

BIOSOLVE

CATALOGUE
2012-2014



Alphabetical listings



General Products

LC Grades – ULC/MS, HPLC Supra-Gradient, Spectro, etc.

GC Grade – LV/GC for organic trace analysis

Environmental analysis – Dioxins, Pesti-S, Furans & PCB's

Headspace

Molecular biology

Peptide synthesis

Extra-dry & Supra-dry

Analytical, Pharmaceutical, Chemically pure

MOS

Special sections



Amino acid derivatives



Deuterated solvents for NMR-spectroscopy



DNA & RNA Synthesis



Dyes



Molecular Biology



Sphingolipids & Phospholipids



Transfection kits

Dear Customer,

This new 2012-2014 catalogue is presented to you as a reference tool for your research, routine analyses and production. It includes new products and new grades, critical parameters, safety and quality information according to each product and grade.

For over three decades, we produce and distribute selected high purity solvents, reagents and formulations for the research, pharmaceutical and biotechnology industries, and are now a major supplier in this field.

Bio-Lab, Biosolve and more recently Biosolve Chimie, our new plant established in Lorraine France, meet the latest quality and environmental ISO standards, manufacturing under stringent quality control processes and serving you with the highest quality products on the market.

As our customer, you deserve excellent service, starting from the right packaging for your application through to swift and reliable delivery. We welcome you to contact us whenever you need our sound advice for quality, safety or product design, or to discuss the grade that best accommodates your special needs.

To contact us:

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20 rue Roger Husson

57260 Dieuze

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Fax: +33 - 3 - 878 675 89

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■ The Netherlands

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Cher Client,

Ce nouveau catalogue 2012-2014 vous est présenté comme un outil de référence pour votre recherche, vos analyses de routines et votre production. Il inclut de nouveaux produits avec leurs paramètres critiques et leurs informations de sécurité et de qualité pour chaque produit et catégorie.

Depuis plus de trois décennies, nous produisons et distribuons des solvants de très haute pureté, des réactifs et des formulations pour la recherche, les industries pharmaceutiques, chimiques, agro-alimentaires, la biotechnologie et sommes maintenant un acteur majeur du marché mondial.

Bio-Lab, Biosolve et plus récemment Biosolve Chimie, notre nouvelle usine en Lorraine, intègrent les dernières normes ISO pour l'environnement et la qualité. Notre production est soumise à des contrôles stricts de qualité à chaque étape de la fabrication, afin de vous proposer des produits de qualité irréprochable.

En tant que client, vous méritez un service d'excellence, à commencer par un emballage adapté, jusqu'à une livraison rapide et fiable. N'hésitez pas à nous contacter. Nous pourrions vous conseiller pour le choix d'un produit particulier ou vous orienter vers la gamme qui répondra le mieux à vos attentes.

Pour nous contacter :

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INTRODUCTION

We produce and distribute selected high purity solvents and chemicals for research, routine laboratories and industries, to the expanding local and international market.

In addition to serving the traditional chemical field with analytical, chemically pure and pharmaceutical grades of chemicals and solvents, we have developed several specialty lines, such as:

- ◆ HPLC, LC-MS & ULC/MS grade solvents and formulations for liquid chromatography.
- ◆ Solvents for organic trace analysis and environmental analysis: LV-GC, Dioxins, Pesti-S, Furans & PCB's grade.
- ◆ Peptide synthesis grade solvents and chemicals.
- ◆ Ancillary reagents and formulations for DNA & RNA synthesis.
- ◆ Chemicals, dyes, buffers and transfection kits for Molecular Biology.
- ◆ Solvents and formulations for the electronic industry.
- ◆ Deuterated solvents and chemicals for NMR spectroscopy.
- ◆ Synthetic lipids for the pharmaceutical industry and R&D use.

Our customers are invited to contact us for additional information regarding specific needs and availability of products not included in the present listing such as special formulations or grades. We are constantly striving to improve the quality and the service for the products we manufacture and distribute. New items are constantly added to meet the needs of a growing and diversifying market.

QUALITY:

Our products manufactured under strict and detailed operating procedures. Bio-Lab, Biosolve and more recently Biosolve Chimie, a new plant in Lorraine, France; meet the latest environmental and quality ISO standards, serving as the development, production and distribution centers.

From the initial acceptance of selected raw material through in process control to the final packed product, all steps are perfectly documented. This ensures a high quality of production with lot-to-lot reproducibility and complete traceability for all purposes. Thanks to continual research and development, we can offer for instance, one of the very best Acetonitrile for HPLC & UHPLC available worldwide: The Supra-gradient grade and the highest brand ULC/MS grade.

Chemical and physical analyses performed according to written procedures using modern equipment, properly maintained and calibrated as per ISO procedures.

Certificates of analysis and compliance (COA and COC) are available on request, or may be downloaded on line from our internet websites, even for long past delivered goods.

Manufacturing and recommended expiry dates are clearly stated on the label whenever relevant.

Thanks to our policy of quality control, we are an approved vendor to large health organizations, leading pharmaceutical companies as well as for the chemical and electronic industries. Our manufacturing units also concerned with ecology and taking steps in order to protect the environment and respect international regulations. We have been granted with the ISO 14001 accreditation, therefore joining the growing international community of companies respectful of the environment.



PRODUCT SECTIONS & GRADES DESCRIPTION

ULC/MS:

Highest quality for very demanding work of chromatography. Analyzed for very high HPLC, UHPLC and MS performances, coupled with very low amounts of inorganic cations contaminants. Filtered through 0.1 μm filters.

LC/MS:

For routine quality work, analyzed for low cations level and good HPLC, UHPLC and MS performance. Filtered through 0.2 μm filters.

HPLC Supra-gradient:

Our guaranteed specifications are often unique on the market including ultra-low fluorescent impurity levels, outstanding high UV transmission, minimum peak impurities, and very low drift in gradient HPLC.

HPLC-S:

Standard gradient quality for higher analytical demand.

HPLC-R:

Regular quality, satisfactory for most standard isocratic and routine gradient work.

HPLC preparative:

A basic alternative for preparative HPLC work. Although not always printed in this catalogue, this quality is available for most solvents. Please inquire.

HPLC:

Carefully prepared, bottled under inert gas and filtered through 0.2 μm filters.

LV-GC:

Suitable for extraction-concentration analysis, analyzed for GC-FID, -ECD and -NPD suitability as well as for PDA performance for the analysis of PAH, GC-Capillary analysis, minute residue analysis, heavy hydrocarbon and mineral oil Index analysis. The solvents displays high transmittance and low level of fluorescent impurities.

Dioxins, Pesti-S, Furans & PCB's:

Analyzed for their suitability in the detection of Dioxins, Furans & PCB's. ECD and NPD tested for pesticide residue analysis.

Headspace:

Headspace grade solvents are optimized for accurate analysis of residual solvents in medicinal products. The purity of our solvents specifically evaluated by analysis of the Headspace grade solvent against OVI standard to ensure the absence of interfering peaks in the GC chromatogram.

DNA & RNA synthesis:

Standard DNA phosphoramidites, RNA phosphoramidites, specialty Amidites & Modifiers, synthesis supports, columns, ancillary reagents & formulations for DNA & RNA synthesis.

Peptide synthesis:

Reagents, chemicals and protected amino acids for peptide synthesis and combinatorial chemistry.

Molecular Biology:

Chemicals, biochemicals, buffers and reagents for Molecular Biology.

Transfection Kits:

Classical and fluorescent transfection kits, provide a novel approach to Liposome based transfection, Genofect™ transfection reagents lyophilized to ensure stability and sterility until use.

Dyes:

Variety of Fluorescein derivatives, tri and penta Methine Cyanines, Oxonols and Styryls for absorption and fluorescence applications.

Synthetic lipids:

Synthetic lipids and sphingolipids for research.

Deuterated solvents for NMR-spectroscopy:

Deuterated solvents and reagents fully controlled and tested for their high isotopic enrichment, chemical purity and water content.

Spectrofluopure & Spectropure:

Spectro-grades solvents with guaranteed ultra-low fluorescence and/or low UV absorbance levels, also suitable for IR analysis.

AR-S:

Glass distilled analytical solvents with metal traces analysis exceeding ACS specifications

AR:

Analytical reagents generally complying with ACS specifications.

Pharmaceutical:

Solvents and chemicals prepared and analyzed to meet the monographs of the European, British and United States pharmacopeia.

MOS:

For use in the microelectronic industry. Metal and particle content are controlled.

Supra-dry & Extra-dry:

Dried solvent for routine synthesis in dry conditions. They usually correspond to AR grade solvents which have been subsequently dried and micro-filtered. Although not specifically indicated in the catalogue, they display low content of metallic impurities. Available in 250 ml, 500 ml, 1L PTFE septum double capped bottle

CP:

Chemically pure reagents and solvents are mostly suitable for chemical synthesis and manipulations. For demanding work the AR grade, mentioned above, may be more suitable.

GENERAL CONDITIONS OF SALE

1. Applicable conditions

The conditions set out below shall apply at all time. Deviations from these conditions of sale require BIOSOLVE's written approval.

2. Offers for sale and orders

All offers submitted by BIOSOLVE are not binding upon BIOSOLVE. Orders and agreements shall be binding only if and in so far as BIOSOLVE has confirmed them in writing.



3. Guarantee

BIOSOLVE guarantees the purity of its products according to the specifications of the analytical data sheet.

The buyer shall check whether the goods are of contractual quality and suitable for the intended purpose. If this is not done or not carried out in the appropriate manner, or if obvious defects are not promptly reported to BIOSOLVE within 10 days of receipt of the goods, the goods shall be considered as approved.

Complaints shall be notified in writing and include lot number of the goods, date of order and invoice. Goods can only be returned with our written approval.

4. Liability

Our liability is limited to the replacement of products delivered by us.

We can not be held responsible for improper handling and storage.

Claims for delayed undelivered goods can not be accepted. Any annulation requires our written permission.

Unforeseen plant stoppages, delays or non-deliveries from BIOSOLVE's suppliers, labor shortages, power failures, raw material shortages, strikes, lock-outs, transport delays, wars and any events of force majeure shall, for the duration of and to the extent of such impact, relieve BIOSOLVE from any obligation to deliver. Information given in the catalogue is believed to be correct and informative. We cannot accept liability of any sort for improper printing of data in this catalogue due to errors.

5. Proprietary rights

The goods delivered by us remain BIOSOLVE's property until the buyer has sent all his obligations arising from the mutual business transaction. The buyer shall collaborate in all measures which BIOSOLVE wishes to take, to protect their proprietary rights for the goods delivered.

SAFETY

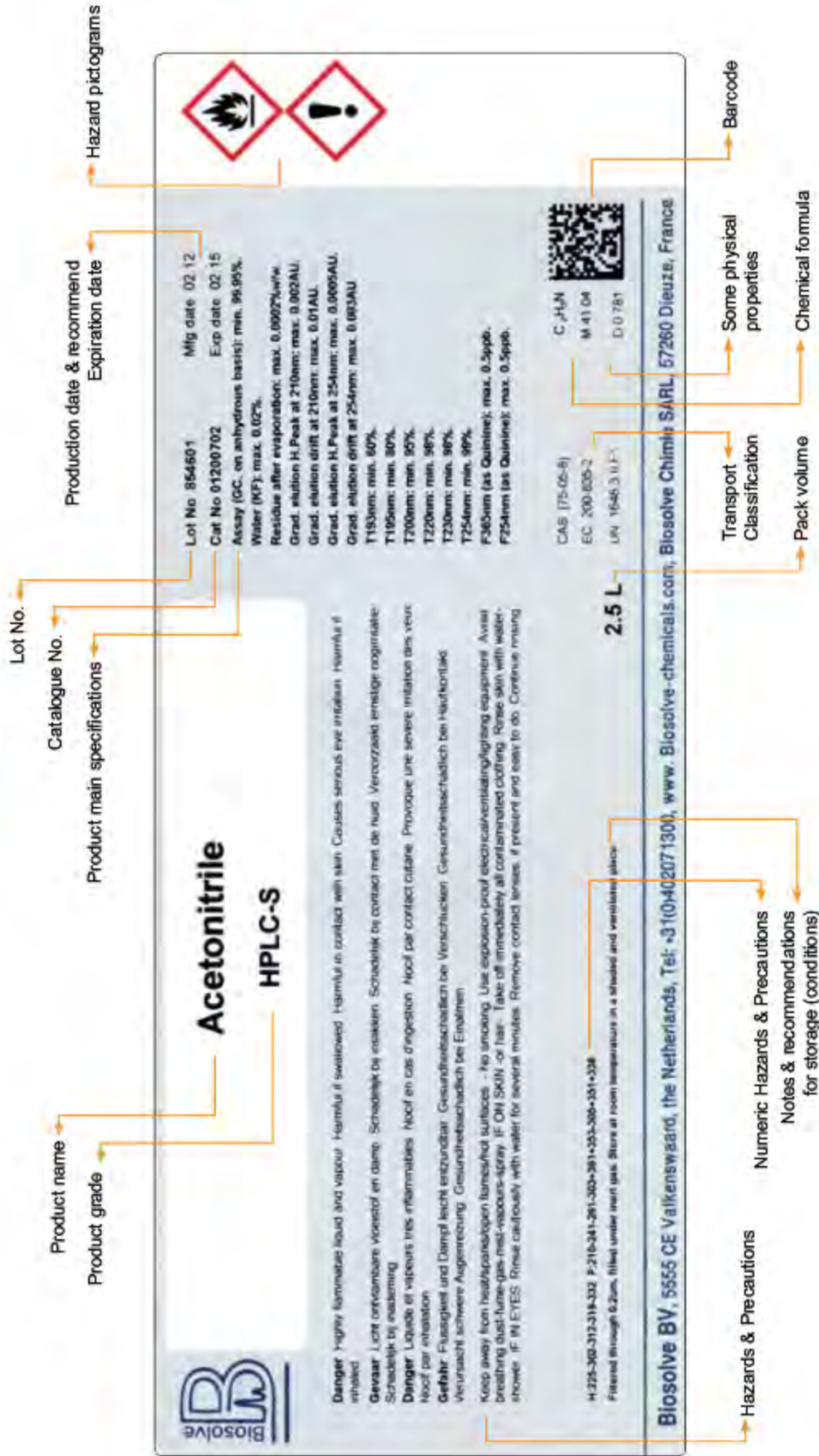
BIOSOLVE products are sold only to recognized institutions with personnel familiar with all aspects of safety when handling chemicals and reagents.

General guidelines:

1. Observe the hazard symbols on the labels and handle accordingly. A list of hazard symbols and precaution phrases are printed on the next pages.
2. Do not dispose chemicals in sinks or lavatories. Chemical waste should be dispose of in a manner consistent with federal, state, and local regulations.
3. All work with harmful reagents should be carried out in a hood or well ventilated area avoiding sources of ignition and heat when using flammable chemicals, wearing gloves and suitable clothing, including respiratory devices, whenever needed. Always ask for medical assistance if feeling unwell or after accidental contact with a hazardous chemical. Show the label to a medic whenever possible.
4. The absence of hazard symbols on the label does not necessarily mean absence of any hazards upon utilization of the product. This is particularly true when mixing chemicals and/or solvents.
5. On the professional user lies the final responsibility of the use and disposal of the products sold by BIOSOLVE. Local authorities should be consulted when in doubts.
6. Material safety data sheets for harmful products sold by BIOSOLVE are available on our internet web site at: www.Biosolve-chemicals.com.

For alphabetical index of products - see p. 372

BIOSOLVE LABEL



Nota: For reasons of clarity, not all product information may be printed on the label.



MAIN BOTTLES AND PACKAGES

Packaging ensures the safe delivery and use of the products we deliver.

The wide spectrum of our customer's activity is reflected by the diversity of packaging we offer.

From 1 ml volume vial, to the 20,000 liter stainless steel iso-container, we offer a packaging combination adapted to the very nature and grade of the chemical delivered and the customer's needs.

Containers offered are made of: polyethylene high density (HPDE), amber glass, aluminum, stainless steel and steel.

UN approved containers and over packaging is available for dangerous goods and long distance transportation.

Quick attachments to dip-pipe delivery system are offered upon request for jars, jerrycan, drums and tanks.

We invite our customers to contact us for further or more detailed information



Use: Powders, liquids PP glass, vial
Cap: Septa /screw

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Note	Ref.
1 ml	10 x 45	D 17	As per order	PP vial	G01
3 ml	15 x 45	D 12	As per order		G02
5 ml	22 x 53	D 18	12 / pack		G03
10 ml	25 x 59	D 18	12 / pack		G04
30 ml	38 x 83	D 18	6 / pack		G05
45 ml	33 x 83	D 20	12 / pack	septa	G06
100 ml	50 x 95	D 20	12 / pack	septa	G07



Use: DNA, peptide synthesis
Bottle: Round amber glass
Cap: Bakelite
Liner: PTFE

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Ref.
8 oz (~240ml)	60 x 138	D 24	6 / carton	G08
8 oz (~240ml)	60 x 138	D 28	6 / carton	G09
16 oz (~480ml)	72 x 170	D 28	6 / carton	G10



Use: Solutions, liquids
 Bottles: Square amber glass
 Cap: HDPE
 Liner: PP or PTFE

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Ref.
50 ml	38 x 70	D 32	6 / carton	G11
100 ml	47 x 120	D 32	6 / carton	G12
250 ml	61 x 152	D 45	6 / carton	G13
250 ml	65 x 145	D 32	6 / carton	G14
500 ml	77 x 180	D 45	6 / carton	G15
1000 ml	95 x 220	D 45	6 / carton	G16



Use: Solvents, liquids
 Bottle: Round amber glass
 Cap: HDPE
 Liner: PP or PTFE

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Ref.
60 ml	39 x 93	D 28	6 / carton	G17
100 ml	46 x 105	D 28	6 / carton	G18
125 ml	50 x 114	D 28	6 / carton	G19
150 ml	51 x 120	D 28	6 / carton	G20
250 ml	61 x 140	D 28	6 / carton	G21
500 ml	76 x 175	D 28	6 / carton	G22
1000 ml	92 x 228	D 28	6 / carton	G23



Use: Solvents, liquids
 Bottle: Round amber glass
 Cap: HDPE
 Liner: PP or PTFE

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Note	Ref.
1000 ml	100 x 212	D 45	6 / carton		G24
1000 ml	100 x 212	D 45	6 / carton	Safe-break	G25
2500 ml	130 x 290	D 45	4 / carton		G26
2500 ml	130 x 290	D 45	4 / carton	Safe-break	G27

Introduction



Use: Solvents, liquids
Bottles: Jug round amber glass
Cap: Bakelite
Liner: PTFE

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Ref.
2.5 l	130 x 330	D 32	4 / carton	G28
4 l	150 x 344	D 32	4 / carton	G29



Use: Compatible liquids
Bottle /small j`can: HPDE
Cap: HDPE
Liner: PP or PTFE

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Ref.
500 ml	80 x 60 x 165	D 28	6 / carton	P01
500 ml	83 x 60 x 155	D 30	6 / carton	P02
1000 ml	90 x 70 x 230	D 36	6 / carton	P03
1000 ml	95 x 65 x 205	D 28	6 / carton	P04
1000 ml	98 x 68 x 205	D 30	6 / carton	P05
2000 ml	130 x 80 x 200	D 28	6 / carton	P06
2000 ml	136 x 83 x 206	D 36	6 / carton	P07



Use: Compatible liquids
J`can: HPDE
Cap: HDPE
Liner: PP or PTFE

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Ref.	Ref.
2.5 lit	120 x 120 x 205	D 36	4 / carton		P08
5 lit	200 x 120 x 280	D 36	4 / carton		P09
10 lit	220 x 180 x 350	D 45	As per order		P10
25 lit	290 x 280 x 375	D 58	As per order	Blue, UN, dip-pipe optional	P11
25 lit	270 x 220 x 450	D 58	As per order		P12
60 lit	395 x 605	D 58	As per order	UN lined in steel, dip-pipe optional	P13
220 lit	580 x 935	D 58	As per order	Blue, UN, dip-pipe optional	P14
1000 lit	1200 x 1000 x 1170	D 170	As per order	UN	P15



Use: Solvents, liquids

Bottle / drum: Aluminum, steel, stainless steel

Cap: PP or steel

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Note	Ref.
5 lit (alu)		D 45 PP/PTFE	As per order	UN, not for alcohols or acids	M01
7 lit (s/s)		D 45 PP/PTFE	As per order	UN, returnable, dip-pipe/level sensor, optional	M02
25 lit (s/s)	272 x 525	2" steel/S/S	As per order	UN, returnable, dip-pipe/level sensor, optional	M03
50 lit (s/s)	395 x 532	2" steel/S/S	As per order	UN, returnable, dip-pipe/level sensor, optional	M04
200 lit (s/s)	553 x 1060	2" and 3/4" steel/S/S	As per order	UN, returnable, dip-pipe/level sensor, optional	M05
200 lit (steel)	580 x 890	2" and 3/4" steel/S/S	As per order	UN, returnable, dip-pipe/level sensor, optional	M06
1500 lit (s/s)	1200 x 1960	Quick attachment	As per order	UN, returnable, dip-pipe and pressure valve included	M07



Use: Powders

Bottle : Round HPDE

Cap: HDPE

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Ref.
1 lit	105 x 135	D 92	6 / carton	P16
2.5 lit	120 x 220	D 92	6 / carton	P17
10 lit	200 x 400	D 125	As per order	P18



Use: Sensitive powders
 Bottle: Square HPDE
 Cap: HDPE

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Note	Ref.
100 ml	44 x 100	D 32	12 / carton		P19
250 ml	58 x 126	D 45	6 / carton		P20
500 ml	74 x 158	D 55	6 / carton		P21
750 ml	95 x 177	D60	6 / carton	UN	P22
1000 ml	85 x 210	D55	4 / carton		P23
1500 ml	108 x 108	D80	4 / carton		P24
2500 ml	118 x 255	D80	4 / carton		P25
5500 ml	146 x 338	D80	As per order		P26
25 lit	340 x 400	D335	As per order	UN	P27



Use: Powders, liquids PP glass, vial
 Cap: Septa /screw

Capacity	Dimensions (section x h, mm)	Cap (mm)	Standard packing	Note	Ref.
1 ml	10 x 45	D 17	As per order	PP vial	G01

OUR BULK CONTAINERS

Bulk delivery in stainless steel containers are available.

