	max. 0.5 ppm
Free Chloride (Cl)	max. 2 ppm	Manganese (Mn)	max. 0.2 ppm
Nitrate (NO_3)	max. 2 ppm	Molybdenum (Mo)	max. 0.01 ppm
Phosphate (PO_4)	max. 2 ppm	Ammonium (NH_4)	max. 1 ppm
Arsenic and Antimony (as As)	max. 1 ppm	Sodium (Na)	max. 0.2 ppm
Aluminium (Al)	max. 0.02 ppm	Nickel (Ni)	max. 0.05 ppm
Calcium (Ca)	max. 1 ppm	Zinc (Zn)	max. 1 ppm
Chromium (Cr)	max. 1 ppm	Zirconium (Zr)	max. 1 ppm
Iron (Fe)	max. 2 ppm	Specific Gravity (as 25ºC)	1.80 – 1.88
Potassium (K)	max. 0.1 ppm		

Code	Capacity
S7064-1-2500	2.5 L

SULPHURIC ACID, VOLUMETRIC SOLUTIONS

S7079-0, Sulphuric acid, solution 0.01 mol/l (0.02N)

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 016-020-00-8
- Poison class CH (Swiss): 5

1ml = 0.0009808 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7079-0-1000	1.0 L

S7080-0, Sulphuric acid, solution 0.025 mol/l (0.05N)

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 016-020-00-8
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 8 B

1ml = 0.002452 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7080-0-1000	1.0 L

S7081-0, Sulphuric acid, solution 0.05 mol/l (0.1N)

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: ~ 1,00 g/cm³
- pH (20 °C) ~ 1,3

Toxicological data:
- LD 50 (oral, rat): 2140 mg/kg
- WGK: 0

Safety:
- EC Index no.: 016-020-00-8
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 8 B

1ml = 0.004904 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7081-0-1000	1.0 L

S7084-0, Sulphuric acid, solution 0.1 mol/l (0.2N)

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: ~ 1,00 g/cm³

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 016-020-00-8
- Poison class CH (Swiss): 4

1ml = 0.0098808 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7084-0-1000	1.0 L

S7085-0, Sulphuric acid, solution 0.125 mol/l (0.25N)

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: 1,01 g/cm³

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 016-020-00-8
- Poison class CH (Swiss): 4

1ml = 0.01226 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7085-0-1000	1.0 L

S7088-0, Sulphuric acid, solution 0.13 mol/l (0.26N)

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: 1,01 g/cm³

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 016-020-00-8
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 8

1ml = 0.0127504 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7088-0-1000	1.0 L

S7091, Sulphuric acid, solution 0.25 mol/l (0.5N)

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: 1,02 g/cm³
- pH (20 °C) ~ 1,0

Toxicological data:
- LD 50 (oral, rat): 2140 mg/kg
- MAK: 0,1 mg/m³
- WGK: 0

Safety:
- EC Index no.: 016-020-00-8
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 8 B

1ml = 0.02452 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7091-0-1000	1.0 L

S7092, Sulphuric acid, solution 0.5 mol/l (1N)

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: 1,03 g/cm³
- pH (20 °C) ~ 0,6

Toxicological data:
- LD 50 (oral, rat): 2140 mg/kg (pure substance)
- MAK: 0,1 mg/m³
- WGK: 1

Safety:
- EC Index no.: 016-020-00-8
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 8 B

1ml = 0.04904 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7092-0-1000	1.0 L

S7095-0, Sulphuric acid, solution 1 mol/l (2N)


Xi

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: 1,06 g/cm³

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 016-020-00-8
- R: 36/38
- S: 26-30-37
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C1 II UN 2796
- IMDG: 8 II UN 2796
- IATA/ICAO: 8 II UN 2796
- PAX: 809
- CAO: 813

1ml = 0.09808 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7095-0-1000	1.0 L

S7097-0, Sulphuric acid, solution 2.5 mol/l (5N)


C

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: 1,15 g/cm³
- Boiling point: ~ 103 °C

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 016-020-00-8
- R: 35
- S: 26-30-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C1 II UN 2796
- IMDG: 8 II UN 2796
- IATA/ICAO: 8 II UN 2796
- PAX: 809
- CAO: 813

1ml = 0.2452 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7097-0-1000	1.0 L

S7098-0, Sulphuric acid, solution 4 mol/l (8N)


C

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: ~ 1,23 g/cm³

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 016-020-00-8
- R: 35
- S: 26-30-36/37/39-45

Transport/storage:
- ADR: 8 C1 II UN 2796
- IMDG: 8 II UN 2796
- IATA/ICAO: 8 II UN 2796
- LGK: 8 B
- Disposal: 12

1ml = 0.39232 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7098-0-1000	1.0 L

S7099-0, Sulfuric acid, solution 5 mol/l (10N)


C

Sulphuric acid

- H_2SO_4
- M = 98.08 g/mol
- CAS [7664-93-9]
- EC number: 231-639-5

Physical data:
- Density: 1,28 g/cm³

Toxicological data:
- MAK: 1 mg/m³
- WGK: 1

Safety:
- EC Index no.: 016-020-00-8
- R: 35
- S: 26-30-36/37/39-45
- Poison class CH (Swiss): 2

Transport/storage:
- ADR: 8 C1 II UN 2796
- IMDG: 8 II UN 2796
- IATA/ICAO: 8 II UN 2796
- LGK: 8 B

1ml = 0.4904 g H_2SO_4

HS-No: 2807 00 10 00

Code	Capacity
S7099-0-1000	1L

TETRAHYDROFURAN

F Xi

THF, Tetramethylene oxide, Oxolane

- C_4H_8O
- M = 72.11 g/mol
- CAS [109-99-9]
- EC number: 203-726-8

Physical data:
- Form: LIquid
- Density: 0,89 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: -108,5 °C
- Boiling point: 65 - 66 °C
- Flash point: -21,5 °C
- Ignition temp.: 215 °C
- Vapour pressure: (20 °C) 173 hPa
- Refraction index: (n 20 °C/D) 1,407
- Viscosity: (20 °C) 0,47 mPas
- Dipolar moment: (20 °C) 1,63 Debye
- Dielectric const.: (20 °C) 7,4
- Saturation conc.: (20 °C) 557 g/m³
- Expl. limit (upper): 12,4 Vol%
- Expl. limit (lower): 1,5 Vol%
- pH (200 g/l H_2O, 20 °C) 7 - 8

Toxicological data:
- LD 50 (oral, rat): 1650 mg/kg
- MAK: 50 ml/m³ , 150 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-025-00-0
- R: 11-19-36/37
- S: 16-29-33
- VbF class: B
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 3 F1 II UN 2056
- IMDG: 3 II UN 2056
- IATA/ICAO: 3 II UN 2056
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