Please contact us for further information

Returnable 200L
 S/S UN with dip-pipe attachment



Returnable 1400L
 S/S UN with dip-pipe attachment



Returnable 18,000-24,000L Iso-Container



GHS Physical hazards



Explosing bomb

Usage

- ✦ Unstable explosives
- ✦ Explosives, divisions 1.1, 1.2, 1.3, 1.4
- ✦ Self-reactive substances and mixtures, types A, B
- ✦ Organic peroxides, types A, B



Flame

Usage

- ✦ Flammable gases, category 1
- ✦ Flammable aerosols, categories 1, 2
- ✦ Flammable liquids, categories 1, 2, 3
- ✦ Flammable solids, categories 1, 2
- ✦ Self-reactive substances and mixtures, types B, C, D, E, F
- ✦ Pyrophoric liquids, category 1
- ✦ Pyrophoric solids, category 1
- ✦ Self-heating substances and mixtures, categories 1, 2
- ✦ Substances and mixtures, which in contact with water, emit flammable gases, categories 1, 2, 3
- ✦ Organic peroxides, types B, C, D, E, F



Flame over circle

Usage

- ✦ Oxidizing gases, category 1
- ✦ Oxidizing liquids, categories 1, 2, 3
- ✦ Oxidizing solids, categories 1, 2, 3



Gas cylinder

Usage

- ✦ Compressed gases
- ✦ Liquefied gases
- ✦ Refrigerated liquefied gases
- ✦ Dissolved gases



Corrosion

Usage

- ✦ Corrosive to metals, category 1

no pictogram required

Usage

- ✦ Explosives, divisions 1.5, 1.6
- ✦ Flammable gases, category 2
- ✦ Self-reactive substances and mixtures, type G
- ✦ Organic peroxides, type G



GHS Health hazards



Skull and crossbones

Usage

- * Acute toxicity (oral, dermal, inhalation), categories 1, 2, 3



Corrosion

Usage

- * Skin corrosion, categories 1A, 1B, 1C
- * Serious eye damage, category 1



Exclamation mark

Usage

- * Acute toxicity (oral, dermal, inhalation), category 4
- * Skin irritation, categories 2, 3
- * Eye irritation, category 2A
- * Skin sensitization, category 1
- * Specific target organ toxicity following single exposure, category 3
- * Respiratory tract irritation
- * Narcotic effects

Not used

- * with the "skull and crossbones" pictogram
- * for skin or eye irritation if:
- * the "corrosion" pictogram also appears
- * the "health hazard" pictogram is used to indicate respiratory sensitization



Health hazard

Usage

- * Respiratory sensitization, category 1
- * Germ cell mutagenicity, categories 1A, 1B, 2
- * Carcinogenicity, categories 1A, 1B, 2
- * Reproductive toxicity, categories 1A, 1B, 2
- * Specific target organ toxicity following single exposure, categories 1, 2
- * Specific target organ toxicity following repeated exposure, categories 1, 2
- * Aspiration hazard, categories 1, 2

no pictogram required

Usage

- * Acute toxicity (oral, dermal, inhalation), category 5
- * Eye irritation, category 2B
- * Reproductive toxicity – effects on or via lactation

GHS Environmental hazards



Environment

Usage

- * Acute hazards to the aquatic environment, category 1
- * Chronic hazards to the aquatic environment, categories 1, 2

no pictogram required

Usage

- * Acute hazards to the aquatic environment, categories 2, 3
- * Chronic hazards to the aquatic environment, categories 3, 4

GHS Hazard statements (EN)

H200	Unstable explosives
H201	Explosive, mass explosion hazard.
H202	Explosive, severe projection hazard.
H203	Explosive; fire, blast or projection hazard.
H204	Fire or projection hazard.
H205	May mass explode in fire.
H220	Extremely flammable gas.
H221	Flammable gas.
H222	Extremely flammable aerosol.
H223	Flammable aerosol.
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H240	Heating may cause an explosion.
H241	Heating may cause a fire or explosion.
H242	Heating may cause a fire.
H250	Catches fire spontaneously if exposed to air.
H251	Self-heating; may catch fire.
H252	Self-heating in large quantities; may catch fire.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H261	In contact with water releases flammable gases.
H270	May cause or intensify fire; oxidiser.
H271	May cause fire or explosion; strong oxidiser.
H272	May intensify fire; oxidiser.
H280	Contains gas under pressure; may explode if heated.
H280	May be corrosive to metals.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H361	Suspected of damaging fertility or the unborn child.
H362	May cause harm to breast-fed children.
H370	Causes damage to organs.
H371	May cause damage to organs.
H372	Causes damage to organs.
H373	May cause damage to organs.
H350i	May cause cancer by inhalation.
H360D	May damage the unborn child.
H360Df	May damage the unborn child. Suspected of damaging fertility.
H360F	May damage fertility.

H360FD	May damage fertility. May damage the unborn child.
H360Fd	May damage fertility. Suspected of damaging the unborn child.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

GHS Precautionary statements (EN)

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P211	Do not spray on an open flame or other ignition source.
P220	Keep/Store away from clothing/.../combustible materials.
P221	Take any precaution to avoid mixing with combustibles...
P222	Do not allow contact with air.
P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P230	Keep wetted with...
P231	Handle under inert gas.
P231+232	Handle under inert gas. Protect from moisture.
P232	Protect from moisture.
P233	Keep container tightly closed.
P234	Keep only in original container.
P235	Keep cool.
P235+410	Keep cool. Protect from sunlight.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P244	Keep reduction valves free from grease and oil.
P250	Do not subject to grinding/shock/.../friction.
P251	Pressurized container. Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P263	Avoid contact during pregnancy/while nursing.
P264	Wash ... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P282	Wear cold insulating gloves/face shield/eye protection.
P283	Wear fire/flame resistant/retardant clothing.
P284	Wear respiratory protection.
P285	In case of inadequate ventilation wear respiratory protection.
P301	IF SWALLOWED:
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+330+331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302	IF ON SKIN:
P302+334	IF ON SKIN: Immerse in cool water/wrap in wet bandages.
P302+350	IF ON SKIN: Gently wash with plenty of soap and water.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304	IF INHALED:
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P304+341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305	IF IN EYES:
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P306	IF ON CLOTHING:
P306+360	IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P307	IF exposed:
P307+311	IF exposed: Call a POISON CENTER or doctor/physician.
P308	IF exposed or concerned:
P308+313	IF exposed or concerned: Get medical advice/attention.
P309	IF exposed or if you feel unwell:
P309+311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P310	Immediately call a POISON CENTER or doctor/physician.
P311	Call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P313	Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P315	Get immediate medical advice/attention.
P320	Specific treatment is urgent (see ... on this label).
P321	Specific treatment (see ... on this label).
P322	Specific measures (see ... on this label).
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P332	If skin irritation occurs:
P332+313	If skin irritation occurs: Get medical advice/attention.
P333	If skin irritation or rash occurs:
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P334	Immerse in cool water/wrap in wet bandages.
P335	Brush off loose particles from skin.
P335+334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
P336	Thaw frosted parts with lukewarm water. Do not rub affected area.
P337	If eye irritation persists:
P337+313	If eye irritation persists: Get medical advice/attention.
P338	Remove contact lenses, if present and easy to do. Continue rinsing.
P340	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P341	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342	If experiencing respiratory symptoms:
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P350	Gently wash with plenty of soap and water.
P351	Rinse cautiously with water for several minutes.
P352	Wash with plenty of soap and water.
P353	Rinse skin with water/shower.
P360	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P361	Remove/Take off immediately all contaminated clothing.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P370	In case of fire:
P370+376	In case of fire: Stop leak if safe to do so.
P370+378	In case of fire: Use ... for extinction.
P370+380	In case of fire: Evacuate area.
P370+380+375	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
P371	In case of major fire and large quantities:
P371+380+375	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
P372	Explosion risk in case of fire.
P373	DO NOT fight fire when fire reaches explosives.
P374	Fight fire with normal precautions from a reasonable distance.
P375	Fight fire remotely due to the risk of explosion.
P376	Stop leak if safe to do so.
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P378	Use ... for extinction.
P380	Evacuate area.

P381	Eliminate all ignition sources if safe to do so.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
P401	Store ...
P402	Store in a dry place.
P402+404	Store in a dry place. Store in a closed container.
P403	Store in a well-ventilated place.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P404	Store in a closed container.
P405	Store locked up.
P406	Store in corrosive resistant/... container with a resistant inner liner.
P407	Maintain air gap between stacks/pallets.
P410	Protect from sunlight.
P403+235	Store in a well-ventilated place. Keep cool.
P410+403	Protect from sunlight. Store in a well-ventilated place.
P410+412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
P411	Store at temperatures not exceeding ... °C/...°F.
P411+235	Store at temperatures not exceeding ... °C/...°F. Keep cool.
P412	Do not expose to temperatures exceeding 50 °C/122°F.
P413	Store bulk masses greater than ... kg/... lbs at temperatures not exceeding ... °C/...°F.
P420	Store away from other materials.
P422	Store contents under ...

GHS Supplemental hazard Information (EN)

EUH001	Explosive when dry.
EUH006	Explosive with or without contact with air.
EUH014	Reacts violently with water.
EUH018	In use may form flammable/explosive vapour-air mixture.
EUH019	May form explosive peroxides.
EUH028	Contact with water liberates toxic gas.
EUH031	Contact with acids liberates toxic gas.
EUH032	Contact with acids liberates very toxic gas.
EUH044	Risk of explosion if heated under confinement.
EUH059	Hazardous to the ozone layer.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH070	Toxic by eye contact.
EUH071	Corrosive to the respiratory tract.
EUH201/201A	Contains lead. Should not be used on surfaces liable to be chewed or sucked by children. Warning! Contains lead.
EUH202	Cyanocrylates. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
EUH203	Contains chromium (VI). May produce an allergic reaction.
EUH204	Contains isocyanates. May produce an allergic reaction.
EUH205	Contains epoxy constituents. May produce an allergic reaction.
EUH206	Warning! Do not use together with other products. May release dangerous gases (chlorine).
EUH207	Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer. Comply with the safety instructions.
EUH208	Contains <name of sensitising substance>. May produce an allergic reaction.
EUH209/209A	Can become highly flammable in use. Can become flammable in use.
EUH210	Safety data sheet available on request.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

GHS Gevarenaanduidingen (NL)

H200	Instabiele ontplofbare stof.
H201	Ontplofbare stof; gevaar voor massa-explosie.
H202	Ontplofbare stof, ernstig gevaar voor scherfwerking.
H203	Ontplofbare stof; gevaar voor brand, luchtdrukwerking of scherfwerking.
H204	Gevaar voor brand of scherfwerking.
H205	Gevaar voor massa-explosie bij brand.
H220	Zeer licht ontvlambaar gas.

H221	Ontvlambaar gas.
H222	Zeer licht ontvlambare aerosol.
H223	Ontvlambare aerosol.
H224	Zeer licht ontvlambare vloeistof en damp.
H225	Licht ontvlambare vloeistof en damp.
H226	Ontvlambare vloeistof en damp.
H228	Ontvlambare vaste stof.
H240	Ontploffingsgevaar bij verwarming.
H241	Brand- of ontploffingsgevaar bij verwarming.
H242	Brandgevaar bij verwarming.
H250	Vet spontaan vlam bij blootstelling aan lucht.
H251	Velbaar voor zelfverhitting; kan vlam vatten.
H252	In grote hoeveelheden velbaar voor zelfverhitting; kan vlam vatten.
H260	In contact met water komen ontvlambare gassen vrij die spontaan kunnen ontbranden.
H261	In contact met water komen ontvlambare gassen vrij.
H270	Kan brand veroorzaken of bevorderen; oxiderend.
H271	Kan brand of ontploffingen veroorzaken; sterk oxiderend.
H272	Kan brand bevorderen; oxiderend.
H280	Bevat gas onder druk; kan ontploffen bij verwarming.
H290	Kan bijtend zijn voor metalen.
H300	Dodelijk bij inslikken.
H301	Giffig bij inslikken.
H302	Schadelijk bij inslikken.
H304	Kan dodelijk zijn als de stof bij inslikken in de luchtwegen terecht komt.
H310	Dodelijk bij contact met de huid.
H311	Giffig bij contact met de huid.
H312	Schadelijk bij contact met de huid.
H314	Veroorzaakt ernstige brandwonden en oogletsel.
H315	Veroorzaakt huidirritatie.
H317	Kan een allergische huidreactie veroorzaken.
H318	Veroorzaakt ernstig oogletsel.
H319	Veroorzaakt ernstige oogirritatie.
H330	Dodelijk bij inademing.
H331	Giffig bij inademing.
H332	Schadelijk bij inademing.
H334	Kan bij inademing allergie- of astmasymptomen of ademhalingsmoeilijkheden veroorzaken.
H335	Kan irritatie van de luchtwegen veroorzaken.
H336	Kan slaperigheid of duizeligheid veroorzaken.
H340	Kan genetische schade veroorzaken.
H341	Verdacht van het veroorzaken van genetische schade.
H350	Kan kanker veroorzaken.
H350i	Kan kanker veroorzaken bij inademing.
H351	Verdacht van het veroorzaken van kanker.
H360	Kan de vruchtbaarheid of het ongeboren kind schaden.
H360D	Kan het ongeboren kind schaden.
H360Df	Kan het ongeboren kind schaden. Wordt ervan verdacht de vruchtbaarheid te schaden.
H360F	Kan de vruchtbaarheid schaden.
H360FD	Kan de vruchtbaarheid schaden. Kan het ongeboren kind schaden.
H360Fd	Kan de vruchtbaarheid schaden. Wordt ervan verdacht het ongeboren kind te schaden.
H361	Kan mogelijk de vruchtbaarheid of het ongeboren kind schaden.
H361d	Wordt ervan verdacht het ongeboren kind te schaden.
H361f	Wordt ervan verdacht de vruchtbaarheid te schaden.
H361fd	Wordt ervan verdacht de vruchtbaarheid te schaden. Wordt ervan verdacht het ongeboren kind te schaden.
H362	Kan schadelijk zijn via borstvoeding.
H370	Veroorzaakt schade aan organen.
H371	Kan schade aan organen.
H372	Veroorzaakt schade aan organen.
H373	Kan schade aan organen.
H400	Zeer giftig voor in het water levende organismen.
H410	Zeer giftig voor in het water levende organismen, met langdurige gevolgen.
H411	Giffig voor in het water levende organismen, met langdurige gevolgen.
H412	Schadelijk voor in het water levende organismen, met langdurige gevolgen.
H413	Kan langdurige schadelijke gevolgen voor in het water levende organismen hebben.

GHS Voorzorgsmaatregelen (NL)

- P101 Bij het inwinnen van medisch advies, de verpakking of het etiket ter beschikking houden.
- P102 Buiten het bereik van kinderen houden.
- P103 Alvorens te gebruiken, het etiket lezen.
- P201 Alvorens te gebruiken de speciale aanwijzingen raadplegen.
- P202 Pas gebruiken nadat u alle veiligheidsvoorschriften gelezen en begrepen heeft.
- P210 Verwijderd houden van warmte/vonken/open vuur/hele oppervlakken. — Niet roken.
- P211 Niet in een open vuur of op andere ontstekingsbronnen spuiten.
- P220 Van kleding/.../brandbare stoffen verwijderd houden/bewaren.
- P221 Vermenging met brandbare stoffen... absoluut vermijden.
- P222 Contact met de lucht vermijden.
- P223 Contact met water vermijden in verband met een heftige reactie en een mogelijke wolkbrand.
- P230 Vochtig houden met...
- P231 Onder inert gas werken.
- P231+232 Onder inert gas werken. Tegen vocht beschermen.
- P232 Tegen vocht beschermen.
- P233 In goed gesloten verpakking bewaren.
- P234 Uitsluitend in de oorspronkelijke verpakking bewaren.
- P235 Koel bewaren.
- P235+410 Koel bewaren. Tegen zonlicht beschermen.
- P240 Opslag- en opvangreservoir aarden.
- P241 Explosiegevaarlijke elektrische/ventilatie-/verlichtings-/...apparatuur gebruiken.
- P242 Uitsluitend vankvvrij gereedschap gebruiken.
- P243 Voorzorgsmaatregelen treffen tegen ontladingen van statische elektriciteit.
- P244 Reduceerventilatie vrij van olie en vet houden.
- P250 Malen/schokken/.../wrijving vermijden.
- P251 Houder onder druk: ook na gebruik niet doorboren of verbranden.
- P260 Stof/rook/gas/nevel/damp/spuitnevel niet inademen.
- P261 Inademing van stof/rook/gas/nevel/damp/spuitnevel vermijden.
- P262 Contact met de ogen, de huid of de kleding vermijden.
- P263 Bij zwangerschap of borstvoeding aanraking vermijden.
- P264 Na het werken met dit product ... grondig.
- P270 Niet eten, drinken of roken tijdens het gebruik van dit product.
- P271 Alleen buiten of in een goed geventileerde ruimte gebruiken.
- P272 Verontreinigde werkkleding mag de werkruimte niet verlaten.
- P273 Voorkom lezing in het milieu.
- P280 Beschermende handschoenen/beschermende kleding/ogbescherming/gelaatsbescherming dragen.
- P281 De nodige persoonlijke beschermingsuitrusting gebruiken.
- P282 Koude-isolerende handschoenen/gelaatsbescherming/ogbescherming dragen.
- P283 Vuur/vlambestendige/brandwerende kleding dragen.
- P284 Adembescherming dragen.
- P285 Bij ontoereikende ventilatie een geschikte adembescherming dragen.
- P301 NA INSLIKKEN:
- P301+310 NA INSLIKKEN: onmiddellijk een ANTIGIFCENTRUM of een arts raadplegen.
- P301+312 NA INSLIKKEN: bij onwel voelen een ANTIGIFCENTRUM of een arts raadplegen.
- P301+330+331 NA INSLIKKEN: de mond spoelen — GEEN braken opwekken.
- P302 BIJ CONTACT MET DE HUID:
- P302+334 BIJ CONTACT MET DE HUID: in koud water ondampelen/nat verband aanbrengen.
- P302+350 BIJ CONTACT MET DE HUID: voorzichtig wassen met veel water en zeep.
- P302+352 BIJ CONTACT MET DE HUID: met veel water en zeep wassen.
- P303+361+353 BIJ CONTACT MET DE HUID (of het haar): verontreinigde kleding onmiddellijk uittrekken — huid met water afspelen/afdoechen.
- P304 NA INADEMING:
- P304+340 NA INADEMING: het slachtoffer in de frisse lucht brengen en laten rusten in een houding die het ademen vergemakkelijkt.
- P304+341 NA INADEMING: bij ademhalingsmoeilijkheden het slachtoffer in de frisse lucht brengen en laten rusten in een houding die het ademen vergemakkelijkt.
- P305 BIJ CONTACT MET DE OGEN:
- P305+351+338 BIJ CONTACT MET DE OGEN: voorzichtig afspelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.
- P306 NA MORSEN OP KLEDING:
- P306+360 NA MORSEN OP KLEDING: verontreinigde kleding en huid onmiddellijk met veel water afspelen en pas daarna kleding uittrekken.
- P307 NA blootstelling:
- P307+311 NA blootstelling: een ANTIGIFCENTRUM of een arts raadplegen.
- P308 NA (mogelijke) blootstelling:

P308+313	NA (mogelijke) blootstelling: een arts raadplegen.
P309	NA blootstelling of bij onwel voelen:
P309+311	NA blootstelling of bij onwel voelen: een ANTIGIFCENTRUM of een arts raadplegen.
P310	Onmiddellijk: een ANTIGIFCENTRUM of een arts raadplegen.
P311	Een ANTIGIFCENTRUM of een arts raadplegen.
P312	Bij onwel voelen een ANTIGIFCENTRUM of een arts raadplegen.
P313	Een arts raadplegen.
P314	Bij onwel voelen een arts raadplegen.
P315	Onmiddellijk een arts raadplegen.
P320	Specifieke behandeling dringend vereest (zie ... op dit etiket).
P321	Specifieke behandeling vereist (zie ... op dit etiket).
P322	Specifieke maatregelen (zie ... op dit etiket).
P330	De mond spoelen.
P331	GEEN braken opwekken.
P332	Bij huidirritatie:
P332+313	Bij huidirritatie: een arts raadplegen.
P333	Bij huidirritatie of uitslag:
P333+313	Bij huidirritatie of uitslag: een arts raadplegen.
P334	In koud water onderdompelen/net verband aanbrengen.
P335	Losse deeltjes van de huid afvegen.
P335+334	Losse deeltjes van de huid afvegen. In koud water onderdompelen/net verband aanbrengen.
P336	Beworven lichaamsdelen met lauw water ontdoien. Niet wrijven op de betrokken plaatsen.
P337	Bij aanhoudende oogirritatie:
P337+313	Bij aanhoudende oogirritatie: een arts raadplegen.
P338	Contactlenzen verwijderen, indien mogelijk. Blijven spoelen.
P340	Het slachtoffer in de frisse lucht brengen en laten rusten in een houding die het ademen vergemakkelijkt.
P341	Bij ademhalingsmoeilijkheden het slachtoffer in de frisse lucht brengen en laten rusten in een houding die het ademen vergemakkelijkt.
P342	Bij ademhalings symptomen:
P342+311	Bij ademhalings symptomen: een ANTIGIFCENTRUM of een arts raadplegen.
P350	Voorzichtig wassen met veel water en zeep.
P351	Voorzichtig afspoelen met water gedurende een aantal minuten.
P352	Met veel water en zeep wassen.
P353	Huid met water afspoelen/afdouchen.
P360	Verontreinigde kleding en huid onmiddellijk met veel water afspoelen en gas daarna kleding uittrekken.
P361	Verontreinigde kleding onmiddellijk uittrekken.
P362	Verontreinigde kleding uittrekken en wassen alvorens deze opnieuw te gebruiken.
P363	Verontreinigde kleding wassen alvorens deze opnieuw te gebruiken.
P370	In geval van brand:
P370+376	In geval van brand: het lek dichten als dat veilig gedaan kan worden.
P370+378	In geval van brand: blussen met ...
P370+380	In geval van brand: evacueren.
P370+380+375	In geval van brand: evacueren. Op afstand blussen omwille van ontploffingsgevaar.
P371	In geval van grote brand en grote hoeveelheden:
P371+380+375	In geval van grote brand en grote hoeveelheden: evacueren. Op afstand blussen omwille van ontploffingsgevaar.
P372	Ontploffingsgevaar in geval van brand.
P373	NIET blussen wanneer het vuur de ontplofbare stoffen bereikt.
P374	Met normale voorzorgen vanaf een redelijke afstand blussen.
P375	Op afstand blussen omwille van ontploffingsgevaar.
P376	Het lek dichten als dat veilig gedaan kan worden.
P377	Brand door lekkend gas: niet blussen, tenzij het lek veilig gedicht kan worden.
P378	Blussen met ...
P380	Evacueren.
P381	Alle ontsiekingsbronnen wegnemen als dat veilig gedaan kan worden.
P380	Gelekt/gemorst stof opnemen om materiele schade te vermijden.
P381	Gelekt/gemorst stof opruimen.
P401	... bewaren.
P402	Op een droge plaats bewaren.
P402+404	Op een droge plaats bewaren. In geestolen verpakking bewaren.
P403	Op een goed geventileerde plaats bewaren.
P403+233	Op een goed geventileerde plaats bewaren. In goed gesloten verpakking bewaren.
P403+235	Op een goed geventileerde plaats bewaren. Koel bewaren.
P404	In gesloten verpakking bewaren.

Introduction

P405	Achter slot bewaren.
P406	In corrosiebestendige/... houder met corrosiebestendige binnenbekleding bewaren.
P407	Ruimte laten tussen stapels/pallets.
P410	Tegen zonlicht beschermen.
P410+403	Tegen zonlicht beschermen. Op een goed geventileerde plaats bewaren.
P410+412	Tegen zonlicht beschermen. Niet blootstellen aan temperaturen boven 50 oC/122oF.
P411	Bij maximaal ... oC/...oF bewaren.
P411+235	Bij maximaal ... oC/...oF bewaren. Koel bewaren.
P412	Niet blootstellen aan temperaturen boven 50 oC/122oF.
P413	Bulkmetaal, indien meer dan ... kg/... lbs, bij temperaturen van maximaal ... oC bewaren.
P420	Gescheiden van ander materiaal bewaren.
P422	Onder ... bewaren.

GHS Aanvullende gevareninformatie (NL)

EUH001	In droge toestand ontplofbaar.
EUH006	Ontplofbaar met en zonder lucht.
EUH014	Reageert heftig met water.
EUH018	Kan bij gebruik een ontvlambaar/ontplofbaar damp-luchtmengsel vormen.
EUH019	Kan ontplofbare peroxiden vormen.
EUH029	Vormt giftig gas in contact met water.
EUH031	Vormt giftig gas in contact met zuren.
EUH032	Vormt zeer giftig gas in contact met zuren.
EUH044	Ontploffingsgevaar bij verwarming in afgesloten toestand.
EUH059	Gevaarlijk voor de ozonlaag.
EUH066	Herhaalde blootstelling kan een droge of een gebarsten huid veroorzaken.
EUH070	Giffig bij oogcontact.
EUH071	Bijtend voor de luchtwegen.
EUH201/201A	Bevat lood. Mag niet worden gebruikt voor voorwerpen waarin kinderen kunnen bijten of waaraan kinderen kunnen zuigen. Let op! Bevat lood.
EUH202	Cyanoacrylaat. Gevaarlijk. Kleeft binnen enkele seconden aan huid en oogleden. Buiten het bereik van kinderen houden.
EUH203	Bevat zwaarwaardig chroom. Kan een allergische reactie veroorzaken.
EUH204	Bevat isocyanaten. Kan een allergische reactie veroorzaken.
EUH205	Bevat epoxyverbindingen. Kan een allergische reactie veroorzaken.
EUH206	Let op! Niet in combinatie met andere producten gebruiken. Er kunnen gevaarlijke gassen (chlor) vrijkomen.
EUH207	Let op! Bevat cadmium. Bij het gebruik ontwikkelen zich gevaarlijke dampen. Zie de aanwijzingen van de fabrikant. Neem de veiligheidsvoorschriften in acht.
EUH208	Bevat <nsam van de sensibiliserende stof>. Kan een allergische reactie veroorzaken.
EUH209/209A	Kan bij gebruik licht ontvlambaar worden. Kan bij gebruik ontvlambaar worden.
EUH210	Veiligheidsinformatieblad op verzoek verkrijgbaar.
EUH401	Volg de gebruiksaanwijzing om gevaar voor de menselijke gezondheid en het milieu te voorkomen.

GHS Mentions de danger (FR)

H200	Explosif instable.
H201	Explosif; danger d'explosion en masse.
H202	Explosif; danger sérieux de projection.
H203	Explosif; danger d'incendie, d'effet de souffle ou de projection.
H204	Danger d'incendie ou de projection.
H205	Danger d'explosion en masse en cas d'incendie.
H220	Gaz extrêmement inflammable.
H221	Gaz inflammable.
H222	Aérosol extrêmement inflammable.
H223	Aérosol inflammable.
H224	Liquide et vapeurs extrêmement inflammables.
H225	Liquide et vapeurs très inflammables.
H226	Liquide et vapeurs inflammables.
H228	Matière solide inflammable.
H240	Peut exploser sous l'effet de la chaleur.
H241	Peut s'enflammer ou exploser sous l'effet de la chaleur.

H242	Peut s'enflammer sous l'effet de la chaleur.
H250	S'enflamme spontanément au contact de l'air.
H251	Matériau auto-échauffant; peut s'enflammer.
H252	Matériau auto-échauffant en grandes quantités; peut s'enflammer.
H260	Dégage au contact de l'eau des gaz inflammables qui peuvent s'enflammer spontanément.
H261	Dégage au contact de l'eau des gaz inflammables.
H270	Peut provoquer ou aggraver un incendie, comburant.
H271	Peut provoquer un incendie ou une explosion; comburant puissant.
H272	Peut aggraver un incendie, comburant.
H280	Contient un gaz sous pression; peut exploser sous l'effet de la chaleur.
H290	Peut être corrosif pour les métaux.
H300	Mortel en cas d'ingestion.
H301	Toxique en cas d'ingestion.
H302	Nocif en cas d'ingestion.
H304	Peut être mortel en cas d'ingestion et de pénétration dans les voies respiratoires.
H310	Mortel par contact cutané.
H311	Toxique par contact cutané.
H312	Nocif par contact cutané.
H314	Provoque des brûlures de la peau et des lésions oculaires graves.
H315	Provoque une irritation cutanée.
H317	Peut provoquer une allergie cutanée.
H318	Provoque des lésions oculaires graves.
H319	Provoque une sévère irritation des yeux.
H330	Mortel par inhalation.
H331	Toxique par inhalation.
H332	Nocif par inhalation.
H334	Peut provoquer des symptômes allergiques ou d'asthme ou des difficultés respiratoires par inhalation.
H335	Peut irriter les voies respiratoires.
H336	Peut provoquer somnolence ou vertiges.
H340	Peut induire des anomalies génétiques.
H341	Susceptible d'induire des anomalies génétiques.
H350	Peut provoquer le cancer.
H350i	Peut provoquer le cancer par inhalation.
H351	Susceptible de provoquer le cancer.
H360	Peut nuire à la fertilité ou au fœtus.
H360D	Peut nuire au fœtus.
H360Df	Peut nuire au fœtus. Susceptible de nuire à la fertilité.
H360F	Peut nuire à la fertilité.
H360FD	Peut nuire à la fertilité. Peut nuire au fœtus.
H360Fd	Peut nuire à la fertilité. Susceptible de nuire au fœtus.
H361	Susceptible de nuire à la fertilité ou au fœtus.
H361d	Susceptible de nuire au fœtus.
H361f	Susceptible de nuire à la fertilité.
H361fd	Susceptible de nuire à la fertilité. Susceptible de nuire au fœtus.
H362	Peut être nocif pour les bébés nourris au lait maternel.
H370	Risque avéré d'effets graves pour les organes.
H371	Risque présumé d'effets graves pour les organes.
H372	Risque avéré d'effets graves pour les organes.
H373	Risque présumé d'effets graves pour les organes.
H400	Très toxique pour les organismes aquatiques.
H410	Très toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.
H411	Toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.
H412	Nocif pour les organismes aquatiques, entraîne des effets néfastes à long terme.
H413	Peut être nocif à long terme pour les organismes aquatiques.

GHS Conseils de prudence (FR)

P101	En cas de consultation d'un médecin, garder à disposition le récipient ou l'étiquette.
P102	Tenir hors de portée des enfants.
P103	Lire l'étiquette avant utilisation.
P201	Se procurer les instructions avant utilisation.
P202	Ne pas manipuler avant d'avoir lu et compris toutes les précautions de sécurité.
P210	Tenir à l'écart de la chaleur/des étincelles/des flammes nues/des surfaces chaudes. — Ne pas fumer.

P211	Ni pas vaporiser sur une flamme nue ou sur toute autre source d'ignition.
P220	Tenir/stocker à l'écart des vêtements/.../matériaux combustibles
P221	Vermenging met brandbare stoffen... absoluut vermijden.
P222	Ne pas laisser au contact de l'air.
P223	Éviter tout contact avec l'eau, à cause du risque de réaction violente et d'inflammation spontanée.
P230	Maintenir humidifié avec...
P231	Manipuler sous gaz inerte.
P231+232	Manipuler sous gaz inerte. Protéger de l'humidité.
P232	Protéger de l'humidité.
P233	Maintenir le récipient fermé de manière étanche.
P234	Conserver uniquement dans le récipient d'origine.
P235	Tenir au frais.
P235+410	Tenir au frais. Protéger du rayonnement solaire.
P240	Mise à la terre/liaison équipotentielle du récipient et du matériel de réception.
P241	Utiliser du matériel électrique/de ventilation/d'éclairage/.../antidéflagrant.
P242	Ne pas utiliser d'outils produisant des étincelles.
P243	Prendre des mesures de précaution contre les décharges électrostatiques.
P244	S'assurer de l'absence de graisse ou d'huile sur les soupapes de réduction.
P250	Éviter les abrasions/les chocs/.../les frottements.
P251	Récipient sous pression: ne pas perforer, ni brûler, même après usage.
P260	Ne pas respirer les poussières/fumées/gaz/brouillants/vapeurs/aérosols.
P261	Éviter de respirer les poussières/fumées/gaz/brouillants/vapeurs/aérosols.
P262	Éviter tout contact avec les yeux, la peau ou les vêtements.
P263	Éviter tout contact avec le substance au cours de la grossesse/pendant l'allaitement.
P264	Se laver ... soigneusement après manipulation.
P270	Ne pas manger, boire ou fumer en manipulant ce produit.
P271	Utiliser seulement en plein air ou dans un endroit bien ventilé.
P272	Les vêtements de travail contaminés ne devraient pas sortir du lieu de travail.
P273	Éviter le rejet dans l'environnement.
P280	Porter des gants de protection/des vêtements de protection/un équipement de protection des yeux/du visage.
P281	Utiliser l'équipement de protection individuel requis.
P282	Porter des gants isolants contre le froid/un équipement de protection du visage/des yeux.
P283	Porter des vêtements résistant au feu/aux flammes/ignifuges.
P284	Porter un équipement de protection respiratoire.
P285	Lorsque la ventilation du local est insuffisante, porter un équipement de protection respiratoire.
P301	EN CAS D'INGESTION:
P301+310	EN CAS D'INGESTION: appeler immédiatement un CENTRE ANTIPOISON ou un médecin.
P301+312	EN CAS D'INGESTION: appeler un CENTRE ANTIPOISON ou un médecin en cas de malaise.
P301+330+331	EN CAS D'INGESTION: rincer la bouche. NE PAS faire vomir.
P302	EN CAS DE CONTACT AVEC LA PEAU:
P302+334	EN CAS DE CONTACT AVEC LA PEAU: rincer à l'eau fraîche/poser une compresse humide.
P302+350	EN CAS DE CONTACT AVEC LA PEAU: laver avec précaution et abondamment à l'eau et au savon.
P302+352	EN CAS DE CONTACT AVEC LA PEAU: laver abondamment à l'eau et au savon.
P303+361+353	EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux): enlever immédiatement les vêtements contaminés. Rincer la peau à l'eau/se doucher.
P304	EN CAS D'INHALATION:
P304+340	EN CAS D'INHALATION: transporter la victime à l'extérieur et la maintenir au repos dans une position où elle peut confortablement respirer.
P304+341	EN CAS D'INHALATION: s'il y a difficulté à respirer, transporter la victime à l'extérieur et la maintenir au repos dans une position où elle peut confortablement respirer.
P305	EN CAS DE CONTACT AVEC LES YEUX:
P305+351+338	EN CAS DE CONTACT AVEC LES YEUX: rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.
P306	EN CAS DE CONTACT AVEC LES VÊTEMENTS:
P306+360	EN CAS DE CONTACT AVEC LES VÊTEMENTS: rincer immédiatement et abondamment avec de l'eau les vêtements contaminés et la peau avant de les enlever.
P307	EN CAS d'exposition:
P307+311	EN CAS d'exposition: appeler un CENTRE ANTIPOISON ou un médecin.
P308	EN CAS d'exposition prouvée ou suspectée:
P308+313	EN CAS d'exposition prouvée ou suspectée: consulter un médecin.
P309	EN CAS d'exposition ou d'un malaise:
P309+311	EN CAS d'exposition ou de malaise: appeler un CENTRE ANTIPOISON ou un médecin.
P310	Appeler immédiatement un CENTRE ANTIPOISON ou un médecin.
P311	Appeler un CENTRE ANTIPOISON ou un médecin.

P312	Appeler un CENTRE ANTIPOISON ou un médecin en cas de malaise.
P313	Consulter un médecin.
P314	Consulter un médecin en cas de malaise.
P315	Consulter immédiatement un médecin.
P320	Un traitement spécifique est urgent (voir ... sur cette étiquette).
P321	Traitement spécifique (voir ... sur cette étiquette).
P322	Mesures spécifiques (voir ... sur cette étiquette).
P330	Rincer la bouche.
P331	NE PAS faire vomir.
P332	En cas d'irritation cutanée:
P332+313	En cas d'irritation cutanée: consulter un médecin.
P333	En cas d'irritation ou d'éruption cutanée:
P333+313	En cas d'irritation ou d'éruption cutanée: consulter un médecin.
P334	Rincer à l'eau fraîche/poser une compresse humide.
P335	Enlever avec précaution les particules déposées sur la peau.
P335+334	Enlever avec précaution les particules déposées sur la peau. Rincer à l'eau fraîche/poser une compresse humide.
P336	Dégeler les parties gelées avec de l'eau tiède. Ne pas frotter les zones touchées.
P337	Si l'irritation oculaire persiste:
P337+313	Si l'irritation oculaire persiste: consulter un médecin.
P338	Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.
P340	Transporter la victime à l'extérieur et la maintenir au repos dans une position où elle peut confortablement respirer.
P341	S'il y a difficulté à respirer, transporter la victime à l'extérieur et la maintenir au repos dans une position où elle peut confortablement respirer.
P342	En cas de symptômes respiratoires:
P342+311	En cas de symptômes respiratoires: appeler un CENTRE ANTIPOISON ou un médecin.
P350	Laver avec précaution et abondamment à l'eau et au savon.
P351	Rincer avec précaution à l'eau pendant plusieurs minutes.
P352	Laver abondamment à l'eau et au savon.
P353	Rincer la peau à l'eau/seoucher.
P360	Rincer immédiatement et abondamment avec de l'eau les vêtements contaminés et la peau avant de les enlever.
P361	Enlever immédiatement les vêtements contaminés.
P362	Enlever les vêtements contaminés et les laver avant réutilisation.
P363	Laver les vêtements contaminés avant réutilisation.
P370	En cas d'incendie:
P370+376	En cas d'incendie: obturer la fuite si cela peut se faire sans danger.
P370+378	En cas d'incendie: utiliser ... pour l'extinction.
P370+380	En cas d'incendie: évacuer la zone.
P370+380+375	En cas d'incendie: évacuer la zone. Combattre l'incendie à distance à cause du risque d'explosion.
P371	En cas d'incendie important et s'il s'agit de grandes quantités:
P371+380+375	En cas d'incendie important et s'il s'agit de grandes quantités: évacuer la zone. Combattre l'incendie à distance à cause du risque d'explosion.
P372	Risque d'explosion en cas d'incendie.
P373	NE PAS combattre l'incendie lorsque le feu atteint les explosifs.
P374	Combattre l'incendie à distance en prenant les précautions normales.
P375	Combattre l'incendie à distance à cause du risque d'explosion.
P376	Obturer la fuite si cela peut se faire sans danger.
P377	Fuite de gaz inflammé: Ne pas éteindre si la fuite ne peut pas être arrêtée sans danger.
P378	Utiliser ... pour l'extinction.
P380	Évacuer la zone.
P381	Éliminer toutes les sources d'ignition si cela est faisable sans danger.
P390	Absorber toute substance répandue pour éviter qu'elle attaque les matériaux environnants.
P391	Recueillir le produit répandu.
P401	Stocker ...
P402	Stocker dans un endroit sec.
P402+404	Stocker dans un endroit sec. Stocker dans un récipient fermé.
P403	Stocker dans un endroit bien ventilé.
P403+233	Stocker dans un endroit bien ventilé. Maintenir le récipient fermé de manière étanche.
P403+235	Stocker dans un endroit bien ventilé. Tenir au frais.
P404	Stocker dans un récipient fermé.
P405	Garder sous clé.
P406	Stocker dans un récipient résistant à la corrosion/récipient en ... avec doublure intérieure résistante à la corrosion.
P407	Maintenir un intervalle d'air entre les piles/palettes.
P410	Protéger du rayonnement solaire.
P410+403	Protéger du rayonnement solaire. Stocker dans un endroit bien ventilé.

P410+412	Protéger du rayonnement solaire. Ne pas exposer à une température supérieure à 50 °C/122 °F.
P411	Stocker à une température ne dépassant pas ... °C/... °F.
P411+235	Stocker à une température ne dépassant pas ... °C/... °F. Tenir au frais.
P412	Ne pas exposer à une température supérieure à 50 °C/122 °F.
P413	Stocker les quantités en vrac de plus de ... kg/... lb à une température ne dépassant pas ... °C/... °F.
P420	Stocker à l'écart des autres matières.
P422	Stocker le contenu sous ...

GHS informations additionnelles sur les dangers (FR)

EUH001	Explosif à l'état sec.
EUH006	Danger d'explosion en contact ou sans contact avec l'air.
EUH014	Réagit violemment au contact de l'eau.
EUH018	Lors de l'utilisation, formation possible de mélange vapeur-air inflammable/explosif.
EUH019	Peut former des peroxydes explosifs.
EUH029	Au contact de l'eau, dégage des gaz toxiques.
EUH031	Au contact d'un acide, dégage un gaz toxique.
EUH032	Au contact d'un acide, dégage un gaz très toxique.
EUH044	Risque d'explosion si chauffé en ambiance confinée.
EUH059	Dangereux pour la couche d'ozone.
EUH066	L'exposition répétée peut provoquer dessèchement ou gerçures de la peau.
EUH070	Toxique par contact oculaire.
EUH071	Corrosif pour les voies respiratoires.
EUH201/201A	Contient du plomb. Ne pas utiliser sur les objets susceptibles d'être mâchés ou sucés par des enfants. Attention! Contient du plomb.
EUH202	Cyanocrylate. Danger. Colle à la peau et aux yeux en quelques secondes. À conserver hors de portée des enfants.
EUH203	Contient du chrome (VI). Peut produire une réaction allergique.
EUH204	Contient des isocyanates. Peut produire une réaction allergique.
EUH205	Contient des composés époxydiques. Peut produire une réaction allergique.
EUH206	Attention! Ne pas utiliser en combinaison avec d'autres produits. Peut libérer des gaz dangereux (chlore).
EUH207	Attention! Contient du cadmium. Des fumées dangereuses se développent pendant l'utilisation. Voir les informations fournies par le fabricant. Respectez les consignes de sécurité.
EUH208	Contient «nom de la substance sensibilisante». Peut produire une réaction allergique.
EUH209/209A	Peut devenir facilement inflammable en cours d'utilisation. Peut devenir inflammable en cours d'utilisation.
EUH210	Fiche de données de sécurité disponible sur demande.
EUH401	Respectez les instructions d'utilisation pour éviter les risques pour la santé humaine et l'environnement.

GHS Gefahrenhinweise (DE)

H200	Instabil, explosiv.
H201	Explosiv, Gefahr der Massenexplosion.
H202	Explosiv; große Gefahr durch Splitter, Spreng- und Wurfstücke.
H203	Explosiv; Gefahr durch Feuer, Luftdruck oder Splitter, Spreng- und Wurfstücke.
H204	Gefahr durch Feuer oder Splitter, Spreng- und Wurfstücke.
H205	Gefahr der Massenexplosion bei Feuer.
H220	Extrem entzündbares Gas.
H221	Entzündbares Gas.
H222	Extrem entzündbares Aerosol.
H223	Entzündbares Aerosol.
H224	Flüssigkeit und Dampf extrem entzündbar.
H225	Flüssigkeit und Dampf leicht entzündbar.
H226	Flüssigkeit und Dampf entzündbar.
H228	Entzündbarer Feststoff.
H240	Erwärmung kann Explosion verursachen.
H241	Erwärmung kann Brand oder Explosion verursachen.
H242	Erwärmung kann Brand verursachen.
H250	Entzündet sich in Berührung mit Luft von selbst.
H251	Selbsterhitzungsfähig; kann in Brand geraten.
H252	In großen Mengen selbsterhitzungsfähig; kann in Brand geraten.
H260	In Berührung mit Wasser entstehen entzündbare Gase, die sich spontan entzünden können.

H261	In Berührung mit Wasser entstehen entzündbare Gase.
H270	Kann Brand verursachen oder verstärken; Oxidationsmittel.
H271	Kann Brand oder Explosion verursachen; starkes Oxidationsmittel.
H272	Kann Brand verstärken; Oxidationsmittel.
H280	Enthält Gas unter Druck; kann bei Erwärmung explodieren.
H280	Kann gegenüber Metallen korrosiv sein.
H300	Lebensgefahr bei Verschlucken.
H301	Giftig bei Verschlucken.
H302	Gesundheitsschädlich bei Verschlucken.
H304	Kann bei Verschlucken und Eindringen in die Atemwege tödlich sein.
H310	Lebensgefahr bei Hautkontakt.
H311	Giftig bei Hautkontakt.
H312	Gesundheitsschädlich bei Hautkontakt.
H314	Verursacht schwere Verätzungen der Haut und schwere Augenschäden.
H315	Verursacht Hautreizungen.
H317	Kann allergische Hautreaktionen verursachen.
H318	Verursacht schwere Augenschäden.
H319	Verursacht schwere Augenreizung.
H330	Lebensgefahr bei Einatmen.
H331	Giftig bei Einatmen.
H332	Gesundheitsschädlich bei Einatmen.
H334	Kann bei Einatmen Allergie, asthmaartige Symptome oder Atembeschwerden verursachen.
H335	Kann die Atemwege reizen.
H336	Kann Schläfrigkeit und Benommenheit verursachen.
H340	Kann genetische Defekte verursachen.
H341	Kann vermutlich genetische Defekte verursachen.
H350	Kann Krebs erzeugen.
H350i	Kann bei Einatmen Krebs erzeugen.
H351	Kann vermutlich Krebs erzeugen.
H360	Kann die Fruchtbarkeit beeinträchtigen oder das Kind im Mutterleib schädigen.
H360D	Kann das Kind im Mutterleib schädigen.
H360DF	Kann das Kind im Mutterleib schädigen. Kann vermutlich die Fruchtbarkeit beeinträchtigen.
H360F	Kann die Fruchtbarkeit beeinträchtigen.
H360FD	Kann die Fruchtbarkeit beeinträchtigen. Kann das Kind im Mutterleib schädigen.
H360FD	Kann die Fruchtbarkeit beeinträchtigen. Kann vermutlich das Kind im Mutterleib schädigen.
H361	Kann vermutlich die Fruchtbarkeit beeinträchtigen oder das Kind im Mutterleib schädigen.
H361d	Kann vermutlich das Kind im Mutterleib schädigen.
H361f	Kann vermutlich die Fruchtbarkeit beeinträchtigen.
H361fd	Kann vermutlich die Fruchtbarkeit beeinträchtigen. Kann vermutlich das Kind im Mutterleib schädigen.
H362	Kann Säuglinge über die Muttermilch schädigen.
H370	Schädigt die Organe.
H371	Kann die Organe schädigen.
H372	Schädigt die Organe.
H373	Kann die Organe schädigen.
H400	Sehr giftig für Wasserorganismen.
H410	Sehr giftig für Wasserorganismen mit langfristiger Wirkung.
H411	Giftig für Wasserorganismen, mit langfristiger Wirkung.
H412	Schädlich für Wasserorganismen, mit langfristiger Wirkung.
H413	Kann für Wasserorganismen schädlich sein, mit langfristiger Wirkung.