T2061-1, Tetrahydrofuran, reagent grade

HS-No: 2932 11 00 90

Purity (GC)	min. 99.5 %	Cadmium (Cd)	max. 0.05 ppm
Identity (IR)	conforms	Cobalt (Co)	max. 0.02 ppm
Colour	max. 10 Hazen	Chromium (Cr)	max. 0.02 ppm
Acidity	max. 0.0005 meq/g	Copper (Cu)	max. 0.02 ppm
Alkalinity	max. 0.0002 meq/g	Iron (Fe)	max. 0.1 ppm
Peroxide (as H_2O_2)	max. 0.005 %	Magnesium (Mg)	max. 0.02 ppm
Evaporation residue	max. 0.001 %	Manganese (Mn)	max. 0.02 ppm
Water	max. 0.05 %	Nickel (Ni)	max. 0.02 ppm
Aluminium (Al)	max. 0.5 ppm	Lead (Pb)	max. 0.1 ppm
Boron (B)	max. 0.02 ppm	Tin (Sn)	max. 0.1 ppm
Barium (Ba)	max. 0.1 ppm	Zinc (Zn)	max. 0.1 ppm
Calcium (Ca)	max. 0.5 ppm		

Code	Capacity
T2061-1-2500	2.5 L
T2061-1-2501	2.5 L
T2061-1-9025	25 L

T2061-4, Tetrahydrofuran, HPLC grade

HS-No: 2932 11 00 90

Assay (GC)	min. 99.8 %	Non-volatile matter	max. 0.0005 %
Colour	max. 10 Hazen	Water	max. 0.03 %
Peroxide (as H_2O_2) at time of packaging	max. 0.015 %		

Maximum absorbance in a 1.0cm cell at wavelength:

212 nm	1.00
225 nm	0.50
250 nm	0.17
350 nm	0.01

Code	Capacity
T2061-4-2501	2.5 L

THINNER

- $C_6H_{14}O_+$
- M = 142 g/mol
- CAS [Mixed]

T1001-1, Thinner LM20, reagent grade

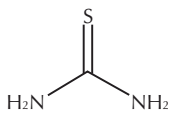
Appearance	liquid	Colour	max. 20 Hazen
Assay	min. 98.0 % wt	Evaporation Residue	max. 0.1 % wt
Specific Gravity (20°C)	0.63 – 0.68	Water	max. 0.2 % wt

Code	Capacity
T1001-1-9020	20 kg

THIOUREA

Xn N

Thiocarbamide



- CH_4N_2S
- M = 76.11 g/mol
- CAS [62-56-6]
- EC number: 200-543-5

Physical data:
- Spec. density: 1,405 g/cm³
- Bulk density: 640 kg/m³
- Solub. in water (20 °C): 137 g/l
- Melting point: 171 - 184 °C
- Ignition temp.: 440 °C
- pH (50 g/l H_2O, 20 °C) 5 - 7

Toxicological data:
- LD 50 (oral, rat): 1750 mg/kg
- WGK: 2

Safety:
- EC Index no.: 612-082-00-0
- R: 22-40-51/53-63
- S: 36/37-46-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 9 M7 III UN 3077
- IMDG: 9 III UN 3077
- IATA/ICAO: 9 III UN 3077
- LGK: 10-13
- Disposal: 3

T3017-1, Thiourea, reagent grade

HS-No: 2930 90 70 90

Assay (argentometric)	min. 99 %	Sensitivity to bismuth	passes test
Insoluble in water	max. 0.005 %	Sulfated ash	max. 0.05 %
Sulphate (SO_4)	max. 0.01 %	Loss on drying (105 °C)	max. 0.5 %
Iron (Fe)	max. 0.0005 %		

Code	Capacity
T3017-1-0500	500 g

T

TIN

- Sn
- M = 118.69 g/mol
- CAS [7440-31-5]
- EC number: 231-141-8

Physical data:
- Bulk density: ~ 4000 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: 232 °C
- Boiling point: 2362 °C

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 15

T3044-3, Tin, granulated

HS-No: 8005 00 00 00

Antimony (Sb)	max. 0.0002 %	Copper (Cu)	max. 0.005 %
Arsenic (As)	max. 0.01 %	Iron (Fe)	max. 0.02 %
Bismuth (Bi)	max. 0.01 %	Lead (Pb)	max. 0.01 %

Code	Capacity
T3044-3-0500	500 g

TIN (II) CHLORIDE DIHYDRATE

Xn

Hydrochloric acid tin(II)-salt dihydrate, Stannic chloride, Stannochlor

- $SNCl_2 \cdot 2H_2O$
- M = 225.63 g/mol
- CAS [10025-69-1]
- EC number: 231-868-0

Physical data:
- Spec. density: 2,71 g/cm³
- Bulk density: ~ 1250 kg/m³
- Solub. in water (20 °C): soluble
- Melting point: 37,7 °C
- pH (100 g/l H_2O, 20 °C) ~ 1- 2

Toxicological data:
- LD 50 (oral, rat): 700 mg/kg (anhydrous substance)
- MAK: 2 mg/m³
- WGK: 1

Safety:
- R: 22-36/37/38
- S: 26-46
- Poison class CH (Swiss): 2

Transport/storage:
- LGK: 10-13
- Disposal: 15

T3032-1, Tin (II) chloride dihydrate, reagent grade

HS-No: 2827 39 10 00

Assay (iodometric)	min. 98 %	Lead (Pb)	max. 0.005 %
Insoluble in HCl	max. 0.005 %	Magnesium (Mg)	max. 0.005 %
Sulfates (SO_4)	max. 0.002 %	Manganese (Mn)	max. 0.0005 %
Ammonium (NH_4)	max. 0.002 %	Nickel (Ni)	max. 0.0005 %
Arsenic (As)	max. 0.0001 %	Other metals (as Pb)	max. 0.01 %
Calcium (Ca)	max. 0.005 %	Potassium (K)	max. 0.005 %
Copper (Cu)	max. 0.001 %	Sodium (Na)	max. 0.005 %
Iron (Fe)	max. 0.002 %		

Code	Capacity
T3032-1-0500	500 g

TIN (IV) OXIDE

Tin dioxide, Stannic (IV) oxide

- SnO_2
- M = 150.70 g/mol
- CAS [18282-10-5]
- EC number: 242-159-0

Physical data:
- Spec. density: 6,95 g/cm³
- Bulk density: ~ 500 - 600 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: 1630 °C
- pH (50 g/l H_2O, 20 °C) 4 - 5

Toxicological data:
- LD 50 (oral, rat): > 20000 mg/kg
- WGK: 0

Safety:
- Poison class CH (Swiss): 4

Transport/storage:
- LGK: 10-13

T3042-3, Tin (IV) oxide, extra pure

HS-No: 2825 90 30 00

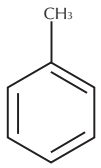
Assay (gravimetric)	min. 99 %	Loss on calcinations (900°C)	max. 0.2 %
Chlorides (Cl)	max. 0.05 %	Iron (Fe)	max. 0.01 %
Sulfates (SO_4)	max. 0.05 %	Soluble in acid	max. 0.2 %

Code	Capacity
T3042-3-0500	500 g

TOLUENE

F Xn

Methylbenzene, Phenylmethane



- C_7H_8
- M = 92.14 g/mol
- CAS [108-88-3]
- EC number: 203-625-9

Physical data:
- Density: 0,87 g/cm³
- Solub. in water (20 °C): 0,52 g/l
- Melting point: -95 °C
- Boiling point: 111 °C
- Flash point: 4 °C
- Ignition temp.: 535 °C
- Vapour pressure: (20 °C) 29 hPa
- Viscosity: (20 °C) 0,58 mPas
- Dipolar moment: (20 °C) 0,36 Debye
- Dielectric const.: (25 °C) 2,3
- Saturation conc.: (20 °C) 110 g/m³
- Expl. limit (upper): 8 Vol%
- Expl. limit (lower): 1,2 Vol%