GHS Sicherheitshinweise (DE)

P101	Ist ärztlicher Rat erforderlich, Verpackung oder Kennzeichnungsetikett bereithalten.
P102	Darf nicht in die Hände von Kindern gelangen.
P103	Vor Gebrauch Kennzeichnungsetikett lesen.
P201	Vor Gebrauch besondere Anweisungen einholen.
P202	Vor Gebrauch alle Sicherheitshinweise lesen und verstehen.
P210	Von Hitze/Funken/offener Flamme/heißen Oberflächen fernhalten. Nicht rauchen.
P211	Nicht gegen offene Flamme oder andere Zündquelle sprühen.
P220	Von Kleidung/.../brennbaren Materialien fernhalten/entfernt aufbewahren.
P221	Mischen mit brennbaren Stoffen/... unbedingt verhindern.
P222	Kontakt mit Luft nicht zulassen.
P223	Kontakt mit Wasser wegen heftiger Reaktion und möglichem Aufblähen unbedingt vermeiden.

P230	Feucht halten mit ...
P231	Unter inertem Gas handhaben.
P231+232	Unter inertem Gas handhaben. Vor Feuchtigkeit schützen.
P232	Vor Feuchtigkeit schützen.
P233	Behälter dicht verschlossen halten.
P234	Nur im Originalbehälter aufbewahren.
P235	Kühl halten.
P235+410	Kühl halten. Vor Sonnenbestrahlung schützen.
P240	Behälter und zu befüllende Anlage ertren:
P241	Explosionsgeschützte elektrische Betriebsmittel/Lüftungsanlagen/Belichtung/... verwenden.
P242	Nur funkenfreies Werkzeug verwenden.
P243	Maßnahmen gegen elektrostatische Aufladungen treffen.
P244	Druckminderer frei von Fett und Öl halten.
P250	Nicht schleifen/stoßen/...reiben.
P251	Behälter steht unter Druck: Nicht durchstechen oder verbrennen, auch nicht nach der Verwendung.
P260	Staub/Rauch/Gas/Nebel/Dampf/Aerosol nicht einatmen.
P261	Einatmen von Staub/Rauch/Gas/Nebel/Dampf/Aerosol vermeiden.
P262	Nicht in die Augen, auf die Haut oder auf die Kleidung gelangen lassen.
P263	Kontakt während der Schwangerschaft und der Stillzeit vermeiden.
P264	Nach Gebrauch ... gründlich waschen.
P270	Bei Gebrauch nicht essen, trinken oder rauchen.
P271	Nur im Freien oder in gut belüfteten Räumen verwenden.
P272	Kontaminierte Arbeitskleidung nicht außerhalb des Arbeitsplatzes tragen.
P273	Freisetzung in die Umwelt vermeiden.
P280	Schutzhandschuhe/Schutzkleidung/Augenschutz/Gesichtsschutz
P281	Vorgeschriebene persönliche Schutzausrüstung verwenden.
P282	Schutzhandschuhe/Gesichtsschild/Augenschutz mit Kälteisolierung tragen.
P283	Schwer entflammend/flammhemmende Kleidung tragen.
P284	Atemschutz tragen.
P285	Bei unzureichender Belüftung Atemschutz tragen.
P301	BEI VERSCHLUCKEN:
P301+310	BEI VERSCHLUCKEN: Sofort GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
P301+312	BEI VERSCHLUCKEN: Bei Unwohlsein GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
P301+330+331	BEI VERSCHLUCKEN: Mund ausspülen. KEIN Erbrechen herbeiführen.
P302	BEI BERÜHRUNG MIT DER HAUT:
P302+334	BEI KONTAKT MIT DER HAUT: In kaltes Wasser tauchen/nassen Verband anlegen.
P302+350	BEI KONTAKT MIT DER HAUT: Behutsam mit viel Wasser und Seife waschen.
P302+352	BEI KONTAKT MIT DER HAUT: Mit viel Wasser und Seife waschen.
P303+361+353	BEI KONTAKT MIT DER HAUT (oder dem Haar): Alle beschmutzten, getränkten Kleidungsstücke sofort ausziehen. Haut mit Wasser abwaschen/duschen.
P304	BEI EINATMEN:
P304+340	BEI EINATMEN: An die frische Luft bringen und in einer Position ruhigstellen, die das Atmen erleichtert.
P304+341	BEI EINATMEN: Bei Atembeschwerden an die frische Luft bringen und in einer Position ruhigstellen, die das Atmen erleichtert.
P305	BEI KONTAKT MIT DEN AUGEN:
P305+351+338	BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.
P306	BEI KONTAMINierter KLEIDUNG:
P306+360	BEI KONTAKT MIT DER KLEIDUNG: Kontaminierte Kleidung und Haut sofort mit viel Wasser abwaschen und danach Kleidung ausziehen.
P307	BEI Exposition:
P307+311	BEI Exposition: GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
P308	BEI Exposition oder falls betroffen
P308+313	BEI Exposition oder falls betroffen: Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.
P309	BEI Exposition oder Unwohlsein:
P309+311	BEI Exposition oder Unwohlsein: GIFTINFORMATIONSZENTRUM oder Arzt anrufen:
P310	Sofort GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
P311	GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
P312	Bei Unwohlsein GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
P313	Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.
P314	Bei Unwohlsein ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.
P315	Sofort ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.
P320	Besondere Behandlung dringend erforderlich (siehe ... auf diesem Kennzeichnungsetikett)
P321	Besondere Behandlung (siehe ... auf diesem Kennzeichnungsetikett)

P322	Gezielte Maßnahmen (siehe ... auf diesem Kennzeichnungsetikett).
P330	Mund ausspülen.
P331	KEIN Erbrechen herbeiführen.
P332	Bei Hautreizung:
P332+313	Bei Hautreizung: Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.
P333	Bei Hautreizung oder -ausschlag:
P333+313	Bei Hautreizung oder -ausschlag: Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.
P334	In kaltes Wasser tauchen/nassen Verband anlegen.
P335	Loose Partikel von der Haut abbürsten.
P335+334	Loose Partikel von der Haut abbürsten. In kaltes Wasser tauchen/nassen Verband anlegen.
P336	Versteifte Bereiche mit lauwarmem Wasser auftauen. Betroffenen Bereich nicht ruben.
P337	Bei anhaltender Augenreizung:
P337+313	Bei anhaltender Augenreizung: Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.
P338	Eventuell vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter ausspülen.
P340	Die betroffene Person an die frische Luft bringen und in einer Position ruhigstellen, die das Atmen erleichtert.
P341	Bei Atembeschwerden an die frische Luft bringen und in einer Position ruhigstellen, die das Atmen erleichtert.
P342	Bei Symptomen der Atemwege:
P342+311	Bei Symptomen der Atemwege: GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
P350	Behutsam mit viel Wasser und Seife waschen.
P351	Einige Minuten lang behutsam mit Wasser ausspülen.
P352	Mit viel Wasser und Seife waschen.
P353	Haut mit Wasser abwaschen/duschen.
P380	Kontaminierte Kleidung und Haut sofort mit viel Wasser abwaschen und danach Kleidung ausziehen.
P381	Alle kontaminierten Kleidungsstücke sofort ausziehen.
P382	Kontaminierte Kleidung ausziehen und vor erneutem Tragen waschen.
P383	Kontaminierte Kleidung vor erneutem Tragen waschen.
P370	Bei Brand:
P370+376	Bei Brand: Undichtigkeit beseitigen, wenn gefahrlos möglich.
P370+378	Bei Brand: ... zum Löschen verwenden.
P370+380	Bei Brand: Umgebung räumen.
P370+380+375	Bei Brand: Umgebung räumen. Wegen Explosionsgefahr Brand aus der Entfernung bekämpfen.
P371	Bei Großbrand und großen Mengen:
P371+380+375	Bei Großbrand und großen Mengen: Umgebung räumen. Wegen Explosionsgefahr Brand aus der Entfernung bekämpfen.
P372	Explosionsgefahr bei Brand.
P373	KEINE Brandbekämpfung, wenn das Feuer explosive Stoffe/Gemische/Erzeugnisse erreicht.
P374	Brandbekämpfung mit üblichen Vorsichtsmaßnahmen aus angemessener Entfernung.
P375	Wegen Explosionsgefahr Brand aus der Entfernung bekämpfen.
P376	Undichtigkeit beseitigen, wenn gefahrlos möglich.
P377	Brand von ausströmendem Gas: Nicht löschen, bis Undichtigkeit gefahrlos beseitigt werden kann.
P378	... zum Löschen verwenden.
P380	Umgebung räumen.
P381	Alle Zündquellen entfernen, wenn gefahrlos möglich.
P380	Verschüttete Mengen aufnehmen, um Materialschäden zu vermeiden.
P391	Verschüttete Mengen aufnehmen.
P401	... aufbewahren.
P402	An einem trockenen Ort aufbewahren.
P402+404	In einem geschlossenen Behälter an einem trockenen Ort aufbewahren.
P403	An einem gut belüfteten Ort aufbewahren.
P403+233	Behälter dicht verschlossen an einem gut belüfteten Ort aufbewahren.
P403+235	Kühl an einem gut belüfteten Ort aufbewahren.
P404	In einem geschlossenen Behälter aufbewahren.
P405	Unter Verschluss aufbewahren.
P406	In korrosionsbeständigem/... Behälter mit korrosionsbeständiger Auskleidung aufbewahren.
P407	Luftspalt zwischen Stapeln/Paletten lassen.
P410	Vor Sonnenbestrahlung schützen.
P410+403	Vor Sonnenbestrahlung geschützt an einem gut belüfteten Ort aufbewahren.
P410+412	Vor Sonnenbestrahlung schützen und nicht Temperaturen von mehr als 50 °C aussetzen.
P411	Bei Temperaturen von nicht mehr als ... °C/... aufbewahren.
P411+235	Kühl und bei Temperaturen von nicht mehr als ... °C aufbewahren.
P412	Nicht Temperaturen von mehr als 50 °C aussetzen.
P413	Schüttgut in Mengen von mehr als ... kg bei Temperaturen von nicht mehr als ... °C aufbewahren.
P420	Von anderen Materialien entfernt aufbewahren.
P422	Inhalt in/unter ... aufbewahren.



GHS Ergänzende Gefahrenmerkmale (DE)

EUH001	In trockenem Zustand explosionsgefährlich.
EUH006	Mil und ohne Luft explosionsfähig.
EUH014	Reagiert heftig mit Wasser.
EUH019	Kann bei Verwendung explosionsfähige/entzündbare Dampf/Luft-Gemische bilden.
EUH019	Kann explosionsfähige Peroxide bilden.
EUH029	Entwickelt bei Berührung mit Wasser giftige Gase.
EUH031	Entwickelt bei Berührung mit Säure giftige Gase.
EUH032	Entwickelt bei Berührung mit Säure sehr giftige Gase.
EUH044	Explosionsgefahr bei Erhitzen unter Einschluss.
EUH059	Die Ozonschicht schädigend.
EUH066	Wiederholter Kontakt kann zu spröder oder rissiger Haut führen.
EUH070	Giftig bei Berührung mit den Augen.
EUH071	Wirkt ätzend auf die Atemwege.
EUH201/201A	Enthält Blei. Nicht für den Anstrich von Gegenständen verwenden, die von Kindern gekaut oder gelutscht werden könnten. Achtung! Enthält Blei.
EUH202	Cyanacrylat. Gefahr. Klebt innerhalb von Sekunden Haut und Augenlider zusammen. Darf nicht in die Hände von Kindern gelangen.
EUH203	Enthält Chrom (VI). Kann allergische Reaktionen hervorrufen.
EUH204	Enthält Isocyanate. Kann allergische Reaktionen hervorrufen.
EUH205	Enthält epoxidhaltige Verbindungen. Kann allergische Reaktionen hervorrufen.
EUH206	Achtung! Nicht zusammen mit anderen Produkten verwenden, da gefährliche Gase (Chlor) freigesetzt werden können.
EUH207	Achtung! Enthält Cadmium. Bei der Verwendung entstehen gefährliche Dämpfe. Hinweise des Herstellers beachten, Sicherheitsanweisungen einhalten.
EUH208	Enthält <Name des sensibilisierenden Stoffes>. Kann allergische Reaktionen hervorrufen.
EUH209/209A	Kann bei Verwendung leicht entzündbar werden. Kann bei Verwendung entzündbar werden.
EUH210	Sicherheitsdatenblatt auf Anfrage erhältlich.
EUH401	Zur Vermeidung von Risiken für Mensch und Umwelt die Gebrauchsanleitung einhalten.

GHS Indicazioni di pericolo (IT)

H200	Esplosivo instabile.
H201	Esplosivo; pericolo di esplosione di massa.
H202	Esplosivo; grave pericolo di proiezione.
H203	Esplosivo; pericolo di incendio, di spostamento d'aria o di proiezione.
H204	Pericolo di incendio o di proiezione.
H205	Pericolo di esplosione di massa in caso d'incendio.
H220	Gas altamente infiammabile.
H221	Gas infiammabile.
H222	Aerosol altamente infiammabile.
H223	Aerosol infiammabile.
H224	Liquido e vapore altamente infiammabili.
H225	Liquido e vapore facilmente infiammabili.
H226	Liquido e vapore infiammabili.
H228	Solido infiammabile.
H240	Rischio di esplosione per riscaldamento.
H241	Rischio d'incendio o di esplosione per riscaldamento.
H242	Rischio d'incendio per riscaldamento.
H250	Spontaneamente infiammabile all'aria.
H251	Autoiscaldante; può infiammarsi.
H252	Autoiscaldante in grandi quantità; può infiammarsi.
H260	A contatto con l'acqua libera gas infiammabili che possono infiammarsi spontaneamente.
H261	A contatto con l'acqua libera gas infiammabili.
H270	Può provocare o aggravare un incendio; comburente.
H271	Può provocare un incendio o un'esplosione; molto comburente.
H272	Può aggravare un incendio; comburente.
H280	Contiene gas sotto pressione; può esplodere se riscaldato.
H290	Può essere corrosivo per i metalli.
H300	Letale se ingerito.

H301	Tossico se ingerito.
H302	Nocivo se ingerito.
H304	Può essere letale in caso di ingestione e di penetrazione nelle vie respiratorie.
H310	Letale per contatto con la pelle.
H311	Tossico per contatto con la pelle.
H312	Nocivo per contatto con la pelle.
H314	Provoca gravi ustioni cutanee e gravi lesioni oculari.
H315	Provoca irritazione cutanea.
H317	Può provocare una reazione allergica cutanea.
H318	Provoca gravi lesioni oculari.
H319	Provoca grave irritazione oculare.
H330	Letale se inalato.
H331	Tossico se inalato.
H332	Nocivo se inalato.
H334	Può provocare sintomi allergici o asmatici o difficoltà respiratorie se inalato.
H335	Può irritare le vie respiratorie.
H338	Può provocare sonnolenza o vertigini.
H340	Può provocare alterazioni genetiche.
H341	Sospettato di provocare alterazioni genetiche.
H350	Può provocare il cancro.
H350i	Può provocare il cancro se inalato.
H351	Sospettato di provocare il cancro.
H360	Può nuocere alla fertilità o al feto.
H360D	Può nuocere al feto.
H360Df	Può nuocere al feto. Sospettato di nuocere alla fertilità.
H360F	Può nuocere alla fertilità.
H360FD	Può nuocere alla fertilità. Può nuocere al feto.
H360Fd	Può nuocere alla fertilità. Sospettato di nuocere al feto.
H361	Sospettato di nuocere alla fertilità o al feto.
H361d	Sospettato di nuocere al feto.
H361f	Sospettato di nuocere alla fertilità.
H361fd	Sospettato di nuocere alla fertilità. Sospettato di nuocere al feto.
H362	Può essere nocivo per i lattanti allattati al seno.
H370	Provoca danni agli organi.
H371	Può provocare danni agli organi.
H372	Provoca danni agli organi.
H373	Può provocare danni agli organi.
H400	Molto tossico per gli organismi acquatici.
H410	Molto tossico per gli organismi acquatici con effetti di lunga durata.
H411	Tossico per gli organismi acquatici con effetti di lunga durata.
H412	Nocivo per gli organismi acquatici con effetti di lunga durata.
H413	Può essere nocivo per gli organismi acquatici con effetti di lunga durata.

GHS Consigli di prudenza (IT)

P101	In caso di consultazione di un medico, tenere a disposizione il contenitore o l'etichetta del prodotto.
P102	Tenere fuori dalla portata dei bambini.
P103	Leggere l'etichetta prima dell'uso.
P201	Procurarsi istruzioni specifiche prima dell'uso.
P202	Non manipolare prima di avere letto e compreso tutte le avvertenze.
P210	Tenere lontano da fonti di calore/scintille/fiamme libere/superfici riscaldate. —Non fumare.
P211	Non vaporizzare su una fiamma libera o altra fonte di accensione.
P220	Tenere/conservare lontano da indumenti.../materiali combustibili.
P221	Prendere ogni precauzione per evitare di miscelare con sostanze combustibili...
P222	Evitare il contatto con l'aria.
P223	Evitare qualsiasi contatto con l'acqua: pericolo di reazione violenta e di infiammazione spontanea.
P230	Mantenere umido con...
P231	Manipolare in atmosfera di gas inerte.
P231+232	Manipolare in atmosfera di gas inerte. Tenere al riparo dall'umidità.
P232	Proteggere dall'umidità.
P233	Tenere il recipiente ben chiuso.
P234	Conservare soltanto nel contenitore originale.

- P235 Conservare in luogo fresco.
- P235+410 Tenere in luogo fresco. Proteggere dai raggi solari.
- P240 Mettere a terra/massa il contenitore e il dispositivo ricevente.
- P241 Utilizzare impianti elettrici/di ventilazione/d'illuminazione...a prova di esplosione.
- P242 Utilizzare solo utensili antiscintillamento.
- P243 Prendere precauzioni contro le scariche elettrostatiche.
- P244 Mantenere le valvole di riduzione libere da grasso e olio.
- P250 Evitare le abrasioni/gli urti.../gli attriti.
- P251 Recipiente sotto pressione: non perforare né bruciare, neppure dopo l'uso.
- P260 Non respirare la polvere/i fumi/i gas/la nebbia/i vapori/gli aerosol.
- P261 Evitare di respirare la polvere/i fumi/i gas/la nebbia/i vapori/gli aerosol.
- P262 Evitare il contatto con gli occhi, la pelle o gli indumenti.
- P263 Evitare il contatto durante la gravidanza/l'allattamento.
- P264 Lavare accuratamente ... dopo l'uso.
- P270 Non mangiare, né bere, né fumare durante l'uso.
- P271 Utilizzare soltanto all'aperto o in luogo ben ventilato.
- P272 Gli indumenti da lavoro contaminati non devono essere portati fuori dal luogo di lavoro.
- P273 Non disperdere nell'ambiente.
- P280 Indossare guanti/indumenti protettivi/Proteggere gli occhi/il viso.
- P281 Utilizzare il dispositivo di protezione individuale richiesto.
- P282 Utilizzare guanti termici/schermo facciale/Proteggere gli occhi.
- P283 Indossare indumenti completamente ignifughi o in tessuti ritardanti di fiamma.
- P284 Utilizzare un apparecchio respiratorio.
- P285 In caso di ventilazione insufficiente utilizzare un apparecchio respiratorio.
- P301 IN CASO DI INGESTIONE:
- P301+310 IN CASO DI INGESTIONE: contattare immediatamente un CENTRO ANTIVELENI o un medico.
- P301+312 IN CASO DI INGESTIONE accompagnata da malessere: contattare un CENTRO ANTIVELENI o un medico.
- P301+330+331 IN CASO DI INGESTIONE: sciacquare la bocca. NON provocare il vomito.
- P302 IN CASO DI CONTATTO CON LA PELLE:
- P302+334 IN CASO DI CONTATTO CON LA PELLE: immergere in acque fredde/avvolgere con un bendaggio umido.
- P302+350 IN CASO DI CONTATTO CON LA PELLE: lavare delicatamente e abbondantemente con acqua e sapone.
- P302+352 IN CASO DI CONTATTO CON LA PELLE: lavare abbondantemente con acqua e sapone.
- P303+361+353 IN CASO DI CONTATTO CON LA PELLE (o con i capelli): togliersi di dosso immediatamente tutti gli indumenti contaminati. Sciacquare la pelle/ferire una doccia.
- P304 IN CASO DI INALAZIONE:
- P304+340 IN CASO DI INALAZIONE: trasportare l'infortunato all'aria aperta e mantenerlo a riposo in posizione che favorisca la respirazione.
- P304+341 IN CASO DI INALAZIONE: se la respirazione è difficile, trasportare l'infortunato all'aria aperta e mantenerlo a riposo in posizione che favorisca la respirazione.
- P305 IN CASO DI CONTATTO CON GLI OCCHI:
- P305+351+338 IN CASO DI CONTATTO CON GLI OCCHI: sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.
- P306 IN CASO DI CONTATTO CON GLI INDUMENTI:
- P306+360 IN CASO DI CONTATTO CON GLI INDUMENTI: sciacquare immediatamente e abbondantemente gli indumenti contaminati e la pelle prima di togliersi gli indumenti.
- P307 IN CASO di esposizione:
- P307+311 IN CASO di esposizione, contattare un CENTRO ANTIVELENI o un medico.
- P308 IN CASO di esposizione o di possibile esposizione:
- P308+313 IN CASO di esposizione o di possibile esposizione, consultare un medico.
- P309 IN CASO di esposizione o di malessere:
- P309+311 IN CASO di esposizione o di malessere, contattare un CENTRO ANTIVELENI o un medico.
- P310 Contattare immediatamente un CENTRO ANTIVELENI o un medico.
- P311 Contattare un CENTRO ANTIVELENI o un medico.
- P312 In caso di malessere, contattare un CENTRO ANTIVELENI o un medico.
- P313 Consultare un medico.
- P314 In caso di malessere, consultare un medico.
- P315 Consultare immediatamente un medico.
- P320 Trattamento specifico urgente (vedere... su questa etichetta).
- P321 Trattamento specifico (vedere... su questa etichetta).
- P322 Misure specifiche (vedere... su questa etichetta).
- P330 Sciacquare la bocca.
- P331 NON provocare il vomito.