Toxicological data:
- LD 50 (oral, rat): 636 mg/kg
- MAK: 50 ml/m³ , 190 mg/m³
- WGK: 2

Safety:
- EC Index no.: 601-021-00-3
- R: 11-20
- S: 16-25-29-33
- VbF class: AI
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 II UN 1294
- IMDG: 3 II UN 1294
- IATA/ICAO: 3 II UN 1294
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

T5031-1, Toluene, reagent grade

HS-No: 2902 30 00 00

Assay (G.C.)	min. 99.5 %	Cadmium (Cd)	max. 0.000005 %
Colour (Hazen)	max. 10 Hazen	Calcium (Ca)	max. 0.00005 %
Acidity	max. 0.0003 meq/g	Cobalt (Co)	max. 0.000002 %
Alkalinity	max. 0.0006 meq/g	Copper (Cu)	max. 0.000002 %
Benzene (GC)	max. 0.005 %	Chromium (Cr)	max. 0.000002 %
Thiophene	max. 0.0001 %	Iron (Fe)	max. 0.00001 %
Sulfur compounds (as S)	max. 0.003 %	Tin (Sn)	max. 0.00001 %
Evaporation residue	max. 0.001 %	Magnesium (Mg)	max. 0.00001 %
Water	max. 0.03 %	Manganese (Mn)	max. 0.000002 %
Aluminium (Al)	max. 0.00005 %	Nickel (Ni)	max. 0.000002 %
Barium (Ba)	max. 0.00001 %	Lead (Pb)	max. 0.00001 %
Boron (B)	max. 0.000002 %	Zinc (Zn)	max. 0.00001 %

Code	Capacity
T5031-1-1000	1.0 L
T5031-1-2500	2.5 L

T5031-4, Toluene, HPLC grade

HS-No: 2902 30 00 00

Assay (G.C.)	min. 99.5 %	Substances darkened by H_2SO_4	max. 0.001 %
Colour (Hazen)	max. 10 Hazen	Non-volatile matter	max. 0.03 %
Sulfur compounds (as S)	max. 0.003 %	Water (K.F.)	max. 0.00005 %

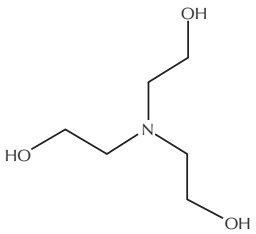
Maximum absorbance in a 1.0cm cell at wavelength:

285 nm	1.00
286 nm	0.70
288 nm	0.40
293 nm	0.20
300 nm	0.10
310 nm	0.05
335 nm	0.02
350 nm	0.01
400 nm	0.01

Code	Capacity
T5031-4-2501	2.5 L

TRIETHANOLAMINE

Tris (2-hydroxyethyl)amine, 2,2',2''-Trihydroxytriethylamine, TEA



- $C_6H_{15}NO_3$
- M = 149.19 g/mol
- CAS [102-71-6]
- EC number: 203-049-8

Physical data:
- Density: 1,12 g/cm³
- Solub. in water (20 °C): miscible
- Melting point: 21,2 °C
- Boiling point: (hPa) 208 °C
- Flash point: 190 °C
- Ignition temp.: 325 °C
- Vapour pressure: (20 °C) 0,01 hPa
- Expl. limit (upper): 7,2 Vol%
- Expl. limit (lower): 3,6 Vol%
- pH (15 g/l H_2O, 20 °C) 10,5

Toxicological data:
- LD 50 (oral, rat): 8000 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 1

T6025-2, Triethanolamine, synthesis grade

HS-No: 2922 13 10 00

Assay (GC)	min. 98 %
Mono + diethanolamine (G.C)	max. 2 %
Sulfated ash	max. 0.1 %
Water	max. 1 %

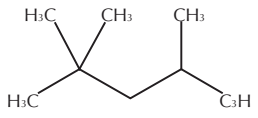
Code	Capacity
T6025-2-1000	1.0 L
T6025-2-2500	2.5 L

T

2,2,4-TRIMETHYLPENTANE

F Xn N

Isooctace, Isobutyltrimethylmethane, iso-Octane



- C_8H_{18}
- M = 114.26 g/mol
- CAS [540-84-1]
- EC number: 208-759-1

Physical data:
- Form: LIquid
- Density: 0.69 g/cm³
- Solub. in water (20 °C): 0.56 mg/l
- Melting point: -107 °C
- Boiling point: 99 °C
- Flash point: -12 °C
- Ignition temp.: 410 °C
- Vapour pressure: (20 °C) 51 hPa
- Viscosity: (22 °C) 0.51 mPas
- Dielectric const.: (20 °C) 1.9
- Evap. heat: (99 °C) 344 KJ/kg
- Saturation conc.: (20 °C) 239 g/m³
- Expl. limit (upper): 6 Vol%
- Expl. limit (lower): 1 Vol%
- pH ~ 7

Toxicological data:
- LD 50 (oral, rat): > 2000 mg/kg
- MAK: 500 ml/m³ , 2400 mg/m³
- WGK: 1

Safety:
- EC Index no.: 603-009-00-8
- R: 11-38-50/53-65-67
- S: 9-16-29-33-46-60-61-62
- VbF class: AI
- Poison class CH (Swiss): 5

Transport/storage:
- ADR: 3 F1 II UN 1262
- IMDG: 3 II UN 1262
- IATA/ICAO: 3 II UN 1262
- PAX: 305
- CAO: 307
- LGK: 3 A
- Disposal: 1

Special regulations:
- Product submitted to special taxes law

TR105-1 2,2,4-Trimethylpentane, reagent grade

HS-No: 2901 10 00 00

Assay	min. 99.5 %	Iron (Fe)	max. 0.00001 %
Colour	max. 10 Hazen	Magnesium (Mg)	max. 0.00001 %
Acidity	max. 0.0003 meq/g	Manganese (Mn)	max. 0.000002 %
Aluminium (Al)	max. 0.00005 %	Nickel (Ni)	max. 0.000002 %
Barium (Ba)	max. 0.00001 %	Lead (Pb)	max. 0.00001 %
Boron (B)	max. 0.000002 %	Tin (Sn)	max. 0.00001 %
Cadmium (Cd)	max. 0.000005 %	Zinc (Zn)	max. 0.00001 %
Calcium (Ca)	max. 0.00005 %	Sulphur compounds (as S)	max. 0.005 %
Chromium (Cr)	max. 0.000002 %	Substances Darkened by H_2SO_4	passes test
Cobalt (Co)	max. 0.000002 %	Non-volatile matter	max. 0.0005 %
Copper (Cu)	max. 0.000002 %	Water	max. 0.01 %

Code	Capacity
TR105-1-2501	2.5 L

TR105-3 2,2,4-Trimethylpentane, extra pure

HS-No: 2901 10 90 00

Assay	min. 99 %	Lead (Pb)	max. 0.00002 %
Acidity	max. 0.005 meq/g	Nickel (Ni)	max. 0.00002 %
Sulphur compounds (as S)	max. 0.002 %	Non-volatile matter	max. 0.001 %
Copper (Cu)	max. 0.00002 %	Water	max. 0.02 %
Iron (Fe)	max. 0.00005 %		

Code	Capacity
TR105-3-2501	2.5 L

TR105-5 2,2,4-Trimethylpentane (Isooctane), spectroscopy grade

HS-No: 2901 10 90 00

Purity (GC)	min. 99.8 %	Colour	max. 10 Hazen
Evaporation residue	max. 0.0005 %	Acidity	max. 0.0005 meq/g
Water	max. 0.005 %	Alkalinity	max. 0.0002 meq/g

Fluorescence

- as quinine at 254 nm	max. 1 ppb
- as quinine at 365 nm	max. 1 ppb

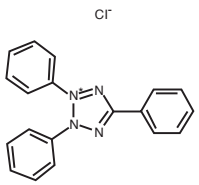
Transmission

- at 205 nm	min. 10 %
- at 215 nm	min. 50 %
- at 225 nm	min. 80 %
- at 235 nm	min. 90 %
- from 255 nm	min. 98 %

Code	Capacity
TR105-5-2501	2.5 L

2,3,5-TRIPHENYL TETRAZOLIUM CHLORIDE

- $C_{19}H_{15}C1N_4$
- M = 334.81 g/mol
- CAS NO. 298-96-4
- EC number: 206-071-6



Physical data:
- Solub. in water ~ 150 g/l (20 °C)
- pH value ~ 3.7 (10 g/l, H2O, 20 °C)
- Melting point: 243 °C (decomposes)
- Bulk density ~ 230 kg/m3

Safety:
- Poison class (CH) NK

Transport/storage:
- LGK: 10-13

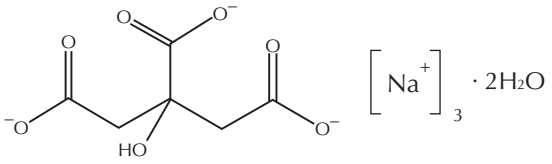
T6030-1, 2,3,5-Triphenyl tetrazolium chloride, reagent grade

HS-No: 2933 90 95 00

Molar absorptivity (L/cm-mol)	min. 2.0 x 10_4	Heavy metals (as Pb)	max. 0.001 %
Sensitivity test	passes test	Iron (Fe)	max. 0.001 %
Solubility test	passes test	Residue after ignition (as sulfate)	max. 0.5 %
Loss on drying	max. 3.0 %		

Code	Capacity
T6030-1-0010	10 g

TRI-SODIUM CITRATE DIHYDRATE



- $C_6H_5Na_3O_7 \cdot 2H_2O$
- M = 294.10 g/mol
- CAS [6132-04-3]
- EC number: 200-675-3

Physical data:
- Spec. density: 1,76 g/cm³
- Bulk density: ~ 600 kg/m³
- Solub. in water (25 °C): 425 g/l
- Melting point: 150 °C (anhydrous substance)
- pH (50 g/l H_2O, 20 °C) 7,5 - 9,5

Toxicological data:
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 14

T6066-1, tris-sodium citrate dihydrate, reagent grade

HS-No: 2918 15 00 00

Assay (titr. with $HClO_4$)	min. 99.5 %	Ammonium (NH_4)	max. 0.003 %
Insoluble in water	max. 0.005 %	Calcium (Ca)	max. 0.005 %
pH (5%, H_2O)	7.5 - 9.0	Copper (Cu)	max. 0.0005 %
Chlorides (Cl)	max. 0.001 %	Heavy metals (as Pb)	max. 0.0005 %
Oxalate (C_2O_4)	max. 0.02 %	Iron (Fe)	max. 0.0005 %
Phosphates (PO_4)	max. 0.002 %	Lead (Pb)	max. 0.0002 %
Sulfates (SO_4)	max. 0.001 %	Zinc (Zn)	max. 0.0005 %
Total N	max. 0.001 %	Water	11 - 13 %

Code	Capacity
T6066-1-0250	250 g
T6066-1-0500	500 g

TRI-SODIUM PHOSPHATE DODECAHYDRATE

Xi

Trisodium phosphate, Sodium phosphate tribasic

- $Na_3PO_4 \cdot 12H_2O$
- M = 380.12 g/mol
- CAS [10101-89-0]
- EC number: 231-509-8

Physical data:
- Spec. density: 1,62 g/cm³
- Bulk density: ~ 620 kg/m³
- Solub. in water (20 °C): 285 g/l
- Melting point: 75 °C
- pH (10 g/l H_2O, 20 °C) ~ 12

Toxicological data:
- LD 50 (oral, rat): 7400 mg/kg
- WGK: 1

Safety:
- R: 36/38
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 14

T6072-1, tri-Sodium phosphate dodecahydrate, reagent grade

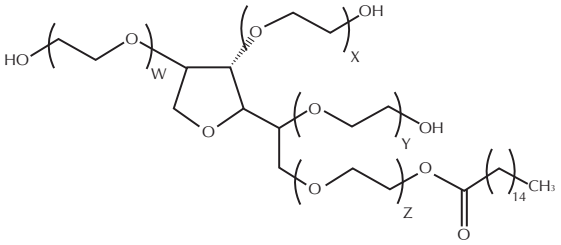
HS-No: 2835 23 00 00

Assay (acidimetric)	min. 98 %	Sulfates (SO_4)	max. 0.005 %
Insoluble in water	max. 0.01 %	Total N	max. 0.001 %
Free alkali (as NaOH)	max. 2.5%	Arsenic (As)	max. 0.0001 %
Chlorides (Cl)	max. 0.0005 %	Heavy metals (as Pb)	max. 0.001 %
Flourides (F)	max. 0.0005 %	Iron (Fe)	max. 0.001 %

Code	Capacity
T6072-1-0500	500 g
T6072-1-1000	1 kg

TWEEN® 20

Polyoxyethylene sorbitan monostearate



W + X + Y + Z = 20

- $C_{54}H_{114}O_{26}$
- CAS [9005-64-5]

Physical data:
- Form: Thick liquid
- Density: 1.11 g/cm³
- Solub. in water (25 °C): 100 g/l
- Boiling point: > 100 °C
- Flash point: > 150 °C
- Vapour pressure: (20 °C) < 1.4 hPa
- pH (50 g/l H2O, 20 °C) 6 - 8

Toxicological data:
- LD 50 (oral, rat): 38000 mg/kg

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 28

T8000-2, Tween® 20, synthesis grade

HS-No: 3402 13 00 00

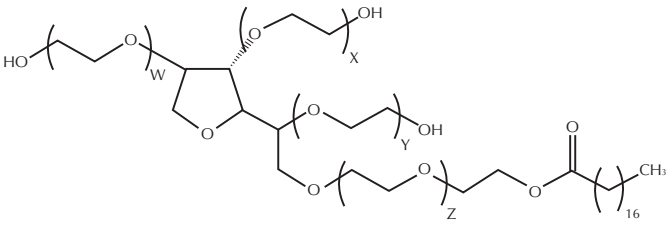
Identity (IR-spectrum)	passes test	Saponification index	40 – 50
Acidity index	3	Sulfated ash	max. 0.5 %
Hydroxyl number	96 – 108		

Code	Capacity
T8000-2-1000	1.0 L

T

TWEEN® 60

Polyoxyethylene sorbitan monostearate



W + X + Y + Z = 20

- $C_{64}H_{126}O_{26}$
- CAS [9005-67-8]