P332	In caso di irritazione della pelle:
P332+313	In caso di irritazione della pelle: consultare un medico.
P333	In caso di irritazione o eruzione della pelle:
P333+313	In caso di irritazione o eruzione della pelle: consultare un medico.
P334	Immergere in acqua fredda/avvolgere con un bendaggio umido.
P335	Rimuovere le particelle depositate sulla pelle.
P335+334	Rimuovere le particelle depositate sulla pelle. Immergere in acqua fredda/avvolgere con un bendaggio umido.
P336	Spalare le parti congelate usando acqua tiepida. Non sfregare la parte interessata.
P337	Se l'irritazione degli occhi persiste:
P337+313	Se l'irritazione degli occhi persiste, consultare un medico.
P338	Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a scioquarsi.
P340	Die Betroffene Person an die frische Luft bringen und in einer Position ruhigstellen, die das Atmen erleichtert.
P341	Se la respirazione è difficile, trasportare l'infortunato all'aria aperta e mantenerlo a riposo in posizione che favorisca la respirazione.
P342	In caso di sintomi respiratori:
P342+311	In caso di sintomi respiratori: contattare un CENTRO ANTIVELENI o un medico.
P350	Lavare delicatamente e abbondantemente con acqua e sapone.
P351	Scioquare accuratamente per parecchi minuti.
P352	Lavare abbondantemente con acqua e sapone.
P353	Scioquare la pelle/fare una doccia.
P360	Scioquare immediatamente e abbondantemente gli indumenti contaminati e la pelle prima di toglierli gli indumenti.
P361	Togliersi di dosso immediatamente tutti gli indumenti contaminati.
P362	Togliersi di dosso gli indumenti contaminati e levarli prima di indossarli nuovamente.
P363	Lavare gli indumenti contaminati prima di indossarli nuovamente.
P370	In caso di incendio:
P370+376	In caso di incendio: bloccare la perdita se non c'è pericolo.
P370+378	In caso di incendio: estinguere con ...
P370+380	Evacuare la zona in caso di incendio.
P370+380+375	In caso di incendio: evacuare la zona. Rischio di esplosione. Utilizzare i mezzi estinguenti a grande distanza.
P371	In caso di incendio grave e di quantità rilevanti:
P371+380+375	In caso di incendio grave e di grandi quantità: evacuare la zona. Rischio di esplosione. Utilizzare i mezzi estinguenti a grande distanza.
P372	Rischio di esplosione in caso di incendio.
P373	NON utilizzare mezzi estinguenti se l'incendio raggiunge materiali esplosivi.
P374	Utilizzare i mezzi estinguenti con le precauzioni abituali e distanze ragionevoli.
P375	Rischio di esplosione. Utilizzare i mezzi estinguenti a grande distanza.
P376	Bloccare la perdita se non c'è pericolo.
P377	In caso d'incendio dovuto a perdita di gas, non estinguerà a meno che non sia possibile bloccare la perdita senza pericolo.
P378	Estinguere con...
P380	Evacuare la zona.
P381	Eliminare ogni fonte di accensione se non c'è pericolo.
P390	Absorbire la fuoriuscita per evitare danni materiali.
P391	Raccogliere il materiale fuoriuscito.
P401	Conservare...
P402	Conservare in luogo asciutto.
P402+404	Conservare in luogo asciutto e in recipiente chiuso.
P403	Conservare in luogo ben ventilato.
P403+233	Tenere il recipiente ben chiuso e in luogo ben ventilato.
P403+235	Conservare in luogo fresco e ben ventilato.
P404	Conservare in un recipiente chiuso.
P405	Conservare sotto chiave.
P406	Conservare in recipiente resistente alla corrosione/... provvisto di rivestimento interno resistente.
P407	Mantenere uno spazio libero tra gli scaffali/palle.
P410	Proteggere dai raggi solari.
P410+403	Proteggere dai raggi solari. Conservare in luogo ben ventilato.
P410+412	Proteggere dai raggi solari. Non esporre a temperature superiori a 50 °C/122°F.
P411	Conservare a temperature non superiori a ... °C/...°F.
P411+235	Conservare in luogo fresco a temperature non superiori a ... °C/...°F.
P412	Non esporre a temperature superiori a 50 °C/122°F.
P413	Conservare le rifuse di peso superiore a ... kg/...lb a temperature non superiori a ... °C/°F.
P420	Conservare lontano da altri materiali.
P422	Conservare sotto...



GHS informazioni supplementari sui pericoli (IT)

EUH001	Esplosivo allo stato secco.
EUH006	Esplosivo a contatto o senza contatto con l'aria.
EUH014	Reagisce violentemente con l'acqua.
EUH019	Durante l'uso può formarsi una miscela vapore-aria esplosiva/inflamabile.
EUH019	Può formare perossidi esplosivi.
EUH029	A contatto con l'acqua libera un gas tossico.
EUH031	A contatto con acidi libera gas tossici.
EUH032	A contatto con acidi libera gas molto tossici.
EUH044	Rischio di esplosione per riscaldamento in ambiente confinato.
EUH059	Pericoloso per lo strato di ozono.
EUH066	L'esposizione ripetuta può provocare secchezza o screpolature della pelle.
EUH070	Tossico per contatto oculare.
EUH071	Corrosivo per le vie respiratorie.
EUH201/201A	Contiene piombo. Non utilizzare su oggetti che possono essere masticati o succhiati dai bambini. Attenzione! Contiene piombo.
EUH202	Cianoacrilato. Pericolo. Incolla la pelle e gli occhi in pochi secondi. Tenere fuori dalla portata dei bambini.
EUH203	Contiene cromo (VI). Può provocare una reazione allergica.
EUH204	Contiene isocianati. Può provocare una reazione allergica.
EUH205	Contiene componenti epossidici. Può provocare una reazione allergica.
EUH206	Attenzione! Non utilizzare in combinazione con altri prodotti. Possono liberarsi gas pericolosi (cloro).
EUH207	Attenzione! Contiene cadmio. Durante l'uso si sviluppano fumi pericolosi. Leggere le informazioni fornite dal fabbricante. Rispettare le disposizioni di sicurezza.
EUH208	Contiene <denominazione della sostanza sensibilizzante>. Può provocare una reazione allergica.
EUH209/209A	Può diventare facilmente infiammabile durante l'uso. Può diventare infiammabile durante l'uso.
EUH210	Scheda dati di sicurezza disponibile su richiesta.
EUH401	Per evitare rischi per la salute umana e per l'ambiente, seguire le istruzioni per l'uso.

GHS Indicaciones de peligro (ES)

H200	Explosivo inestable
H201	Explosivo; peligro de explosión en masa.
H202	Explosivo; grave peligro de proyección.
H203	Explosivo; peligro de incendio, de onda expansiva o de proyección.
H204	Peligro de incendio o de proyección.
H205	Peligro de explosión en masa en caso de incendio.
H220	Gas extremadamente inflamable.
H221	Gas inflamable.
H222	Aerosol extremadamente inflamable.
H223	Aerosol inflamable.
H224	Líquido y vapores extremadamente inflamables.
H225	Líquido y vapores muy inflamables.
H226	Líquidos y vapores inflamables.
H228	Sólido inflamable.
H240	Peligro de explosión en caso de calentamiento.
H241	Peligro de incendio o explosión en caso de calentamiento.
H242	Peligro de incendio en caso de calentamiento.
H250	Se inflama espontáneamente en contacto con el aire.
H251	Se calienta espontáneamente; puede inflamarse.
H252	Se calienta espontáneamente en grandes cantidades; puede inflamarse.
H260	En contacto con el agua desprende gases inflamables que pueden inflamarse espontáneamente.
H261	En contacto con el agua desprende gases inflamables.
H270	Puede provocar o agravar un incendio; comburente.
H271	Puede provocar un incendio o una explosión; muy comburente.
H272	Puede agravar un incendio; comburente.
H280	Contiene gas a presión; peligro de explosión en caso de calentamiento.
H290	Puede ser corrosivo para los metales.
H300	Mortal en caso de ingestión.

H301	Tóxico en caso de ingestión.
H302	Nocivo en caso de ingestión.
H304	Puede ser mortal en caso de ingestión y penetración en las vías respiratorias.
H310	Mortal en contacto con la piel.
H311	Tóxico en contacto con la piel.
H312	Nocivo en contacto con la piel.
H314	Provoca quemaduras graves en la piel y lesiones oculares graves.
H315	Provoca irritación cutánea.
H317	Puede provocar una reacción alérgica en la piel.
H318	Provoca lesiones oculares graves.
H319	Provoca irritación ocular grave.
H330	Mortal en caso de inhalación.
H331	Tóxico en caso de inhalación.
H332	Nocivo en caso de inhalación.
H334	Puede provocar síntomas de alergia o asma o dificultades respiratorias en caso de inhalación.
H335	Puede irritar las vías respiratorias.
H338	Puede provocar somnolencia o vértigo.
H340	Puede provocar defectos genéticos.
H341	Se sospecha que provoca defectos genéticos.
H350	Puede provocar cáncer.
H350i	Puede provocar cáncer por inhalación.
H351	Se sospecha que provoca cáncer.
H360	Puede perjudicar la fertilidad o dañar al feto.
H360D	Puede dañar al feto.
H360DF	Puede dañar al feto. Se sospecha que perjudica a la fertilidad.
H360F	Puede perjudicar a la fertilidad.
H360FD	Puede perjudicar a la fertilidad. Puede dañar al feto.
H360Fd	Puede perjudicar a la fertilidad. Se sospecha que daña al feto.
H361	Se sospecha que perjudica la fertilidad o daña al feto.
H361d	Se sospecha que daña al feto.
H361f	Se sospecha que perjudica a la fertilidad.
H361fd	Se sospecha que perjudica a la fertilidad. Se sospecha que daña al feto.
H362	Puede perjudicar a los niños alimentados con leche materna.
H370	Provoca daños en los órganos.
H371	Puede provocar daños en los órganos.
H372	Provoca daños en los órganos.
H373	Puede provocar daños en los órganos.
H400	Muy tóxico para los organismos acuáticos.
H410	Muy tóxico para los organismos acuáticos, con efectos nocivos duraderos.
H411	Tóxico para los organismos acuáticos, con efectos nocivos duraderos.
H412	Nocivo para los organismos acuáticos, con efectos nocivos duraderos.
H413	Puede ser nocivo para los organismos acuáticos, con efectos nocivos duraderos.

GHS Consejos de prudencia (ES)

P101	Si se necesita consejo médico, tener a mano el envase o la etiqueta.
P102	Mantener fuera del alcance de los niños.
P103	Leer la etiqueta antes del uso.
P201	Leer instrucciones especiales antes del uso.
P202	No manipular la sustancia antes de haber leído y comprendido todas las instrucciones de seguridad.
P210	Mantener alejado de fuentes de calor, chispas, llama abierta o superficies calientes. — No fumar.
P211	No pulverizar sobre una llama abierta u otra fuente de ignición.
P220	Mantener o almacenar alejado de la ropa.../materiales combustibles.
P221	Tomar todas las precauciones necesarias para no mezclar con materias combustibles...
P222	No dejar que entre en contacto con el aire.
P223	Mantener alejado de cualquier posible contacto con el agua, pues reacciona violentamente y puede provocar una llamarada.
P230	Mantener humedecido con...
P231	Manipular en gas inerte.
P231+232	Manipular en gas inerte. Proteger de la humedad.
P232	Proteger de la humedad.
P233	Mantener el recipiente herméticamente cerrado.
P234	Conservar únicamente en el recipiente original.

- P235 Mantener en lugar fresco.
- P235+410 Conservar en un lugar fresco. Proteger de la luz del sol.
- P240 Conectar a tierra/enlace equipotencial del recipiente y del equipo de recepción.
- P241 Utilizar un material eléctrico, de ventilación o de iluminación/.../antídotos/agente.
- P242 Utilizar únicamente herramientas que no produzcan chispas.
- P243 Tomar medidas de precaución contra descargas electrostáticas.
- P244 Mantener las válvulas de reducción limpias de grasa y aceite.
- P250 Evitar la abrasión/el choque/.../la fricción.
- P251 Recipiente a presión: no perforar ni quemar, aun después del uso.
- P260 No respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol.
- P261 Evitar respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol.
- P262 Evitar el contacto con los ojos, la piel o la ropa.
- P263 Evitar el contacto durante el embarazo/la lactancia.
- P264 Lavarse ... concienzudamente tras la manipulación.
- P270 No comer, beber ni fumar durante su utilización.
- P271 Utilizar únicamente en exteriores o en un lugar bien ventilado.
- P272 Las prendas de trabajo contaminadas no podrán sacarse del lugar de trabajo.
- P273 Evitar su liberación al medio ambiente.
- P280 Llevar guantes/prendas/gafas/máscara de protección.
- P281 Utilizar el equipo de protección individual obligatorio.
- P282 Llevar guantes que aislen del frío/gafas/máscara.
- P283 Llevar prendas ignífugas/resistentes al fuego/resistentes a las llamas.
- P284 Llevar equipo de protección respiratoria.
- P285 En caso de ventilación insuficiente, llevar equipo de protección respiratoria.
- P301 EN CASO DE INGESTIÓN:
- P301+310 EN CASO DE INGESTIÓN: Llamar inmediatamente a un CENTRO DE INFORMACIÓN TOXICOLÓGICA o a un médico.
- P301+312 EN CASO DE INGESTIÓN: Llamar a un CENTRO DE INFORMACIÓN TOXICOLÓGICA o a un médico si se encuentra mal.
- P301+330+331 EN CASO DE INGESTIÓN: Enjuagarse la boca. NO provocar el vómito.
- P302 EN CASO DE CONTACTO CON LA PIEL:
- P302+334 EN CASO DE CONTACTO CON LA PIEL: Sumergir en agua fresca/aplicar compresas húmedas.
- P302+350 EN CASO DE CONTACTO CON LA PIEL: Lavar suavemente con agua y jabón abundantes.
- P302+352 EN CASO DE CONTACTO CON LA PIEL: Lavar con agua y jabón abundantes.
- P303+361+353 EN CASO DE CONTACTO CON LA PIEL (o el pelo): Quitarse inmediatamente las prendas contaminadas. Aclararse la piel con agua o ducharse.
- P304 EN CASO DE INHALACIÓN:
- P304+340 EN CASO DE INHALACIÓN: Transportar a la víctima al exterior y mantenerla en reposo en una posición confortable para respirar.
- P304+341 EN CASO DE INHALACIÓN: Si respira con dificultad, transportar a la víctima al exterior y mantenerla en reposo en una posición confortable para respirar.
- P305 EN CASO DE CONTACTO CON LOS OJOS:
- P305+351+338 EN CASO DE CONTACTO CON LOS OJOS: Aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando.
- P306 EN CASO DE CONTACTO CON LA ROPA:
- P306+360 EN CASO DE CONTACTO CON LA ROPA: Aclarar inmediatamente con agua abundante las prendas y la piel contaminadas antes de quitarse la ropa.
- P307 EN CASO DE exposición:
- P307+311 EN CASO DE exposición: Llamar a un CENTRO DE INFORMACIÓN TOXICOLÓGICA o a un médico.
- P308 EN CASO DE exposición manifiesta o preunta:
- P308+313 EN CASO DE exposición manifiesta o preunta: Consultar a un médico.
- P309 EN CASO DE exposición o malestar:
- P309+311 EN CASO DE exposición o si se encuentra mal: Llamar a un CENTRO DE INFORMACIÓN TOXICOLÓGICA o a un médico.
- P310 Llamar inmediatamente a un CENTRO DE INFORMACION TOXICOLOGICA o a un médico.
- P311 Llamar a un CENTRO DE INFORMACION TOXICOLOGICA o a un médico.
- P312 Llamar a un CENTRO DE INFORMACION TOXICOLOGICA o a un médico en caso de malestar.
- P313 Consultar a un médico.
- P314 Consultar a un médico en caso de malestar.
- P315 Consultar a un médico inmediatamente.
- P320 Se necesita urgentemente un tratamiento específico (ver ... en esta etiqueta).
- P321 Se necesita un tratamiento específico (ver ... en esta etiqueta).
- P322 Se necesitan medidas específicas (ver ... en esta etiqueta).
- P330 Enjuagarse la boca.
- P331 NO provocar el vómito.
- P332 En caso de irritación cutánea:

P332+313	En caso de irritación cutánea: Consultar a un médico.
P333	En caso de irritación o erupción cutánea:
P333+313	En caso de irritación o erupción cutánea: Consultar a un médico.
P334	Sumergir en agua fresca/aplicar compresas húmedas.
P335	Sacudir las partículas que se hayan depositado en la piel.
P335+334	Sacudir las partículas que se hayan depositado en la piel. Sumergir en agua fresca/aplicar compresas húmedas.
P336	Descongelar las partes heladas con agua tibia. No frotar la zona afectada.
P337	Si persiste la irritación ocular:
P337+313	Si persiste la irritación ocular: Consultar a un médico.
P338	Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando.
P340	Transportar a la víctima al exterior y mantenerla en reposo en una posición cómoda para respirar.
P341	Si respira con dificultad, transportar a la víctima al exterior y mantenerla en reposo en una posición cómoda para respirar.
P342	En caso de síntomas respiratorios:
P342+311	En caso de síntomas respiratorios: Llamar a un CENTRO DE INFORMACIÓN TOXICOLÓGICA o a un médico.
P350	Lavar suavemente con agua y jabón abundantes.
P351	Aclarar cuidadosamente con agua durante varios minutos.
P352	Lavar con agua y jabón abundantes.
P353	Aclararse la piel con agua/ducharse.
P360	Aclarar inmediatamente con agua abundante las prendas y la piel contaminadas antes de quitarse la ropa.
P361	Quitarse inmediatamente las prendas contaminadas.
P362	Quitarse las prendas contaminadas y lavarlas antes de volver a usarlas.
P363	Lavar las prendas contaminadas antes de volver a usarlas.
P370	En caso de incendio:
P370+376	En caso de incendio: Detener la fuga, si no hay peligro en hacerlo.
P370+378	En caso de incendio: Utilizar ... para apagarlo.
P370+380	En caso de incendio: Evacuar la zona.
P370+380+375	En caso de incendio: Evacuar la zona. Luchar contra el incendio a distancia, dado el riesgo de explosión.
P371	En caso de incendio importante y en grandes cantidades:
P371+380+375	En caso de incendio importante y en grandes cantidades: Evacuar la zona. Luchar contra el incendio a distancia, dado el riesgo de explosión.
P372	Riesgo de explosión en caso de incendio.
P373	NO luchar contra el incendio cuando el fuego llega a los explosivos.
P374	Luchar contra el incendio desde una distancia razonable, tomando las precauciones habituales.
P375	Luchar contra el incendio a distancia, dado el riesgo de explosión.
P376	Detener la fuga, si no hay peligro en hacerlo.
P377	Fuga de gas en llamas: No apagar, salvo si la fuga queda detenida sin peligro.
P378	Utilizar ... para apagarlo.
P380	Evacuar la zona.
P381	Eliminar todas las fuentes de ignición si no hay peligro en hacerlo.
P390	Absorber el vertido para que no dañe otros materiales.
P391	Recoger el vertido.
P401	Almacenar ...
P402	Almacenar en un lugar seco.
P402+404	Almacenar en un lugar seco. Almacenar en un recipiente cerrado.
P403	Almacenar en un lugar bien ventilado.
P403+233	Almacenar en un lugar bien ventilado. Mantener el recipiente cerrado herméticamente.
P403+235	Almacenar en un lugar bien ventilado. Mantener en lugar fresco.
P404	Almacenar en un recipiente cerrado.
P405	Guardar bajo llave.
P406	Almacenar en un recipiente resistente a la corrosión/... con revestimiento interior resistente.
P407	Dejar una separación entre los bloques/los palets de carga.
P410	Proteger de la luz del sol.
P410+403	Proteger de la luz del sol. Almacenar en un lugar bien ventilado.
P410+412	Proteger de la luz del sol. No exponer a temperaturas superiores a 50 °C/122°F.
P411	Almacenar a temperaturas no superiores a ... °C/...°F.
P411+235	Almacenar a temperaturas no superiores a ... °C/...°F. Mantener en lugar fresco.
P412	No exponer a temperaturas superiores a 50 °C/122°F.
P413	Almacenar las cantidades a granel superiores a ... kg/... lbs a temperaturas no superiores a ... °C/...°F.
P420	Almacenar alejado de otros materiales.
P422	Almacenar el contenido en ...



GHS información suplementaria sobre los peligros (ES)

EUH001	Explosivo en estado seco.
EUH006	Explosivo en contacto o sin contacto con el aire.
EUH014	Reacciona violentamente con el agua.
EUH019	Al usarlo pueden formarse mezclas aire-vapor explosivas o inflamables.
EUH019	Puede formar peróxidos explosivos.
EUH029	En contacto con agua libera gases tóxicos.
EUH031	En contacto con ácidos libera gases tóxicos.
EUH032	En contacto con ácidos libera gases muy tóxicos.
EUH044	Riesgo de explosión al calentarlo en ambiente confinado.
EUH059	Peligroso para la capa de ozono.
EUH066	La exposición repetida puede provocar sequedad o formación de grietas en la piel.
EUH070	Tóxico en contacto con los ojos.
EUH071	Corrosivo para las vías respiratorias.
EUH201/201A	Contiene plomo. No utilizar en objetos que los niños puedan masticar o chupar. ¡Atención! Contiene plomo.
EUH202	Cianoacrilato. Peligro. Se adhiere a la piel y a los ojos en pocos segundos. Mantener fuera del alcance de los niños.
EUH203	Contiene cromo (VI). Puede provocar una reacción alérgica.
EUH204	Contiene isocianatos. Puede provocar una reacción alérgica.
EUH205	Contiene componentes epoxídicos. Puede provocar una reacción alérgica.
EUH206	¡Atención! No utilizar junto con otros productos. Puede desprender gases peligrosos (dióxido).
EUH207	¡Atención! Contiene cadmio. Durante su utilización se desprenden vapores peligrosos. Ver la información facilitada por el fabricante. Seguir las instrucciones de seguridad.
EUH208	Contiene <nombre de la sustancia sensibilizante>. Puede provocar una reacción alérgica.
EUH209/209A	Puede inflamarse fácilmente al usarlo. Puede inflamarse al usarlo.
EUH210	Puede solicitarse la ficha de datos de seguridad.
EUH401	A fin de evitar riesgos para las personas y el medio ambiente, siga las instrucciones de uso.