Physical data:
- Density: 1,08 g/cm³
- Solub. in water (25 °C): miscible
- Boiling point: > 100 °C
- Flash point: > 149 °C
- Vapour pressure: (20 °C) < 14 hPa
- Viscosity: (25 °C) ~ 600 mPas
- pH ~ 7

Toxicological data:
- LD 50 (oral, rat): > 38000 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 28

T8007-2, Tween® 60, synthesis grade

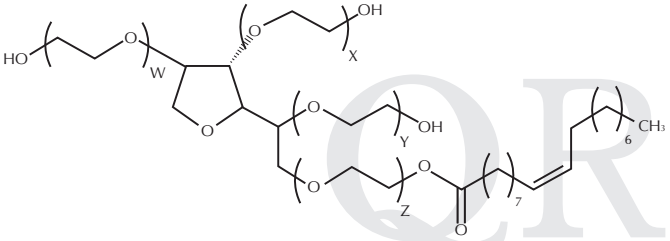
Hydroxyl number ..... 81 - 95
Saponification index ..... 45 - 55

HS-No: 3402 13 00 00

Code	Capacity
T8007-2-1000	1.0 L

TWEEN® 80

Polyoxyethylene sorbitan monooleate



W + X + Y + Z = 20

- $C_{64}H_{124}O_{26}$
- CAS [9005-65-6]

Physical data:
- Density: (25 °C) 1,07 g/cm³
- Solub. in water (25 °C): miscible
- Boiling point: > 100 °C
- Flash point: > 149 °C
- Ignition temp.: > 180 °C
- Vapour pressure: (20 °C) < 1,33 hPa
- Viscosity: (25 °C) 375 - 480 mPas
- pH (50 g/l H_2O, 20 °C) 5 - 7

Toxicological data:
- LD 50 (oral, rat): > 38000 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 28

T8009-2, Tween® 80, synthesis grade

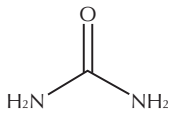
Arsenic (As) ..... max. 0.0001 %
Heavy metals (as Pb) ..... max. 0.001 %
Acidity index 3
Hydroxyl number ..... 65 - 80
Iodine index ..... 18 - 24
Saponification index ..... 45 - 55
Sulfated ash ..... max. 0.5 %

HS-No: 3402 13 00 00

Code	Capacity
T8009-2-1000	1.0 L

T

UREA



- CH_4N_2O
- M = 60.06 g/mol
- CAS [57-13-6]
- EC number: 200-315-5

Physical data:
- Spec. density: 1,34 g/cm³
- Bulk density: ~ 750 kg/m³
- Solub. in water (20 °C): 590 g/l
- Melting point: 132,5 - 134,5 °C
- Vapour pressure: (75 °C) ~ 0,002 hPa
- pH (100 g/l H_2O, 20 °C) ~ 9,5

Toxicological data:
- LD 50 (oral, rat): 8471 mg/kg
- WGK: 1

Safety:
- Poison class CH (Swiss): 5

Transport/storage:
- LGK: 10-13
- Disposal: 31

U6006-1, Urea, reagent grade

HS-No: 3102 10 10 00

Assay	min. 99.5 %	Sulphate (SO_4)	max. 0.001 %
Insoluble Matter	max. 0.01 %	Heavy Metals (as Pb)	max. 0.001 %
Residue After Ignition	max. 0.01 %	Iron (Fe)	max. 0.001 %
Chloride (Cl)	max. 5 ppm		

Code	Capacity
U6006-1-0500	500 g
U6006-1-1000	1 kg

U6006-1, Urea 99.5%, ultra pure grade

HS-No: 3102 10 10 00

Assay	min. 99.5 %	Heavy metals (as Pb)	max. 0.001 %
A280 (5M, H_2O)	max. 0.05 %	Iron (Fe)	max. 0.001 %
Melting point	132 – 135 °C	Cyanate	none detected
Chloride (Cl)	max. 0.0005 %	Ammonia	none detected

Code	Capacity
U6006-8-2500	2.5 kg

WATER

- H_2O
- M = 18.02 g/mol
- CAS [7732-18-5]
- EC number: 231-791-2

Physical data:
- Density: 1,00 g/cm³
- Melting point: 0 °C
- Boiling point: 100 °C
- Vapour pressure: (20 °C) 23 hPa
- Viscosity: (20 °C) 0,95 mPas
- Dipolar moment: (20 °C) 1,85 Debye
- Dielectric const.: (20 °C) 80,2
- Evap. heat: (20 °C) 2253 KJ/kg
- pH (20 °C) 7

Toxicological data:
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13

W1001-1, DI Water 17 – 18 Mega ohm

HS-No: 2851 00 10 00

Water	17 – 18 mega ohm
Chloride (Cl)	max. 0.005 %
Phosphates (PO_4)	max. 0.005 %
Sulphate (SO_4)	max. 0.005 %

Code	Capacity
W1001-1-2500	2.5 L

W1001-1, Water deionized, reagent grade

HS-No: 2851 00 10 00

Chloride (Cl)	max. 0.005 %
Phosphates (PO_4)	max. 0.005 %
Sulphate (SO_4)	max. 0.005 %

Code	Capacity
W1001-1-9020	20 L

W1001-4, Water, HPLC grade

HS-No: 2851 00 10 00

Fluorescence, 450 nm, as quinine	max. 0.1 ppb
Conductivity	max. 1 µS/cm
LC gradient elution suitability	passes test
Chloride (Cl)	max. 0.00004 %
Nitrates (NO_3)	max. 0.00004 %
Phosphates (PO_4)	max. 0.0001%
Silicates (SiO_2)	max. 0.0000001 %
Sulfates (SO_4)	max. 0.0001 %
Heavy Metals (as Pb)	max. 0.0000001 %
$KMnO_4$ red matter	passes test
Non-volatile mater (at time of packaging)	max. 0.0001 %

Code	Capacity
W1001-4-2501	20 L

Maximum absorbance in a 1.0cm cell at wavelength

190 nm	1.00
200 nm	0.10
210 nm	0.01
250 nm	0.005
400 nm	0.005

WIJS SOLUTION


C

- ICI

Physical data:
- Density: 1,06 g/cm³
- Solub. in water (20°C): miscible (decomposes)

- Flash point: 40 °C
- pH (20 °C) < 1

Toxicological data:
- LD 50 (oral, rat): 3310 mg/kg (chief component)

- MAK: 10 ml/m³ , 25 mg/m³
- WGK: 1

Safety:
- R: 10-35
- S: 23.2-51-26-36/37/39-45
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 CF1 II UN 2920
- IMDG: 5.1 II UN 2920
- IATA/ICAO: 5.1 II UN 2920
- PAX: 809
- CAO: 813
- LGK: 3A

W3001-0, Wijs solution for determination of the iodine number c(ICl) = 0.1 mol/l (0.1N)

HS-No: 2812 10 99 00

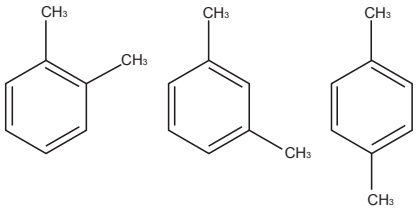
Amount-of-substance concentration	c(ICl)=0.1 mol/l+/-0.2%
Titer (20°C)	1.000

Code	Capacity
W3001-0-2501	2.5 L

W

XYLENE, MIXTURE OF ISOMERS

Xn



Dimethylbenzene, Xylol

- C_8H_{10}
- M = 106.17 g/mol
- CAS [1330-20-7]
- EC number: 215-535-7

Physical data:
- Density: 0,86 g/cm³
- Solub. in water (25 °C): 0,2 g/l
- Melting point: > -34 °C
- Boiling point: 137 - 143 °C
- Flash point: 25 °C
- Ignition temp.: ~ 465 °C
- Vapour pressure: (20 °C) 10 hPa
- Dielectric const.: (25 °C) 2,4
- Saturation conc.: (20 °C) 30 - 38 g/m³
- Expl. limit (upper): 7,5 Vol%
- Expl. limit (lower): 1,7 Vol%

Toxicological data:
- LD 50 (oral, rat): 4300 mg/kg
- MAK: 100 ml/m³ , 440 mg/m³
- WGK: 2

Safety:
- EC Index no.: 601-022-00-9 [4]
- R: 10-20/21-38
- S: 25-36/37
- VbF class: AII
- Poison class CH (Swiss): 4

Transport/storage:
- ADR: 3 F1 III UN 1307
- IMDG: 3 III UN 1307
- IATA/ICAO: 3 III UN 1307
- PAX: 309
- CAO: 310
- LGK: 3 A
- Disposal: 1

X8001-1, Xylene, mixture of isomers, reagent grade

HS-No: 2902 44 00 00

Assay (Xylene isomers + Ethylbenzene < 25%)	min. 98.5 %	Sudstances Darkened by Sulphuric Acid	passes test
Colour	max. 10 APHA	Sulphur compounds (as S)	max. 0.003 %
Residue After Evaporation	max. 0.002 %	Water	max. 0.05 %

Code	Capacity
X8001-1-2501	2.5L

X8008-1, Xylenol orange, tetrasodium salt, reagent grade

HS-No: 2902 44 00 00

Absorption maximum a (pH 14.0)	582 – 585 nm	Suitability as indicator for metal titration	passes test
Absorptivity (A1%/1cm; a max, pH 14.0 on dried material)	600 – 650	Loss on drying (110°C)	max. 7 %

Code	Capacity
X8008-1-0005	5 g

X

ZINC

F

- Zn
- M = 65,38 g/mol
- CAS [7440-66-6]
- EC number: 231-175-3

Physical data:
- Spec. density: 7,14 g/cm³
- Solub. in water (20 °C): hydrolysis reaction
- Melting point: 420 °C
- Boiling point: 908 °C
- Ignition temp.: 460 °C
- Vapour pressure: (487 °C) 1,33 hPa

Toxicological data:
- WGK: 0

Safety:
- EC Index no.: 030-002-00-7
- R: 10-15
- S: 7/8-43.3
- Poison class CH (Swiss): F

Transport/storage:
- ADR: 4.3 WS II UN 1436
- IMDG: 4.3 II UN 1436
- IATA/ICAO: 4.3 II UN 1436
- PAX: 415
- CAO: 417
- LGK: 4.3
- Disposal: 15

Z3045-3, Zinc powder, extra pure

HS-No: 7903 90 00 00

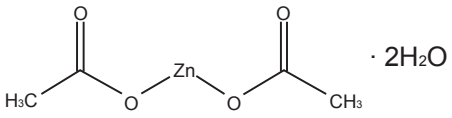
Assay (complexometric)	min. 97 %	Cadmium (Cd)	max. 0.005 %
Insoluble in hydrochloric acid	max. 0.05 %	Iron (Fe)	max. 0.005 %
Arsenic (As)	max. 0.00001 %	Lead (Pb)	max. 0.01 %

Code	Capacity
Z3045-3-1000	1 kg

ZINC ACETATE DIHYDRATE

Xn

Acetic acid zinc salt dihydrate



- $Zn(CH_3COO)_2 \cdot 2H_2O$
- M = 219,49 g/mol
- CAS [5970-45-6]
- EC number: 209-170-2

Physical data:
- Spec. density: 1.77 g/cm³
- Bulk density: ~ 900 kg/m³
- Solub. in water (20 °C): 430 g/l
- Melting point: ~ 100 °C
- pH (50 g/l H_2O, 20 °C) 6 - 8

Toxicological data:
- LD 50 (oral, rat): 794 mg/kg
- WGK: 1

Safety:
- R: 22
- S: 25-46
- Poison class CH (Swiss): 3

Transport/storage:
- LGK: 10-13
- Disposal: 15

Z3005-1, Zinc acetate dihydrate, reagent grade

HS-No: 2915 29 00 90

Assay (complexometric)	min. 99.5 %	Copper (Cu)	max. 0.0005 %
Insoluble in (CH_3COOH) (0.5%)	max. 0.005 %	Iron (Fe)	max. 0.0005 %
pH (5%, H_2O)	6 - 7	Lead (Pb)	max. 0.0005 %
Chlorides (Cl)	max. 0.0005 %	Magnesium (Mg)	max. 0.0005 %
Sulfates (SO_4)	max. 0.005 %	Manganese (Mn)	max. 0.0005 %
Total N	max. 0.001 %	Potassium (K)	max. 0.001 %
Cadmium (Cd)	max. 0.0005 %	Sodium (NA)	max. 0.001 %
Calcium (Ca)	max. 0.001 %		

Code	Capacity
Z3005-1-1000	1 kg

ZINC CARBONATE

- CAS [5263-02-5]
- EC number: 226-076-7

Physical data:
- Spec. density: 3.5 g/cm³ (20 °C)
- Solub. in water (20 °C): almost insoluble
- pH value ~ 9.5 (50 g/l, H_2O, 20 °C) (suspension)
- Melting point: 1970 °C
- Bulk density ~ 400 kg/m³

Toxicological data:
- LD 50 (oral, rat) > 10000 mg/kg

Safety:
- Poison class CH 4
- WGK 1

Transport/storage:
- LGK: 10-13

Z3010-3, Zinc carbonate, extra pure

HS-No: 2836 99 18 00

Assay (complexometric, Zn)	min. 58.0 %	Iron (Fe)	max. 0.02 %
Chloride (Cl)	max. 0.05 %	Lead (Pb)	max. 0.002 %
Sulphate (SO_4)	max. 0.5 %	Residue on ignition	70 – 80 %
Arsenic (As)	max. 0.0005 %	Bulk density	35 – 45 g/100ml
Calcium (Ca)	max. 0.5 %		

Code	Capacity
Z3010-3-0500	500 g

ZINC CHLORIDE


C

$ZnCl_2$

- Cl_2Zn
- M = 136.28 g/mol
- CAS [7646-85-7]
- EC number: 231-592-0

Physical data:
- Form: Solid
- Spec. density: ~ 2,9 g/cm³
- Bulk density: ~ 1400 - 1800 kg/m³
- Solub. in water (20°C): soluble
- Melting point: 318 °C
- Boiling point: 730 °C
- pH (100 g/l H_2O, 20 °C) ~ 5