SOME LC SOLVENTS AND CHEMICALS - CHARACTERISTICS AT A GLANCE

See full specifications in the coming section

Product	Minimum purity %	Minimum UV Transmission, %	Max water content (KF) %	Max residue on evpn. %	Max acidity or alkalinity %	Catalogue No.
Acetic acid	(GC) 99.8%	25/254; 80/260	0.05	0.001	-	010706
Acetone	(GC) 99.9%	60/335; 85/340; 98/350	0.2	0.0005	0.002	010306
ACN-Supra gradient	(GC) 99.97%	30/191; 85/195; 97/200; 98/215; 98/220; 99/230; 99/254	0.01	0.0001	0.001	012035
ACN -S (gradient)	(GC) 99.95%	60/193; 80/195; 95/200; 98/220; 98/230; 99/254	0.02	0.0002	0.002	012007
ACN -R (isocratic)	(GC) 99.9%	72/195; 92/200; 97/230; 98/240; 99/254	0.05	0.0004	0.002	012013
ACN preparative	(GC) 99.9%	70/200; 95/230; 98/254	0.1	0.001	0.005	012016
Butane sulfonic acid, Na	(Acidim) 99%	0.005M/water: 70/200; 90/220; 98/250				022181
n-Butanol	(GC) 99.8%	20/210; 70/230; 90/270; 98/310	0.05	0.0005	0.002	022006
t-Butyl methyl ether	(GC) 99.5%	60/250; 90/260; 98/280	0.02	0.0002	0.002	138906
Carbon tetrachloride	(GC) 99.8%	50/270; 80/280; 98/290	0.02	0.001	0.001	032006
1-Chlorobutane	(GC) 99.7%	70/230; 90/240; 96/260	0.01	0.0005	0.001	030906
Chloroform stab. amylene	(GC) 99.9%	70/255; 85/260; 98/280	0.01	0.0005	0.001	030806
Chloroform-S stab. amylene	(GC) 99.9%	75/255; 90/260; 98/275	0.01	0.0003	0.001	030807
Chloroform stab. ethanol	(GC) cor. 99.9%	70/255; 85/260; 98/280	0.05	0.0005	0.001	034806
Dichloroethane	(GC) 99.9%	20/230; 80/240; 99/280	0.03	0.0003	0.002	040506
Dichloromethane stab. amylene	(GC) 99.9%	40/235; 78/240; 90/245; 99/260	0.01	0.0003	0.001	137906
Diethyl ether	(GC) 99.8%	15/220; 60/230; 85/250; 95/270	0.03	0.0005	0.001	053106
Diisopropyl ether	(GC) 99.8%	40/254; 80/280	0.01	-	0.002	044006
N,N-Dimethylformamide	(GC) 99.8%	30/270; 60/275; 90/300; 97/320	0.03	0.0005	0.003	041906

Dioxane	(GC) 99.8%	20/220; 40/240; 90/280; 98/300	0.02	0.0005	0.002	048406
Ethanol absolute	(GC) 99.9%	35/210; 85/240; 98/260	0.1	0.0005	0.002	052506
Ethyl acetate	(GC) 99.9%	75/260; 95/275; 98/300	0.05	0.0005	0.003	054006
Heptane - S, 99%	(GC) 99%	25/200; 82/220; 99/250	0.01	0.0003	0.002	080507
Heptane	(GC) 96%	15/200; 80/220; 98/250	0.01	0.0005	0.002	080506
Hexane - S, 99%	(GC) 99%	12/195; 35/200; 60/210; 80/217; 90/225; 98/245	0.005	0.0002	0.002	080907
Hexane - S	(GC) 96%	12/195; 35/200; 60/210; 90/225; 98/245	0.005	0.0002	0.002	082907
Hexane	(GC) 96%	25/200; 50/210; 85/220; 98/245	0.005	0.0003	0.002	082906
Hexane sulfonic acid, Na	(GC) 99%	(0.005M): 70/200; 90/220; 98/250				082881
Isohexane (C ₆ H ₁₄ isomers)	(GC) 99%	25/210; 65/220; 95/230; 99/260	0.005	0.0002	-	091406
Isooctane	(GC) 99.5%	80/225; 90/235; 98/270	0.01	0.0003	0.002	091506
Methanol - supra gradient	(GC) 99.9%	40/210; 85/235; 98/260	0.03	0.0002	0.002	136835
Methanol	(GC) 99.9%	30/210; 85/235; 98/260	0.05	0.0003	0.002	136806
n-Pentane - S 99%	(GC) 99%	60/200; 65/210; 90/215; 90/222; 98/240	0.005	0.0002	0.0002	167607
n-Pentane	(GC) 96%	40/200; 90/220; 99/270	0.005	0.0003	0.002	160506
Pentane sulfonic acid, Na	(GC) 99%	(0.005M, H ₂ O): 70/200; 90/220; 98/250				160481
Petroleum ether 40-60°C.		10/200; 75/220; 98/270	0.005	0.0003	0.002	171506
n-Propanol	(GC) 99.8%	60/230; 80/240; 98.5/270	0.05	0.0003	0.003	163606
2-Propanol	(GC) 99.8%	30/210; 80/230; 99/270	0.1	0.0005	0.002	162606
Pyridine	(GC) 99.8%	65/310; 85/320; 98/340	0.03	0.0005		162506
Tetrahydrofuran - S	(GC) 99.9%	35/230; 70/254; 95/280; 98/300	0.02	0.0002	0.002	202207
Tetrahydrofuran	(GC) 99.8%	30/230; 88/270; 99/310	0.03	0.0003	0.003	202206
Toluene	(GC) 99.8%	60/292; 80/300; 98/350	0.01	0.0003	0.003	201506
Trichlorotrifluoroethane	(GC) 99.9%	45/240; 80/245; 98/260	0.01	0.0003	0.001	061806
Triethylamine	(GC) 99.6%	10/250; 75/254	0.1	0.002		204106
Trifluoroacetic acid	(GC) 99.95%	15/260; 90/280; 95/300	0.02	0.002		202306
Water	Resistivity at bottling 18M Ω cm ⁻¹	Abs. max. 210nm 254nm 5x10 ⁻³ AU 1x10 ⁻³ AU	0.02	0.0002	0.0002	232106

TYPICAL WORKING RANGE

of some HPLC solvents

HPLC product	200nm	210nm	220nm	230nm	235nm	240nm	245nm	250nm	254nm	260nm	270nm	280nm	300nm	400nm
Acetic acid									32	80	93	94	95	100
Acetone									18(330)	60(335)	87(340)	96(345)	99(350)	100
Acetonitrile Isocratic	93	94	97	98	98	99	99	99	100					
Acetonitrile Gradient	96	97	98	99	99	99	99	99	100					
Acetonitrile Supra-gradient	97	98	99	99	99	99	99	99	100					
n-Butanol		27	63	82	87	90	92	93	94	96	98	98	98	99
tert-Butyl methyl ether		14	27	40	50	61	70	78	84	90	96	100		
Chloroform							16	52	76	92	99	100		
Cyclohexane	8	20	60	84	90	94	95	96	97	98	99	99	100	
1,2-Dichloroethane				48	78	92	96	98	99	98	98	100		
Dichloromethane				10	45	78	92	93	98	100				
Diethyl ether		15	72	78	83	86	90	93	95	98	99	99	99	100
Diisopropyl ether		34	50	60	67	73	78	94	88	92	96	98	99	100
Dimethyl formamide											30	82	94	100
1,4-Dioxane			21	32	42	54	62	70	74	79	88	93	99	100
Ethanol absolute	40	62	77	84	89	92	95	96	98	98	99	99	99	100

Ethyl acetate							12	75	98	99	100
n-Heptane	32	59	84	93	96	97	98	99	99	99	100
Hexafluoroisopropanol	98	98	98	98	98	98	98	99	99	99	99
n-Hexane	35	66	88	95	97	98	98	99	99	100	
Iso-Hexane	39	71	88	95	96	97	98	99	99	100	
Iso-Octane	21	47	80	93	95	97	98	99	99	99	100
Methanol		42	68	89	89	92	95	97	98	100	100
N-Methyl pyrrolidone							4	63	77	89	100
n-Pentane	60	42	90	96	96	98	98	99	99	100	
Petroleum ether 40-60°	10	52	88	94	96	97	98	89	98	99	100
1-Propanol		18	32	60	80	87	94	97	98	99	100
2-Propanol		49	76	87	90	94	96	97	99	99	100
Tetrahydrofurane		5	27	40	49	56	62	68	73	80	90
Toluene											89
Trichlorotrifluoroethane-1,1,2					24	60	84	94	97	98	100
Triethylamine (0.1M in water)							13	46	75	90	97
Trifluoroacetic acid										15	80
Trifluoroethanol-2,2,2	87	93	95	97	97	97	97	97	97	97	98
Water		Abs. max. 5x10 ⁻³ AU							Abs. max. 1x10 ⁻³ AU		
											less than 2% UV Transmittance

UV Cutoff & Miscibility of Some Solvents

Absorbance in a 1 cm path length cell using water as reference.

Solvent	UV Cutoff (nm)	Solvent	UV Cutoff (nm)
Acetone	330	Hexane	195
Acetonitrile	190	Methanol	205
n-Butyl acetate	254	2-Methoxyethanol	210
iso-butyl alcohol	220	Methyl ethyl ketone	329
n-Butyl alcohol	215	Methyl isoamyl ketone	330
n-Butyl chloride	220	Methyl isobutyl ketone	334
Chlorobenzene	287	Methyl n-propyl ketone	331
Chloroform	245	Methyl t-butyl ether	210
Cyclohexane	200	N-Methyl pyrrolidone	285
Cyclopentane	198	Iso-Octane	215
o-Dichlorobenzene	295	Pentane	190
Dichloromethane	233	iso-propyl alcohol	205
Dimethyl acetamide	268	n-Propyl alcohol	210
Dimethyl sulfoxide	268	Propylene carbonate	220
N,N'-Dimethylformamide	268	Tetrahydrofuran	212
1,4-Dioxane	215	Toluene	284
Ethyl acetate	256	1,2,4-Trichlorobenzene	308
Ethyl Alcohol	210	1,1,2-Trichlorotrifluoroethane	231
Ethyl ether	215	Trifluoroacetic acid	210
Ethylene dichloride	228	Water	190
Heptane	200	o-Xylene	288

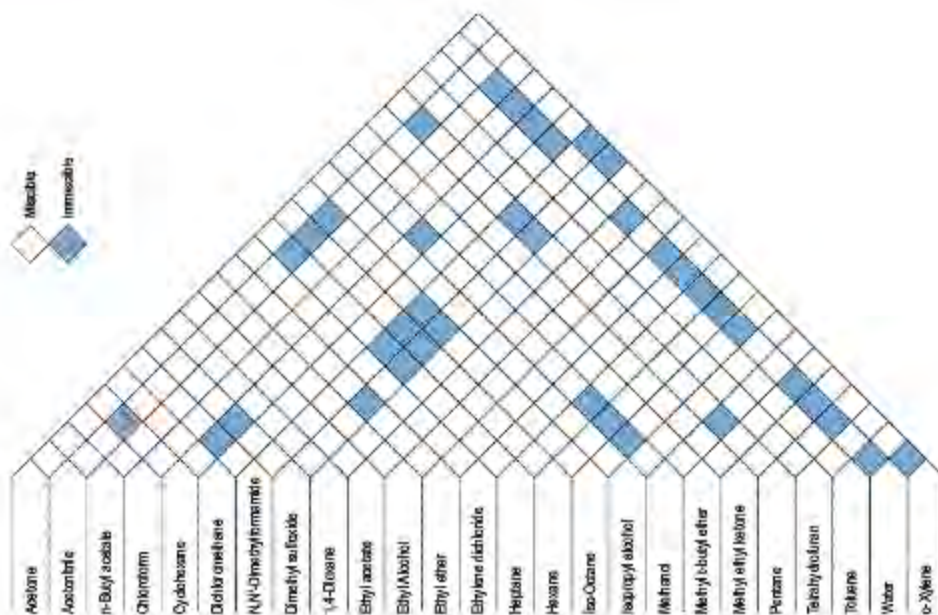




TABLE OF SOME SOLVENTS PROPERTIES

Solvents	Properties	Viscosity [*] , cP	Water ^{**} solubility, %	Relative Polarity index, p [†]	Eluotropic value, ε ^o	
					Silica	Alumina
Acetone		0.32	∞	5.1	0.53	0.56
Acetonitrile		0.38 (15oC)	∞	6.2	3.1	0.65
1 - Butanol		2.98	7.81	3.9	-	0.70
Chloroform		0.57	0.815	4.1	0.26	0.40
Cyclohexane		1.0	0.0025	0.2	0.03	0.04
Dichloroethane		0.79	0.81	3.5	-	0.49
Dichloromethane		0.44	1.60	3.1	0.30	0.42
N,N-Dimethylformamide		0.92	∞	6.4	-	-
Dimethyl Sulfoxide		2.00	∞	7.2	-	0.62
1,4-Dioxane		1.54	∞	4.8	0.51	0.56
Ethyl Acetate		0.45	8.7	4.4	0.48	0.58
Ethyl Alcohol		1.1 (25°C)	∞	5.2	-	-
Ethyl Ether		0.32	6.89	2.8	0.43	0.38
Heptane		0.39	0.0003 (25°C)	0.0	0.01	0.01
Hexane		0.33	0.014	0.0	0.01	0.01
Iso-Octane		0.50	0.0002 (25°C)	0.0	-	0.01
1-Propanol		2.27	∞	4.0	-	-
2-Propanol		2.30	∞	3.9	0.60	0.82
Methanol		0.60	∞	6.6	0.70	0.95
Methyl t-Butyl Ether		0.27	4.8	2.5	0.48	0.35
Methyl Ethyl Ketone		0.45	24.0	4.7	-	0.51
Methyl Isobutyl Ketone		0.58	1.7	4.2	-	0.43
N - Methylpyrrolidone		1.67 (25°C)	∞	6.7	-	-
Pentane		0.23	0.04	0.0	0.00	0.00
Pyridine		0.95	∞	5.3	-	0.70
Tetrahydrofuran		0.55	∞	4.0	0.53	0.45
Toluene		0.59	0.052 (25°C)	2.4	0.22	0.29
1.1.2-Trichlorotrifluoroethane		0.71	0.017 (25°C)	0.0	0.02	-0.25
Water		1.0	-	9.0	-	-
o-Xylene		0.61	0.018 (25°C)	2.5	-	0.26

* Viscosity: At 20°C unless otherwise indicated.

** Solubility: At 20°C unless otherwise indicated.

∞- miscible with water in all proportions.

ULC/MS SOLVENTS

Recent improvements on the High and Ultra High LC instruments, coupled with sensitive MS, PDA, ELSD, CAD, etc. detectors, have led to special high-performing systems. Ultra low detection limits and valid analysis of molecular structures of proteins, peptides, oligonucleotides and other chemicals brought these new techniques a growing popularity, especially in the pharmaceutical and biotechnology industries.

Some minor impurities arising from the solvents may interfere with low levels of sample impurities, or give false peaks, which will result in inadequate interpretation of the chromatograms.

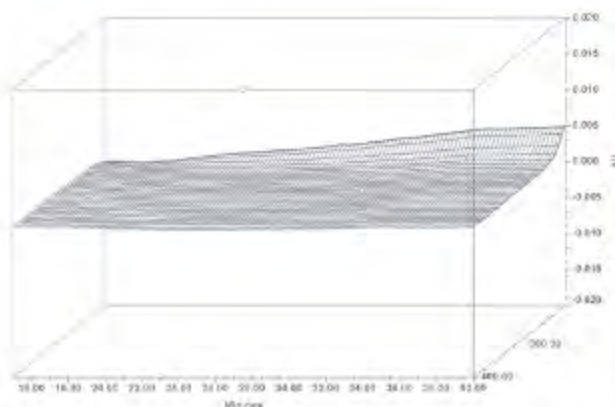
Biosolve Ultra Liquid Chromatography / Mass Spectrometry (ULC/MS) solvents for high resolution and sensitivity developed in close cooperation with advanced instrument companies to meet these new requirements.

Biosolve ULC/MS solvents checked and guaranteed to meet the demand for high chemical purity, high UV transmission, and lowest peak impurities in the MS and PDA gradient elution tests to ensure reproducibility.

All ULC/MS solvents are filtered at 0.1 μm and packed under inert gas for better shelf life. Standard packages are available in 1L, 2.5L, PTFE lined amber bottles and for some solvents stainless steel containers that can be equipped with dip pipe delivery devices from 25L to 1500L volume.



Comparison between the positive ESI spectra of Acetonitrile, MeOH & Water ULC/MS grade versus Reserpine 50ppb at 100-1000 m/z.



PDA gradient between 200-400 nm of Acetonitrile Vs. Water ULC/MS grade. Loading for 15 min. gradient 10-100% Acetonitrile in 20 min., hold 5 min. Column RP18, 3.5 μm ; flow 1 ml/min.



GC GRADE SOLVENTS

For Trace Organic Analysis

With the development of advanced analytical techniques, trace analysis have been a major challenge for analytical chemists. Analytical chemistry involves the separation, identification, and quantization of target compounds in complex samples. Modern chromatographic techniques have an excellent separation power. They are versatile and allow the use of a variety of detection techniques. However, due to the increasing requirements of environmental and toxicological regulations, the current detection limits cannot meet all needs; therefore, sample enrichment by extraction-concentration technique is frequently required before introduction samples into the chromatographic system. As a result, high purity solvents using the extraction-concentration technique for the analysis of residues, pesticides and other general trace organic contaminants in water, soil, food, etc. are needed.

We are constantly striving to tight up our specifications and presently offer several grades depending of the solvent and its intended use.

Pesti-S

Our classical solvents suitable for analysis of common pesticides and residue analysis, NPD and ECD tested. Each batch is tested after 1000:1 concentration.

Dioxins, Pesti-S, Furans and PCB's

Solvents suitable for all analysis of 209 PCB range, from 2-PCB to Deca-PCB, including TCDD isomers, (Mainly 2,3,7,8-TCDD), Furans and Dioxins. Each batch is tested after 1000:1 concentration, samples tested against internal standard of <5ppb Lindane.

LV/GC - Large Volume GC Solvents

For ultimate organic trace analysis; checked for ppb level of PAH, Furans & PCB's, Pesticides and other residual organic contaminants, low level of C10-C40 hydrocarbons for mineral oil analysis, suitable for analysis with GC-FID, -NPD & -ECD.

All solvents are filtered through 0,2 μm and packed under inert gas for better shelf-life. Standard packages are available in 1L, 2.5L, PTFE lined amber bottles.



HEADSPACE GRADE SOLVENTS

For Analysis Of Organic Volatile Impurities

Organic Volatile Impurities (OVI's) in pharmaceuticals, commonly referred as residual solvents, are trace organic volatile chemicals used or produced in the manufacturing of active substances, excipients, or in the preparation of medicinal products.

The International Conference on Harmonization (ICH) Q3C, United States Pharmacopoeia (USP) <467> and the European Pharmacopoeia (EP) 2.4.24, have set guidelines to identify residual solvents in pharmaceuticals and ensure that these solvents are not above the concentration limits according to the risk they pose for human health.

Revised procedures for the identification and quantification of OVI's consist of a static Headspace extraction coupled with a Gas Chromatographic (GC) separation. This technique is a precise and well-accepted method for the analysis of residual solvents.

We offer a range of high boiling point solvents, such as Dimethylacetamide (DMA), Dimethylformamide (DMF), Dimethylimidazolidinone (DMI), Dimethylsulfoxide (DMSO) and N-Methyl-2-pyrrolidone (NMP), specially developed and packed for Headspace analysis of volatile solvent impurities.

The purity of our Headspace grade solvents specifically evaluated by analysis against standards to ensure the absence of interfering peaks in the GC chromatogram.

SAFE-DRY™

Double Closure System

This unique double closure packing system with a six-holes cap assures an ultimate protection from atmospheric humidity for the Extra-Dry solvents.

The anhydrous characteristics of the solvents will be maintained for extended periods.

The SAFE-DRY™ double closure system is available in 100 ml, 250 ml and 1 liter amber bottles, tightly closed with a silicone/PTEE lined septum primary cap and a PTEE lined over cap.

THE BENEFITS OF SAFE-DRY™ are:

- ◆ Repetitive withdrawal of dry solvents without loss of quality.
- ◆ Simplicity; just mark the used holes with any marker to prevent puncturing again the same site.
- ◆ Better stability of solvent within the cycle of samples withdrawal.
- ◆ Better reproducibility within the cycle of samples withdrawal.
- ◆ More economical to the user.



A(Bz)-OTBDMS-CE Phosphoramidite

See section: DNA & RNA Synthesis

Aces

$C_4H_{10}N_2O_4S$ EC 230-908-4
 M 182.18 CAS [7365-82-4]
 m.p. 270-295°C



Synonym: N-(2-Acetamido)-2-aminoethanesulfonic acid, N-(Carbamoylmethyl)-2-aminoethanesulfonic acid, N-(Carbamoylmethyl)taurine

Application: ACES is a buffering substance useful at pH range 6.1 - 7.5, pKa = 6.78 at 25°C

Commonly used as an elution buffer in the chromatographic purification of proteins.

Cat. No:

010223

Solubility (2% in Water)

Heavy metals (as Pb)

Assay (T)

A280nm (2%)

Aces

Molecular biology

Clear colorless solution DNase activity

max. 0.0085%

min. 99%w/w

max. 0.05AU

RNase activity

Protease activity

Not detected

Not detected

Not detected

Standard pack:

01022353 25 GR 6X250 HDPE

Acetic acid glacial

$C_2H_4O_2$ m.p. 16.5 °C
 M 60.04 EC 200-580-7
 b.p. 117-118 °C UN 2789,8 (3),IL,CF1
 D 1.048 CAS [64-19-7]



Danger H:226-314 P:210-303+361+353-305+351+338-310-405

Synonym: N-(2-Acetamido)-2-aminoethanesulfonic acid, N-(Carbamoylmethyl)-2-aminoethanesulfonic acid, N-(Carbamoylmethyl)taurine

Cat. No:

010741

Appearance

Assay (GC, on anhydrous basis)

Residue after evaporation

Water (KF)

Subs. reducing Dichromate

Subs. reducing $KMnO_4$

T254nm

T260nm

T265nm

T275nm

Acetic acid glacial

ULC/MS

Clear colorless liquid

min. 99.95%

max. 0.0005%w/w

max. 0.05%

Passes test

Passes test

min. 30%

min. 80%

min. 95%

min. 98%

Grad. elution H.Peak at 254nm

Grad. elution drift at 254nm

F254nm (0.1%, as Quinine)

F385nm (0.1%, as Quinine)

Al (Aluminum)

Ca (Calcium)

Fe (Iron)

K (Potassium)

Mg (Magnesium)

Na (Sodium)

max. 0.002AU

max. 0.005AU

max. 0.5ppb

max. 0.5ppb

max. 10ppb

max. 50ppb

max. 20ppb

max. 20ppb

max. 10ppb

max. 50ppb

Filtered through 0.1µm, filled under inert gas.

Standard pack:

01074131 100 ML 6X100ML G. Bottle

01074101 1 L 6X1L G. Bottle 45

Cat. No:

010706

Appearance

Color (APHA)

Assay (GC, on anhydrous basis)

Residue after evaporation

Filtered through 0.4µm, filled under inert gas.