Toxicological data:
- LD 50 (oral, rat): 350 mg/kg
- WGK: 1

Safety:
- EC Index no.: 030-003-00-2
- R: 22-34-50/53
- S: 28.1-26-36/37/39-45-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C2 III UN 2331
- IMDG: 8 III UN 2331
- IATA/ICAO: 8 III UN 2331
- PAX: 822
- CAO: 823
- LGK: 8 B
- Disposal: 24

Z3015-0, Zinc chloride, CP grade

HS-No: 2827 36 00 00

Assay	min. 98 %	Lead	max. 0.01 %
Sulphate	max. 0.03 %	NO_2	max. 0.006 %
Iron	max. 0.002 %		

Code	Capacity
Z3015-0-1000	1 kg

Z3015-1, Zinc chloride, reagent grade

HS-No: 2827 36 00 00

Assay (complexometric)	min. 98 %	Cadmium (Cd)	max. 0.0005 %
Insoluble substances	max. 0.005 %	Calcium (Ca)	max. 0.001 %
Oxichloride (acidimetric, as ZnO)	max. 1.2 %	Copper (Cu)	max. 0.001 %
pH (10%, H_2O)	4.6 - 5.5	Iron (Fe)	max. 0.0005 %
Nitrates (NO_3)	max. 0.003 %	Lead (Pb)	max. 0.001 %
Sulfates (SO_4)	max. 0.002 %	Magnesium (Mg)	max. 0.001 %
Total N	max. 0.001 %	Potassium (K)	max. 0.001 %
Ammonium (NH_4)	max. 0.005 %	Sodium (NA)	max. 0.001 %

Code	Capacity
Z3015-1-0250	250 g

Z3015-3, Zinc chloride, extra pure

HS-No: 2827 36 00 00

Assay (complexometric)	min. 98 %	Arsenic (As)	max. 0.0002 %
Appearance of solution	passes test	Calcium (Ca)	max. 0.01 %
pH (10%, H_2O)	4.6 - 5.5	Iron (Fe)	max. 0.001 %
Sulfates (SO_4)	max. 0.01 %	Lead (Pb)	max. 0.005 %
Total N	max. 0.001 %	Potassium (K)	max. 0.15 %
Aluminium, calcium, magnesium iron,		Sodium (Na)	max. 0.01 %
heavy metals	passes test	Organic volatile impurities	passes test
Ammonium (NH_4)	max. 0.04 %		

Code	Capacity
Z3015-3-0500	1 kg
Z3015-3-1000	1 kg

ZINC NITRATE HEXAHYDRATE


O

Xn

Nitric acid zinc salt hexahydrate

- $Zn(NO_3)_2 \cdot 6H_2O$
- M = 297.46 g/mol
- CAS [10196-18-6]
- EC number: 231-943-8

Physical data:
- Spec. density: 2,06 g/cm³
- Solub. in water (20 °C): soluble
- Melting point: ~ 36 °C
- pH (50 g/l H_2O, 20 °C) 5,1

Toxicological data:
- LD 50 (oral, rat): 1190 mg/kg
- WGK: 1

Safety:
- R: 8-22-36/37/38
- S: 26-46
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 5.1 O2 II UN 1514
- IMDG: 5.1 II UN 1514
- IATA/ICAO: 5.1 II UN 1514
- PAX: 508
- CAO: 511
- LGK: 5.1B

Z3020-1, Zinc nitrate hexahydrate, reagent grade

HS-No: 2834 29 80 00

Assay (complexometric)	min. 98.5 %	Cadmium (Cd)	max. 0.001 %
Insoluble in water	max. 0.005 %	Copper (Cu)	max. 0.0005 %
Free acid (as HNO_3)	max. 0.02 %	Iron (Fe)	max. 0.001 %
Chlorides (Cl)	max. 0.002 %	Lead (Pb)	max. 0.005 %
Sulfates (SO_4)	max. 0.01 %	Magnesium (Mg)	max. 0.002 %
Ammonium (NH_4)	max. 0.01 %	Nickel (Ni)	max. 0.0005 %

Code	Capacity
Z3020-1-0500	500 g

ZINC OXIDE

- ZnO
- M = 81.37 g/mol
- CAS [1314-13-2]
- EC number: 215-222-5

Physical data:
- Spec. density: 5,47 g/cm³
- Bulk density: ~ 300 - 500 kg/m³
- Solub. in water (20 °C): insoluble
- Melting point: ~ 1970 °C
- pH (50 g/l H_2O, 20 °C) ~ 7

Toxicological data:
- LD 50 (oral, rat): > 8437 mg/kg
- MAK: 1,5 mg/m³
- WGK: 0

Safety:
- Poison class CH (Swiss): F

Transport/storage:
- LGK: 10-13
- Disposal: 15

Z3027-1, Zinc oxide, reagent grade

HS-No: 2817 00 00 11

Assay (complexometric)	min. 99 %	Calcium (Ca)	max. 0.001 %
Insoluble in H_2SO_4	max. 0.01 %	Copper (Cu)	max. 0.0005 %
Free alkali	passes test	Iron (Fe)	max. 0.0005 %
Chlorides (Cl)	max. 0.001 %	Lead (Pb)	max. 0.002 %
Nitrates (NO_3)	max. 0.003 %	Magnesium (Mg)	max. 0.002 %
Phosphates (PO_4)	max. 0.0005 %	Manganese (Mn)	max. 0.005 %
Sulfates (SO_4)	max. 0.01 %	Potassium (K)	max. 0.002 %
Total N	max. 0.0005 %	Sodium (NA)	max. 0.001 %
Arsenic (As)	max. 0.00005 %	$KMnO_4$ red. matter (as O)	max. 0.001 %
Cadmium (Cd)	max. 0.0005 %	Loss on ignition (500°C)	max 0.5 %

Code	Capacity
Z3027-1-1000	1 kg

ZINC SULFATE HEPTAHYDRATE

Xi N

Sulfuric acid zinc salt heptahydrate, Zinc vitriol

- $ZnSO_4 \cdot 7H_2O$
- M = 287.54 g/mol
- CAS [7446-20-0]
- EC number: 231-793-3

Physical data:
- Spec. density: 1,97 g/cm³
- Bulk density: ~ 800 - 1000 kg/m³
- Solub. in water (20 °C): 960 g/l
- Melting point: ~ 40 °C (decomposes)
- pH (50 g/l H_2O, 20 °C) ~ 4 - 6

Toxicological data:
- LD 50 (oral, rat): > 2150 mg/kg
- WGK: 1

Safety:
- EC Index no.: 030-006-00-9
- R: 36/38-50/53
- S: 22-25-60-61
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 9 M7 III UN 3077
- IMDG: 9 III UN 3077
- IATA/ICAO: 9 III UN 3077
- PAX: 911
- CAO: 911
- LGK: 10-13
- Disposal: 15

Z3038-1, Zinc sulfate heptahydrate, reagent grade

HS-No: 2833 26 00 00

Assay (complexometric)	min. 99.5 %	Copper (Cu)	max. 0.0005 %
pH (5%, H_2O)	4.4 - 5.6	Iron (Fe)	max. 0.0005 %
Chloride (Cl)	max. 0.0005 %	Lead (Pb)	max. 0.0005 %
Total N	max. 0.0005 %	Magnesium (Mg)	max. 0.001 %
Arsenic (As)	max. 0.00005 %	Manganese (Mn)	max. 0.0002 %
Cadmium (Cd)	max. 0.0002 %	Potassium (K)	max. 0.001 %
Calcium (Ca)	max. 0.001 %	Sodium (Na)	max. 0.0005 %

Code	Capacity
Z3038-1-0500	500 g
Z3038-1-1000	1 kg

ZINC STANDARD SOLUTION 1000MG/L FOR AA

Xi

Zinc nitrate in nitric acid 0,5 mol/l

Physical data:
- Density: ~ 1.02 g/cm³
- Solub. in water (20 °C): miscible
- pH (20 °C) < 1

Safety:
- R: 36/38
- S: 26-37
- Poison class CH (Swiss): 3

Transport/storage:
- ADR: 8 C1 III UN 3264
- IMDG: 8 III UN 3264
- IATA/ICAO: 8 III UN 3264
- PAX: 818
- CAO: 820
- LGK: 8 B

Z1001-0, Zinc standard solution 1000mg/l for AA

HS-No: 3822 00 00 00

composition ..... 1000±5 mg/l

Code	Capacity
Z1001-0-0500	500 ml

ZINC SULFATE, VOLUMETRIC SOLUTIONS

Z3042-0, Zinc sulfate, solution 0.05 mol/l (0.025N)

Zinc vitriol

- $ZnSO_4 \cdot 7H_2O$
- M = 287.54 g/mol
- CAS [7446-20-0]
- EC number: 231-793-3

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 030-006-00-9
- R: 51/53
- S: 61

Transport/storage:
- LGK: 10-13
- Disposal: 15

1ml = 0.00807 g $ZnSO_4$

HS-No: 2833 26 00 00

Code	Capacity
Z3042-0-1000	1.0 L

Z3043-0, Zinc sulfate, solution 0.1 mol/l (0.05N)

N

Zinc vitriol

- $ZnSO_4 \cdot 7H_2O$
- M = 287.54 g/mol
- CAS [7446-20-0]
- EC number: 231-793-3

Physical data:
- Density: 1,00 g/cm³

Toxicological data:
- WGK: 1

Safety:
- EC Index no.: 030-006-00-9
- R: 52/53
- S: 61

Transport/storage:
- LGK: 10-13
- Disposal: 15

1ml = 0.01614 g $ZnSO_4$

HS-No: 2833 26 00 00

Code	Capacity
Z3043-0-1000	1.0 L

ALPHABETICAL INDEX

A

B

C

DESCRIPTION

T

Periodic Table of the Elements

1 IA												13 IIIA	14 IVA	15 VA	16 VIA	17 VIIA	18 VIIIA INERT GASES
1 1.008 **H** Hydrogen	2 IIA																2 4.003 **He** Helium
3 6.941 **Li** Lithium	4 9.012 **Be** Beryllium											5 10.811 **B** Boron	6 12.011 **C** Carbon	7 14.007 **N** Nitrogen	8 15.999 **O** Oxygen	9 18.999 **F** Fluorine	10 20.180 **Ne** Neon
11 22.990 **Na** Sodium	12 24.305 **Mg** Magnesium	3 IIIB	4 IVB	5 VB	6 VIB	7 VIIB	8 -------	9 VIII	10 -------	11 IB	12 IIB	13 26.982 **AI** Aluminum	14 28.086 **Si** Silicon	15 30.974 **P** Phosphorus	16 32.066 **S** Sulfur	17 35.453 **CI** Chlorine	18 39.948 **Ar** Argon
19 39.098 **K** Potassium	20 40.078 **Ca** Calcium	21 44.956 **Sc** Scandium	22 47.88 **Ti** Titanium	23 50.942 **V** Vanadium	24 51.996 **Cr** Chromium	25 54.938 **Mn** Manganese	26 55.847 **Fe** Iron	27 58.933 **Co** Cobalt	28 58.69 **Ni** Nickel	29 63.546 **Cu** Copper	30 65.39 **Zn** Zinc	31 69.723 **Ga** Gallium	32 72.61 **Ge** Germanium	33 74.922 **As** Arsenic	34 78.96 **Se** Selenium	35 79.904 **Br** Bromine	36 83.8 **Kr** Krypton
37 85.468 **Rb** Rubidium	38 87.62 **Sr** Strontium	39 88.906 **Y** Yttrium	40 91.224 **Zr** Zirconium	41 92.906 **Nb** Niobium	42 95.94 **Mo** Molybdenum	43 98.906 **Tc** Technetium	44 101.07 **Ru** Ruthenium	45 102.906 **Rh** Rhodium	46 106.42 **Pd** Palladium	47 107.868 **Ag** Silver	48 112.411 **Cd** Cadmium	49 114.82 **In** Indium	50 118.71 **Sn** Tin	51 121.75 **Sb** Antimony	52 127.6 **Te** Tellurium	53 126.904 **I** Iodine	54 131.29 **Xe** Xenon
55 132.905 **Cs** Cesium	56 137.327 **Ba** Barium	57-71 *	72 178.49 **Hf** Hafnium	73 180.948 **Ta** Tantalum	74 183.85 **W** Tungsten	75 186.207 **Re** Rhenium	76 190.2 **Os** Osmium	77 192.22 **Ir** Iridium	78 195.08 **Pt** Platinum	79 196.967 **Au** Gold	80 200.59 **Hg** Mercury	81 204.383 **TI** Thallium	82 207.2 **Pb** Lead	83 208.980 **Bi** Bismuth	84 208.982 **Po** Polonium	85 209.987 **At** Astatine	86 222.018 **Rn** Radon
87 223.020 **Fr** Francium	88 226.025 **Ra** Radium	89-103 **	104 261.109 **Unq** Unnilquadium	105 262.114 **Unp** Unnilpentium	106 263.118 **Unh** Unnilhexium	107 262.123 **Uns** Unnilseptium	108 **Uno**	109 **Une**									

KEY

Atomic Number — 999
Atomic Weight — 1928.2004
Symbol — Q
Name — QRëC

Lanthanides *	57 138.906 **La** Lanthanum	58 140.115 **Ce** Cerium	59 140.908 **Pr** Praseodymium	60 144.24 **Nd** Neodymium	61 146.915 **Pm** Promethium	62 150.36 **Sm** Samarium	63 151.965 **Eu** Europium	64 157.25 **Gd** Gadolinium	65 158.925 **Tb** Terbium	66 162.5 **Dy** Dysprosium	67 164.930 **Ho** Holmium	68 167.26 **Er** Erbium	69 168.934 **Tm** Thulium	70 173.04 **Yb** Ytterbium	71 174.967 **Lu** Lutetium
Actinides **	89 227.028 **Ac** Actinium	90 232.038 **Th** Thorium	91 231.036 **Pa** Protactinium	92 238.029 **U** Uranium	93 237.048 **Np** Neptunium	94 244.064 **Pu** Plutonium	95 243.061 **Am** Americium	96 247.070 **Cm** Curium	97 247.070 **Bk** Berkelium	98 251.080 **Cf** Californium	99 252.083 **Es** Einsteinium	100 257.095 **Fm** Fermium	101 258.099 **Md** Mendelevium	102 259.101 **No** Nobelium	103 260.105 **Lr** Lawrencium