Acetic acid glacial

HPLC

Clear colorless liquid

max. 10

min. 99.8%

max. 0.001%w/w

Water (KF)

T254nm

T260nm

max. 0.05%

min. 25%

min. 80%

Standard pack:

01070801 1 L 6X1L G. Bottle 45

01070802 2.5 L 4X2.5L G. Bottle 45



A
B
C
D
E
F
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J
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R
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T
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V
W
X
Y
Z

Cat. No:
010751

Acetic acid glacial
AR-S glass distilled

Appearance	Clear colorless liquid	B (Boron)	max. 0.02ppm
Color (APHA)	max. 10	Be (Barium)	max. 0.1ppm
Assay (GC, on anhydrous basis)	min. 99.8%	Ca (Calcium)	max. 0.5ppm
Acetic anhydride	max. 0.01%	Cd (Cadmium)	max. 0.05ppm
Alkalinity	max. 0.0004meq/gr	Co (Cobalt)	max. 0.02ppm
Dilution test	Passes test	Cr (Chromium)	max. 0.02ppm
Residue after evaporation	max. 0.001%w/w	Cu (Copper)	max. 0.02ppm
Subs. reducing Dichromate	Passes test	Fe (Iron)	max. 0.1ppm
Subs. reducing KMnO4	Passes test	Mg (Magnesium)	max. 0.1ppm
Water (KF)	max. 0.2%	Mn (Manganese)	max. 0.02ppm
Chloride (Cl)	max. 0.0001%	Ni (Nickel)	max. 0.02ppm
Heavy metals (as Pb)	max. 0.00005%	Pb (Lead)	max. 0.1ppm
Iron (Fe)	max. 0.00002%	Sn (Tin)	max. 0.1ppm
Sulfate (SO4)	max. 0.0001%	Zn (Zinc)	max. 0.1ppm
Al (Aluminium)	max. 0.5ppm		

Standard pack:

01075101	1 L	6X1L G. Bottle 45
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Cat. No:
010705

Acetic acid glacial
AR

Appearance	Clear colorless liquid	Residue after evaporation	max. 0.001%w/w
Color (APHA)	max. 10	Subs. reducing Dichromate	Passes test
Chloride (Cl)	max. 0.0001%	Subs. reducing KMnO4	Passes test
Dilution test	Passes test	Sulfate (SO4)	max. 0.0001%
Assay (GC, on anhydrous basis)	min. 99.8%	Acetic anhydride	max. 0.01%
Iron (Fe)	max. 0.00002%	Water (KF)	max. 0.2%
Heavy metals (as Pb)	max. 0.00005%	Alkalinity	max. 0.0004meq/gr

Standard pack:

01070501	1 L	6X1L G. Bottle 45
010705K2	2.5 L	4X2.5L HDPE Bottle
01070502	2.5 L	4X2.5L G. Bottle 45
01070565	25 L	1X25L HDPE Drum
01070577	200 L	1X200L HDPE Drum

Cat. No:
010764

Acetic acid glacial
Meets EP/BP/USP spec.

Identification A	Passes EP/BP test	Chloride (Cl)	max. 0.0025%
Identification B	Passes EP/BP test	Chloride (Cl)	Passes USP test
Identification	Passes USP test	Iron (Fe)	max. 0.0005%
Appearance	Clear colorless liquid	Heavy metals (as Pb)	max. 0.0005%
Assay (T)	99.5-100.5%w/w	Residue after evaporation	max. 0.005%w/w
Reducing substances	Passes EP/BP test	Sulfate (SO4)	max. 0.005%
Oxidisable substances	Passes USP test	Sulfate (SO4)	Passes USP test
Solidification point	15.6-17.0°C		

Standard pack:

01076401	1 L	6X1L G. Bottle 45
01076402	2.5 L	4X2.5L G. Bottle 45
01076465	25 L	1X25L HDPE Drum
01076462	205 L	1X205L Drum

Cat. No:
010702

Acetic acid glacial
CP

Appearance	Clear colorless liquid
Assay (GC, on anhydrous basis)	min. 99%
Residue after evaporation	max. 0.01%w/w
Water (KF)	max. 0.5%

Standard pack:

01070201	1 L	6X1L G. Bottle 45
01070221	1 L	6X1L G. Bottle 28
01070265	25 L	1X25L HDPE Drum
01070277	200 L	1X200L HDPE Drum

■ **Acetic-d3 acid-d, 99.5 atom%D**

See section: NMR

■ **Acetic-d3 acid-d, 99 atom%D**

See section: NMR

Acetic acid 0.1% in Acetonitrile

UN 1903,3,II,F1

Danger H:225-312-319-332 P:210-241-261-303+361+353-305+351+338



Cat. No:
019141

Acetic acid 0.1% in Acetonitrile
ULC/MS

Appearance	Clear colorless liquid	T210nm	min. 20%
Assay (T)	0.095-0.105%w/v	T230nm	min. 50%
Water (KF)	max. 0.02%	T254nm	min. 98%
Residue after evaporation	max. 0.0001%w/w	Al (Aluminum)	max. 30ppb
MS-ESI+ (as Reserpine)	max. 50ppb	Ca (Calcium)	max. 100ppb
Grad. elution H.P.peak at 254nm	max. 0.002AU	Fe (Iron)	max. 50ppb
Grad. elution drift at 254nm	max. 0.010AU	K (Potassium)	max. 100ppb
F254nm (as Quinine)	max. 0.5ppb	Mg (Magnesium)	max. 30ppb
F365nm (as Quinine)	max. 0.5ppb	Na (Sodium)	max. 100ppb

Filtered through 0.1µm, filled under inert gas.

Standard pack:

01914101	1 L	6X1L G. Bottle 45
01914102	2.5 L	4X2.5L G. Bottle 45

Acetic Acid 0.1% in Water

Cat. No:
232341

Acetic Acid 0.1% in Water
ULC/MS

Appearance	Clear colorless liquid	T230nm	min. 75%
Assay (T)	0.095-0.105%w/v	T254nm	min. 99%
Residue after evaporation	max. 0.0001%w/w	Al (Aluminum)	max. 30ppb
MS-ESI+ (as Reserpine)	max. 50ppb	Ca (Calcium)	max. 100ppb
Grad. elution H.P.peak at 254nm	max. 0.002AU	Fe (Iron)	max. 50ppb
Grad. elution drift at 254nm	max. 0.010AU	K (Potassium)	max. 100ppb
F254nm (as Quinine)	max. 0.5ppb	Mg (Magnesium)	max. 30ppb
F365nm (as Quinine)	max. 0.5ppb	Na (Sodium)	max. 100ppb
T210nm	min. 20%		

Filtered through 0.1µm, filled under inert gas.

Standard pack:

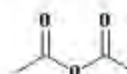
23234101	1 L	6X1L G. Bottle 45
23234102	2.5 L	4X2.5L G. Bottle 45

Acetic anhydride

C₄H₆O₃
M 102.09
b.p. 140 °C
D 1.08

m.p. -73.1 °C
EC 203-564-9
UN 1715,8+3,II,CF1
CAS [108-24-7]

Danger H:226-302-314-332 P:210-303+361+353-305+351+338-310-405



Cat. No:
010105

Acetic anhydride
AR

Appearance	Clear colorless liquid	Sulfate (SO ₄)	max. 0.0005%
Color (APHA)	max. 10	Heavy metals (as Pb)	max. 0.0002%
Chloride (Cl)	max. 0.0005%	Phosphate (PO ₄)	max. 0.001%
Assay (GC, on anhydrous basis)	min. 98%	Residue after evaporation	max. 0.003%w/w
Iron (Fe)	max. 0.0005%	Subs. reducing KMnO ₄	Passes test

Standard pack:

01010501	1 L	6X1L G. Bottle 45
01010585	25 L	1X25L HDPE Drum
01010596	185 L	1X185L Drum

Cat. No:
010102

Acetic anhydride
CP

Appearance	Clear colorless liquid
Assay (GC, on anhydrous basis)	min. 97%
Residue after evaporation	max. 0.005%w/w

Standard pack:

01010201	1 L	6X1L G. Bottle 45
01010265	25 L	1X25L HDPE Drum
01010277	200 L	1X200L Metal drum



Acetic anhydride-d6, 99.5 atom%D

See section: NMR

Acetone



C ₃ H ₆ O	m.p. -95 °C
M 58,08	EC 200-662-2
b.p. 56 °C	UN 1060,3,,I,F1
D 0.790	CAS [67-64-1]
Danger H:225-319-336 EUH:066 P:210-241-303+361+353-305+351+338-405	

Synonym: Methyl methyl keton

Cat. No:

010378

Acetone

LC-MS

Appearance	Clear colorless liquid	LC-MS suitability test	Passes test
Color (APHA)	max. 10	T339nm	min. 80%
Assay (GC, on anhydrous basis)	min. 99.9%	T342nm	min. 80%
Acidity	max. 0.0002meq/gr	T350nm	min. 98%
Alkalinity	max. 0.0002meq/gr	Ca (Calcium)	max. 0.1ppm
Residue after evaporation	max. 0.0001%w/w	K (Potassium)	max. 0.1ppm
Water (KF)	max. 0.1%	Mg (Magnesium)	max. 0.1ppm
Grad. elution H.P. peak at 345nm	max. 0.0005AU	Na (Sodium)	max. 0.1ppm

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01037801 1 L 6X1L G. Bottle 45

Cat. No:

010306

Acetone

HPLC

Appearance	Clear colorless liquid	Water (KF)	max. 0.2%
Acidity (as Acetic acid)	max. 0.002%	T335nm	min. 80%
Assay (GC, on anhydrous basis)	min. 99.9%	T340nm	min. 85%
Residue after evaporation	max. 0.0005%w/w	T350nm	min. 88%

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01030601 1 L 6X1L G. Bottle 45
01030602 2.5 L 4X2.5L G. Bottle 45

Cat. No:

010384

Acetone

LV-GC for organic trace analysis

Appearance	Clear colorless liquid	PAH test (<2ppb by HPLC)	Passes test
Acidity (as Acetic acid)	max. 0.002%	GC/ECD Dioxins, Furans & PCB's	max. 5ng/L
Color (APHA)	max. 10	GC/ECD any pesticide (as Lindane)	max. 5ng/L
F254nm (as Quinine)	max. 1ppb	GC/NPD any pesticide (as Parathion)	max. 10ng/L
F365nm (as Quinine)	max. 1ppb	GC/FID any hydrocarbon (C10-C40)	max. 0.1mg/L
Assay (GC, on anhydrous basis)	min. 99.9%	T335nm	min. 80%
GC/FID suitability (as 2-Octanol)	max. 10ng/ml	Residue after evaporation	max. 0.0003%w/w
GC/ECD suitability (as H. Epoxide)	max. 10ng/L	Water (KF)	max. 0.3%

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01038401 1 L 6X1L G. Bottle 45
01038402 2.5 L 4X2.5L G. Bottle 45

Cat. No:

010360

Acetone

Dioxins, Pesti-S, Furans & PCB's analysis

Appearance	Clear colorless liquid	Water (KF)	max. 0.2%
Acidity (as Acetic acid)	max. 0.002%	GC/ECD Dioxins, Furans & PCB's	max. 5ng/L
Color (APHA)	max. 10	GC/ECD any pesticide (as Lindane)	max. 5ng/L
Assay (GC, on anhydrous basis)	min. 99.9%	GC/NPD any pesticide (as Parathion)	max. 10ng/L
Residue after evaporation	max. 0.0002%w/w		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01036002 2.5 L 4X2.5L G. Bottle 45

Cat. No:
010338
Acetone
Spectrofluopure

Appearance	Clear colorless liquid	Water (KF)	max. 0.2%
Acidity (as Acetic acid)	max. 0.002%	T335nm	min. 60%
F365nm (as Quinine)	max. 1ppb	T340nm	min. 90%
Assay (GC, on anhydrous basis)	min. 99.9%	T350nm	min. 99%
Residue after evaporation	max. 0.0005%/w/w		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01033801	1 L	6X1L G. Bottle 45
01033805	5 L	4X5L HDPE Jerrycan

Cat. No:
010333
Acetone
Peptide synthesis

Appearance	Clear colorless liquid	2-Propanol	max. 0.05%
Acidity (as Acetic acid)	max. 0.002%	Methanol	max. 0.05%
Color (APHA)	max. 10	Residue after evaporation	max. 0.001%/w/w
Free Amines (Kaiser)	max. 0.001%	Water (KF)	max. 0.1%
Assay (GC, on anhydrous basis)	min. 99.9%		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01033301	1 L	6X1L G. Bottle 45
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Cat. No:
010332
Acetone
Peptide-S

Acidity (as Acetic acid)	max. 0.002%	Residue after evaporation	max. 0.0005%/w/w
Color (APHA)	max. 10	Water (KF)	max. 0.1%
Free Amines (Kaiser)	max. 0.0003%	Fe (Iron)	max. 0.1ppm
F365nm (as Quinine)	max. 1ppb	Mg (Magnesium)	max. 0.1ppm
Assay (GC, on anhydrous basis)	min. 99.9%	Pb (Lead)	max. 0.1ppm
2-Propanol	max. 0.05%	Zn (Zinc)	max. 0.1ppm
Methanol	max. 0.05%		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01033201	1 L	6X1L G. Bottle 45
01033202	2.5 L	4X2.5L G. Bottle 45

Cat. No:
010310
Acetone
MOS

Color (APHA)	max. 10	Fe (Iron)	max. 20ppb
Assay (GC, on anhydrous basis)	min. 99.9%	Ge (Gallium)	max. 10ppb
Residue after evaporation	max. 0.0005%/w/w	Ge (Germanium)	max. 10ppb
Water (KF)	max. 0.3%	K (Potassium)	max. 10ppb
Acidity (as Acetic acid)	max. 0.002%	Li (Lithium)	max. 10ppb
Alkalinity (as Ammonia)	max. 0.001%	Mg (Magnesium)	max. 20ppb
Methanol	max. 0.05%	Mn (Manganese)	max. 10ppb
2-Propanol	max. 0.05%	Mo (Molybdenum)	max. 10ppb
Chloride (Cl)	max. 0.2ppm	Na (Sodium)	max. 10ppb
Phosphate (PO4)	max. 0.05ppm	Nb (Niobium)	max. 30ppb
Heavy metals (as Pb)	max. 0.5ppm	Ni (Nickel)	max. 10ppb
Dilution test	Passes test	Pb (lead)	max. 10ppb
Ag (Silver)	max. 10ppb	Sb (Antimony)	max. 10ppb
Al (Aluminum)	max. 50ppb	Si (Silicon)	max. 30ppb
As (Arsenic)	max. 5ppb	Sn (Tin)	max. 20ppb
Au (Gold)	max. 20ppb	Sr (Strontium)	max. 10ppb
B (Boron)	max. 10ppb	Ta (Tantalum)	max. 30ppb
Ba (Barium)	max. 20ppb	Ti (Titanium)	max. 10ppb
Be (Beryllium)	max. 10ppb	Tl (Thallium)	max. 10ppb
Bi (Bismuth)	max. 20ppb	V (Vanadium)	max. 10ppb
Ca (Calcium)	max. 25ppb	Zn (Zinc)	max. 20ppb
Cd (Cadmium)	max. 10ppb	Zr (Zirconium)	max. 10ppb
Co (Cobalt)	max. 10ppb	Particle count > 0.5µm	max. 100P/ml
Cr (Chromium)	max. 10ppb	Particle count > 1µm	max. 8P/ml
Cu (Copper)	max. 10ppb		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01031001	1 L	6X1L G. Bottle 45
01031002	2.5 L	4X2.5L G. Bottle 45
01031005	5 L	4X5L HDPE Jerrycan

General Products

Cat. No:

010305

Appearance
Acidity (as Acetic acid)
Alkalinity (as Ammonia)
Color (APHA)
Aldehyde
Assay (GC, on anhydrous basis)

Filtered through 0.2µm, filled under inert gas

Acetone

AR

Clear colorless liquid
max. 0.002%
max. 0.001%
max. 5
max. 0.002%
min. 99.8%
2-Propanol
Methanol
Residue after evaporation
Subs. reducing KMnO4
Water (KF)
Solubility in Water

max. 0.05%
max. 0.05%
max. 0.001%/w/w
Passes test
max. 0.3%
Passes test

Standard pack:

01030501 1 L 6X1L G. Bottle 45
01030523 1 L 12X1L HDPE Bottle
01030502 2.5 L 4X2.5L G. Bottle 45
01030504 4 L 4X4L G. Bottle 32
01030505 5 L 4X5L HDPE Jerrycan
01030508 18 L 1X18/25L HDPE Drum
01030530 25 L 1X25L Stain/st. drum
01030585 25 L 1X25L HDPE Drum
01030537 200 L 1X200L Stain/st. drum
01030577 200 L 1X200L Metal drum
01030507 1400 L 1X1400L Stain/st.

Cat. No:

010314

Appearance
Color (APHA)
Acidity (as Acetic acid)
Alkalinity (as Ammonia)
Assay (GC, on anhydrous basis)
2-Propanol
Methanol

Acetone

AR Extra dry

Clear colorless liquid
max. 10
max. 0.002%
max. 0.001%
min. 99.8%
max. 0.05%
max. 0.05%
Residue after evaporation
Subs. reducing KMnO4
Water (KF)
Solubility in Water
Benzene
Alfa-Mesityl oxide
Beta-Mesityl oxide

max. 0.001%/w/w
Passes test
max. 0.045%
Passes test
max. 0.0015%
max. 0.0002%
max. 0.0002%

Standard pack:

01031402 2.5 L 4X2.5L G. Bottle 45
01031430 25 L 1X25L Stain/st. drum

Cat. No:

010347

Appearance
Acidity (as Acetic acid)
Color (APHA)
Assay (GC, on anhydrous basis)

Acetone

Extra dry

Clear colorless liquid
max. 0.003%
max. 10
min. 99.8%

max. 0.001%/w/w
Passes test
max. 0.01%

Standard pack:

01034752 250 ML 5X250ML D. Cup Bottle 32
01034701 1 L 6X1L G. Bottle 45
01034730 25 L 1X25L Stain/st. drum
01034777 200 L 1X200L Metal drum

Cat. No:

010364

Appearance
Appearance of Solution
Solubility (5% in Water)
Assay (GC, on anhydrous basis)
Identity (IR)
Water insolubles
Acidity or Alkalinity
Relative density (20°C)
Specific gravity
Reducing substances

Acetone

Meets ACS/EP/BP/USP spec.

Clear colorless liquid
Conforms
The solution is clear
min. 99.5%
Conforms
Conforms
Conforms
0.790-0.793
max. 0.789
Conforms
Oxidisable substances
Related substances
Methanol
2-Propanol
Benzene
Other each impurity
Water (KF)
Residue after evaporation
Residual solvents

Conforms
Conforms
max. 0.05%
max. 0.05%
max. 0.0002%
max. 0.05%
max. 0.3%
max. 0.001%/w/w
Meets the requirements

Standard pack:

01036401 1 L 6X1L G. Bottle 45
01036405 5 L 4X5L HDPE Jerrycan
01036465 25 L 1X25L HDPE Drum
01036437 200 L 1X200L Stain/st. drum
01036461 210 L 1X210L Metal drum
0103646A 1000 L 1X1000L Stain/st.

Cat. No:

010302

Appearance
Assay (GC, on anhydrous basis)
Residue after evaporation
Water (KF)

Acetone

CP

Clear colorless liquid
min. 98.5%
max. 0.003%/w/w
max. 0.3%

Standard pack:

01030201 1 L 6X1L G. Bottle 45
01030202 2.5 L 4X2.5L G. Bottle 45
01030205 5 L 4X5L HDPE Jerrycan
01030248 5 L 4X5L HDPE Jerrycan
01030265 25 L 1X25L HDPE Drum
01030277 200 L 1X200L Metal drum
01030261 210 L 1X200L Metal drum

■ Acetone d6, 100 atom%D

See section: NMR

■ Acetone d6, 99.9 atom%D

See section: NMR

■ Acetone d6, 99.8 atom%D

See section: NMR

■ Acetone d6, 99.5 atom%D

See section: NMR

■ Acetonitrile

C_2H_3N m.p. -46 °C
 M 41.04 EC 200-835-2
 b.p. 81-82 °C UN 1648,3,II,F1
 D 0.781 CAS [75-05-8]
 Danger H:225-302-312-319-332 P:210-241-261-303+361+353-305+351+338

Synonym: **ACN, Methyl cyanide**

Cat. No:

012041

Acetonitrile

ULC/MS

Appearance	Clear colorless liquid	F365nm (as Quinine)	max. 0.3ppb
Color (APHA)	max. 5	T191nm	min. 30%
Assay (GC, on anhydrous basis)	min. 99.97%	T195nm	min. 85%
Residue after evaporation	max. 0.0001%w/w	T200nm	min. 97%
Water (KF)	max. 0.01%	T215nm	min. 98%
Acidity (as Acetic acid)	max. 0.001%	T>230nm	min. 99%
Alkalinity (as Ammonia)	max. 0.0001%	Al (Aluminum)	max. 20ppb
MS-ESI+ (as Reserpine)	max. 30ppb	Ca (Calcium)	max. 50ppb
H.Peak by PDAD 210-400nm	max. 0.001AU	Fe (Iron)	max. 20ppb
Grad. elution H.Peak at 210nm	max. 0.001AU	K (Potassium)	max. 50ppb
Grad. elution drift at 210nm	max. 0.006AU	Mg (Magnesium)	max. 20ppb
Grad. elution H.Peak at 254nm	max. 0.0003AU	Na (Sodium)	max. 50ppb
Grad. elution drift at 254nm	max. 0.002AU	Cu (Copper)	Not detected
F254nm (as Quinine)	max. 0.3ppb		

Filtered through 0.1µm, filled under inert gas.

Standard pack:

012041G5	500 ML	6X0.5L G. Bottle	45
01204101	1 L	6X1L G. Bottle	45
01204102	2.5 L	4X2.5L G. Bottle	45

Cat. No:

012035

Acetonitrile

HPLC Supra-gradient (Reag. EP/BP/USP)

Appearance	Clear colorless liquid	Residue after evaporation	max. 0.0001%w/w
Acidity (as Acetic acid)	max. 0.001%	Water (KF)	max. 0.01%
Alkalinity (as Ammonia)	max. 0.0001%	Identity (IR)	Conforms to standard
Color (APHA)	max. 5	T191nm	min. 30%
F254nm (as Quinine)	max. 0.3ppb	T185nm	min. 85%
F365nm (as Quinine)	max. 0.3ppb	T200nm	min. 97%
Assay (GC, on anhydrous basis)	min. 99.97%	T215nm	min. 99%
Grad. elution H.Peak at 210nm	max. 0.001AU	T220nm	min. 99%
Grad. elution drift at 210nm	max. 0.006AU	T230nm	min. 99%
Grad. elution H.Peak at 254nm	max. 0.0003AU	T254nm	min. 99%
Grad. elution drift at 254nm	max. 0.002AU		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01203501	1 L	4X2.5L G. Bottle	45
01203502	2.5 L	4X2.5L G. Bottle	45
01203504	4 L	4X4 L G. Bottle	32
01203555	45 L	1X45L Stain/Al. drum	



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Cat. No:
012078

Acetonitrile
LC-MS

Appearance	Clear colorless liquid	F254nm (as Quinine)	max. 0.5ppb
Acidity (as Acetic acid)	max. 0.002%	F365nm (as Quinine)	max. 0.5ppb
Alkalinity (as Ammonia)	max. 0.0002%	T195nm	min. 78%
Color (APHA)	max. 5	T200nm	min. 95%
Assay (GC, on anhydrous basis)	min. 99.98%	T220nm	min. 98%
Residue after evaporation	max. 0.0001%w/w	T240nm	min. 98%
Water (KF)	max. 0.02%	Ca (Calcium)	max. 0.1ppm
MS-ESI+ (as Reserpine)	max. 100ppb	K (Potassium)	max. 0.1ppm
Grad. elution H.Peak at 210nm	max. 0.002AU	Mg (Magnesium)	max. 0.1ppm
Grad. elution H.Peak at 254nm	max. 0.0005AU	Na (Sodium)	max. 0.1ppm

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01207801	1 L	6X1L G. Bottle 45
01207802	2.5 L	4X2.5L G. Bottle 45

Cat. No:
012007

Acetonitrile
HPLC-S

Appearance	Clear colorless liquid	Grad. elution drift at 254nm	max. 0.003AU
Acidity (as Acetic acid)	max. 0.002%	Residue after evaporation	max. 0.0002%w/w
Alkalinity (as Ammonia)	max. 0.0002%	Water (KF)	max. 0.02%
Color (APHA)	max. 5	T193nm	min. 80%
F254nm (as Quinine)	max. 0.5ppb	T195nm	min. 80%
F365nm (as Quinine)	max. 0.5ppb	T200nm	min. 95%
Assay (GC, on anhydrous basis)	min. 99.95%	T220nm	min. 98%
Grad. elution H.Peak at 210nm	max. 0.002AU	T230nm	min. 98%
Grad. elution drift at 210nm	max. 0.01AU	T254nm	min. 99%
Grad. elution H.Peak at 254nm	max. 0.0005AU	Identity (IR)	Conforms to standard

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01200701	1 L	6X1L G. Bottle 45
01200702	2.5 L	4X2.5L G. Bottle 45
01200704	4 L	4X4L G. Bottle 32
01200703	30 L	1X30L Stain/st. drum
01200755	45 L	1X45L Stain/st. drum
01200737	200 L	1X200L Stain/st. drum

Cat. No:
012013

Acetonitrile
HPLC-R

Appearance	Clear colorless liquid	Water (KF)	max. 0.05%
Acidity (as Acetic acid)	max. 0.002%	T195nm	min. 72%
Alkalinity (as Ammonia)	max. 0.0002%	T200nm	min. 82%
Color (APHA)	max. 5	T230nm	min. 97%
F254nm (as Quinine)	max. 1ppb	T240nm	min. 98%
F365nm (as Quinine)	max. 1ppb	T254nm	min. 99%
Assay (GC, on anhydrous basis)	min. 99.9%	Identity (IR)	Conforms to standard
Residue after evaporation	max. 0.0004%w/w		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01201301	1 L	6X1L G. Bottle 45
01201302	2.5 L	4X2.5L G. Bottle 45
01201304	4 L	4X4L G. Bottle 32
01201337	200 L	1X200L Stain/st. drum

Cat. No:
012016

Acetonitrile
HPLC Preparative

Appearance	Clear colorless liquid	Water (KF)	max. 0.02%
Acidity (as Acetic acid)	max. 0.005%	T200nm	min. 70%
Color (APHA)	max. 10	T230nm	min. 95%
Assay (GC, on anhydrous basis)	min. 99.9%	T254nm	min. 98%
Residue after evaporation	max. 0.001%w/w		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01201630	25 L	1X25L Stain/st. drum
01201603	30 L	1X30L Stain/st. drum
01201677	200 L	1X200L Metal drum
01201637	200 L	1X200L Stain/st. drum
01201607	1400 L	1X1400L Stain/st.
01201600		ISOTANK 605X240X260

Cat. No:
012060

Acetonitrile
Dioxins, Pesti-S, Furans & PCB's analysis

Appearance	Clear colorless liquid	GC/ECD any pesticide (as Lindane)	max. 5ng/L
Acidity (as Acetic acid)	max. 0.002%	GC/NPD any pesticide (as Parathion)	max. 10ng/L
Color (APHA)	max. 5	Residue after evaporation	max. 0.0005%w/w
Assay (GC, on anhydrous basis)	min. 99.9%	Water (KF)	max. 0.1%
GC/ECD Dioxins, Furans & PCB's	max. 5ng/L		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01206001	1 L	6X1L G. Bottle 45
01206002	2.5 L	4X2.5L G. Bottle 45
01206004	4 L	4X4L G. Bottle 32

Cat. No:
012038

Acetonitrile
Spectrofluopure

Appearance	Clear colorless liquid	Residue after evaporation	max. 0.0005%/w/w
Acidity (as Acetic acid)	max. 0.002%	Water (KF)	max. 0.02%
Color (APHA)	max. 10	T200nm	min. 95%
F254nm (as Quinine)	max. 0.5ppb	T220nm	min. 98%
F365nm (as Quinine)	max. 0.5ppb	T254nm	min. 99%
Assay (GC, on anhydrous basis)	min. 99.9%		

Standard pack:

01203801	1 L	6X1L G. Bottle 45
01203804	4 L	4X4L G. Bottle 32

Cat. No:
012031

Acetonitrile
Peptide preparative

Appearance	Clear colorless liquid	Acetamide	max. 3ppm
Acidity (as Acetic acid)	max. 0.0015%	T200nm	min. 75%
Alkalinity (as Ammonia)	max. 0.0002%	T205nm	min. 80%
Assay (GC, on anhydrous basis)	min. 99.95%	T210nm	min. 85%
Other impurities	max. 0.01%	T215nm	min. 89%
Propionitrile	max. 0.04%	T220nm	min. 90%
Iron (Fe)	max. 0.1ppm	T225nm	min. 92%
Residue after evaporation	max. 0.0002%/w/w	T230nm	min. 95%
Water (KF)	max. 0.03%	T235nm	min. 97%
Acrylonitrile	max. 5ppm	T240nm	min. 98%
Amyl alcohol	max. 5ppm	T245nm	min. 99%
Methacrylonitrile	max. 5ppm	T250nm	min. 99%

Standard pack:

01203137	200 L	1X200L Stain/et. drum
01203177	200 L	1X200L Metal drum
01203107	1400 L	1X1400L Stain/et.
01203100		ISOTANK 605X240X260

Cat. No:
012058

Acetonitrile
Diluent for DNA synthesis

Appearance	Clear colorless liquid	Residue after evaporation	max. 0.0003%/w/w
Acidity (as Acetic acid)	max. 0.002%	Subs. reducing KMnO4	Passes test
Color (APHA)	max. 5	Water (KF)	max. 0.001%
Assay (GC, on anhydrous basis)	min. 99.9%		

Standard pack:

01205831	100 ML	6X100ML G. Bottle
01205833	100 ML	6X100ML G. Bottle
01205833	200 ML	6X200ML 8oz/24
01205832	250 ML	6X250ML D.Cup Bottle 32
01205820	450 ML	6X450ML 16oz/28
01205835	500 ML	6X0.5L D.Cup Bottle 32
01205801	1 L	6X1L G. Bottle 45
01205802	2.5 L	4X2.5L G. Bottle 45
01205804	4 L	4X4L G. Bottle 32
012058P1	24 L	1X24L Stain. Pr. drum
01205830	25 L	1X25L Stain/et. drum
01205807	1400 L	1X1400L Stain/et.

Cat. No:
012054

Acetonitrile
Extra dry, DNA synthesis

Acidity (as Acetic acid)	max. 0.002%	Residue after evaporation	max. 0.0003%/w/w
Color (APHA)	max. 5	Subs. reducing KMnO4	Passes test
Assay (GC, on anhydrous basis)	min. 99.9%	Water (KF)	max. 0.003%

Standard pack:

01205431	100 ML	6X100ML G. Bottle
01205432	250 ML	6X250ML D.Cup Bottle 32
01205432	250 ML	6X250ML G. Bottle 32
01205420	450 ML	6X450ML 16oz/28
01205435	500 ML	6X0.5L G. Bottle 45
01205435	500 ML	6X0.5L D.Cup Bottle 32
01205421	1 L	6X1L G. Bottle 28
01205431	1 L	6X1L G. Bottle 45
01205401	1 L	6X1L G. Bottle 45
01205402	2.5 L	4X2.5L G. Bottle 45
01205404	4 L	4X4L G. Bottle 32
01205430	25 L	1X25L Stain/et. drum
01205435	45 L	1X45L Stain/et. drum
01205437	200 L	1X200L Stain/et. drum
01205477	200 L	1X200L Metal drum
01205407	1400 L	1X1400L Stain/et.



Cat. No:
012005

Acetonitrile
AR

Appearance	Clear colorless liquid	Assay (GC, on anhydrous basis)	min. 99.8%
Acidity (as Acetic acid)	max. 0.003%	Residue after evaporation	max. 0.0005%/w/w
Alkalinity (as Ammonia)	max. 0.001%	Water (KF)	max. 0.1%
Color (APHA)	max. 10		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01200501	1 L	6X1L G. Bottle 45
01200502	2.5 L	4X2.5L G. Bottle 45
01200537	200 L	1X200L Stainless drum
01200577	200 L	1X200L Metal drum

Cat. No:
012002

Acetonitrile
CP

Appearance	Clear colorless liquid	Residue after evaporation	max. 0.001%/w/w
Assay (GC, on anhydrous basis)	min. 99.5%	Identity (IR)	Conforms to reference
Water (KF)	max. 0.1%	Refractive index (20°C)	1.3430-1.3450

Standard pack:

01200201	1 L	6X1L G. Bottle 45
01200202	2.5 L	4X2.5L G. Bottle 45
01200285	25 L	1X25L HDPE Drum
01200237	200 L	1X200L Stainless drum
01200277	200 L	1X200L Metal drum
01200200		ISOTANK 605X240X260

■ Acetonitrile / TEAA 0.1M 95:5

D 0.793

UN 1863,3,II,F1

Danger H:225-312-319-332 P:210-241-261-303+361+353-305+351+338



Cat. No:
272306

Acetonitrile / TEAA 0.1M 95:5
HPLC

Appearance	Clear colorless liquid	Water (KF)	3.3-3.5%/w/w
Assay (T)	0.095-0.105M	T255nm	min. 40%
Residue after evaporation	max. 0.0005%/w/w	T265nm	min. 85%
Filter test	Passes test	T275nm	min. 95%

Filtered through 0.2µm, filled under inert gas.

Standard pack:

27230601	1 L	6X1L G. Bottle 45
27230602	2.5 L	4X2.5L G. Bottle 45

■ Acetonitrile-d₃, 100 atom%D

See section: NMR

■ Acetonitrile-d₃, 99.9 atom%D

See section: NMR

■ Acetonitrile-d₃, 99.8 atom%D

See section: NMR

■ Acetonitrile-d₃, 99.5 atom%D

See section: NMR

■ Acetophenone-d₈, 98 atom%D

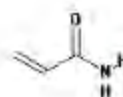
See section: NMR

■ N-Acetyl-D-erythro-sphingosine

See section: Sphingolipids & Phospholipids

■ Acrylamide 4X

C_3H_5NO
 M 71.08
 b.p. 125 °C at 25mmHg
 m.p. 83 - 85 °C
 Danger: H:301-312-315-317-319-332-340-350-361-372 P:260-301+310-305+351+338-321
 Synonyms: 2-Propenamida, Acrylic acid amide



Cat. No: 014623	Acrylamide 4X Molecular biology		
Appearance	White crystalline powder	Residual Methanol (GC)	max. 0.5%
Conductivity (40% in water)	max. 5µS/cm	A290nm (1%)	max. 0.1AU
Assay Acrylamide (on dry basis)	min. 99.5%	DNase activity	Not detected
Heavy metals (as Pb)	max. 0.0005%	RNase activity	Not detected
Acrylic acid	max. 0.003%	Protease activity	Not detected

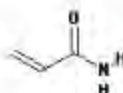
Standard pack:
014623B1 1 KG 6X1KG HDPE

Cat. No: 014680	Acrylamide 4X For synthesis		
Appearance	White crystalline powder	Solubility (50% in Water)	Clear colorless solution
Assay Acrylamide (on dry basis)	min. 99.8%	Water insoluble	max. 0.005%
Acrylic acid	max. 0.001%	pH (5% in water)	5.0-6.5

Standard pack:
014680B1 1 KG 6X1KG HDPE

■ Acrylamide 4X, 40% solution

C_3H_5NO
 M 71.08
 D 1.035
 Danger H:302-312-315-317-319-332-340-350-361-372 P:260-261-305+351+338-321
 Synonyms: 2-Propenamida, Acrylic acid amide



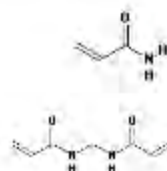
Cat. No: 013123	Acrylamide 4X, 40% solution Molecular biology		
Appearance	Clear colorless liquid	Acrylic acid	max. 0.001%
Conductivity (40% in water)	max. 5µS/cm	A290nm (1%)	max. 0.1AU
Assay Acrylamide (on dry basis)	min. 99.5%	DNase activity	Not detected
Assay (content)	39-41% w/v	RNase activity	Not detected
Heavy metals (as Pb)	max. 0.0002%	Protease activity	Not detected

Filtered through 0.2µm, filled under inert gas.

Standard pack:
01312301 1 L 4X1L G. Bottle
01312335 500 ml 4X0.5L G. Bottle

■ Acrylamide / bis-Acrylamide 19:1, 40%

b.p. ~100°C
 D 1.035
 EC 201-173-7
 Danger H:302-312-315-317-319-340-350-361-372 P:260-261-305+351+338-321
Application: Commonly used for DNA sequencing and separation of low-molecular-weight proteins.



Cat. No: 013523	Acrylamide / bis-Acrylamide 19:1, 40% Molecular biology		
Appearance	Clear colorless liquid	Composition	Complex
Conductivity (40% in water)	max. 5µS/cm	A290nm (1%)	max. 0.1AU
Assay (content)	39-41% w/v	DNase activity	Not detected
Heavy metals (as Pb)	max. 0.0002%	RNase activity	Not detected
Polymerization time	max. 30min.	Protease activity	Not detected
Acrylic acid	max. 0.001%		

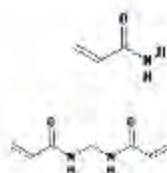
Filtered through 0.2µm, filled under inert gas.

Standard pack:
01352335 500 ML 4X0.5L G. Bottle
01352301 1 L 4X1L G. Bottle
01352302 2.5 L 4X2.5L G. Bottle 4S

■ Acrylamide / bis-Acrylamide 29:1, 40%

D 1.035 UN 2810,8.1,III,T1
 EC 201-173-7 CAS [79-06-1]
 Danger H:302-312-315-317-319-340-350-261-372 P:260-261-305+351+338-321

Application: Commonly used for DNA sequencing and separation of proteins by electrophoresis.



Cat. No: 013823 Acrylamide / bis-Acrylamide 29:1, 40%

Appearance	Clear colorless liquid	Composition	Complexes
Conductivity (40% in water)	max. 5µs/cm	A290nm (1%)	max. 0.1AU
Assay (content)	39-41%w/v	DNase activity	Not detected
Heavy metals (as Pb)	max. 0.0002%	RNase activity	Not detected
Polymerization time	max. 30min.	Protease activity	Not detected
Acrylic acid	max. 0.001%		

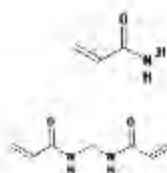
Standard pack:

01382335	500 ML	4X0.5L G. Bottle
01382301	1 L	4X1L G. Bottle

■ Acrylamide / bis-Acrylamide 37.5:1, 40%

D 1.035 UN 2810,8.1,III,T1
 EC 201-173-7 CAS [79-06-1]
 Danger H:302-312-315-317-319-340-350-372-361f P:260-261-305+351+338-321

Application: Commonly used for separation of high-molecular-weight proteins.



Cat. No: 014223 Acrylamide / bis-Acrylamide 37.5:1, 40%

Appearance	Clear colorless liquid	Composition	Complexes
Conductivity (40% in water)	max. 5µs/cm	A290nm (1%)	max. 0.1AU
Assay (content)	39-41%w/v	DNase activity	Not detected
Heavy metals (as Pb)	max. 0.0002%	RNase activity	Not detected
Polymerization time	max. 30min.	Protease activity	Not detected
Acrylic acid	max. 0.001%		

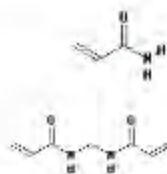
Standard pack:

01422335	500 ML	4X0.5L G. Bottle
01422301	1 L	4X1L G. Bottle

■ Acrylamide / bis-Acrylamide 37.5:1, 30%

D 1.02 UN 2810,8.1,III,T1
 EC 201-173-7 CAS [79-06-1]
 Danger: H:302-312-315-317-319-340-350-372-361f P:260-261-305+351+338-321-405

Application: Commonly used for separation of high-molecular-weight proteins.



Cat. No: 015223 Acrylamide / bis-Acrylamide 37.5:1, 30%

Appearance	Clear colorless liquid	Composition	Complexes
Conductivity (at bottling)	max. 3µs/cm	A290nm (1%)	max. 0.1AU
Assay (content)	29-31%w/v	DNase activity	Not detected
Heavy metals (as Pb)	max. 0.0002%	RNase activity	Not detected
Polymerization time	max. 30min.	Protease activity	Not detected
Acrylic acid	max. 0.001%		

Standard pack:

01522335	500 ML	4X0.5L G. Bottle
01522301	1 L	4X1L G. Bottle

Filtered through 0.2µm, filled under inert gas.

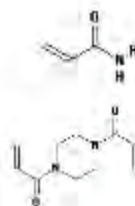
■ Acrylamide / 1,4-bis(Acryloyl)piperazine 37.5:1, 30%

EC 201-173-7

UN 2810,6.1,III,T1

CAS [79-06-1]

Danger H:302-312-315-317-319-340-350-361-372 P:260-261-305+351+338-321



Cat. No:

Acrylamide / 1,4-bis(Acryloyl)piperazine 37.5:1, 30%

014523

Molecular biology

Appearance

Clear colorless liquid

Acrylic acid

max. 0.001%

Conductivity (at bottling)

max. 25µs/cm

Composition

Complex

Assay (content)

28.5-31.5%w/v

DNase activity

Not detected

Heavy metals (as Pb)

max. 0.0005%

RNase activity

Not detected

Polymerization time

max. 30min.

Protease activity

Not detected

Filtered through 0.2µm, filled under inert gas.

Standard pack:

01452301 1 L 4X1L G. Bottle

■ Activator

See section: DNA & RNA Synthesis

■ Agarose I

EC 232-731-8

CAS [9012-36-6]

Cat. No:

Agarose I

017123

Molecular biology

Gel strength (1.5% gel.)

2200-4000g/cm²Sulfate (SO₄)

max. 0.09%

Electroendosmosis (-MR)

0.08-0.14

DNase activity

Not detected

Gelling temperature (1.5% sol.)

34-37°C

RNase activity

Not detected

Melting temperature (1.5% sol.)

max. 92°C

Protease activity

Not detected

Loss on drying (105°C)

max. 10%

Residue after ignition

max. 1%

Standard pack:

01712350 500 GR 6X500G HDPE

01712301 1 KG 6X1KG HDPE

■ Agarose II

EC 232-731-8

CAS [9012-36-6]

Cat. No:

Agarose II

017223

Molecular biology

Gel strength (4% gel)

1200-2500g/cm²Sulfate (SO₄)

max. 0.15%

Electroendosmosis (-MR)

0.08-0.14

Residue after ignition

max. 1%

Gelling temperature (4% sol.)

31-39°C

DNase activity

Not detected

Melting temperature (4% sol.)

max. 92°C

RNase activity

Not detected

Loss on drying (105°C)

max. 10%

Protease activity

Not detected

Standard pack:

01722350 100 GR 6X100G HDPE

■ Agarose III

EC 232-731-8

CAS [9012-36-6]

Cat. No:

Agarose III

017323

Molecular biology

Gel strength (1% Gel.)

200-400g/cm²Sulfate (SO₄)

max. 0.1%

Electroendosmosis (-MR)

0.05-0.14

Residue after ignition

max. 1%

Gelling temperature (1.5% sol.)

max. 31°C

DNase activity

Not detected

Melting temperature (1.5% sol.)

max. 96°C

RNase activity

Not detected

Loss on drying (105°C)

max. 10%

Protease activity

Not detected

Standard pack:

01732350 100 GR 6X100G HDPE

Allyl alcohol

C_3H_6O m.p. $-129\text{ }^\circ\text{C}$
 M 58.08 EC 203-470-7
 b.p. $97\text{ }^\circ\text{C}$ UN 1098, 6.1+3, I, TF1
 D 0.850 CAS [107-18-6]
 Danger H:225-301-311-315-319-331-335-400 P:301+310-303+361+353-305+351+338-361-405
Synonym: 2-Propen-1-ol



Cat. No: Allyl alcohol

013002

Appearance

Color (APHA)

CP

Clear liquid

max. 20

Density (20/4°C)

Assay (GC, on anhydrous basis)

0.850-0.854g/ml

min. 98%

Standard pack:

01300231 100 ML 10X100ML G. Bottle

Aluminium oxide

Al_2O_3 CAS [1344-28-1]
 M:101.96 M.P. $2030\text{ }^\circ\text{C}$
 EC no. 215-691-6
Synonym: Alumina



Aluminium oxide gravitational, grade A

For chromatography

Corresponding to activity 1 as per Woelm

Water soluble matter $\sim 0.1\%$
 Density $\sim 0.8\text{ g/ml}$
 Particle size 50-200 μm
 Specific surface 150 m^2/g
 Color white
 Loss on ignition $\sim 1.7\%$

Standard pack:

1kg, 5Kg, 10Kg, Bulk

Cat. No:

270681

270781

011081

Three qualities are available:

Acidic pH 4.5-5

Neutral pH 7-7.5

Basic pH 9-11

Cat. No:

271981

Trial kit

Contains:

100 g of acidic Cat.No. 270681

100 g of neutral Cat.No. 270781

100 g of basic Cat.No. 011081

Aluminium oxide flash

For chromatography

Density $\sim 0.8\text{ g/ml}$
 Particle size 32-63 μm
 Specific surface 200 m^2/g

Standard pack:

1kg, 5Kg, 10Kg, Bulk

Cat. No:

270981

271081

Neutral pH 7-7.5

Basic pH 10

Aluminium oxide neutral, pH 7-7.5

For chromatography

Bulk density ~0.8 g/ml

Standard pack:

1kg, 5Kg, 10Kg, Bulk

Cat. No:

271181

Particle size 10µm

271281

Particle size 5µm

Cat. No:

010881

Aluminium oxide activated <10µm

For chromatography

pH (10% in water) 7-9

Standard pack:

01088181 1 KG 6X1KG HDPE

Cat. No:

017881

Aluminium oxide activated 0.5-1.5mm

For chromatography

Standard pack:

1kg, 5Kg, 10Kg, Bulk

Cat. No:

017981

Aluminium oxide activated 5.5-6.5mm

For chromatography

Standard pack:

1kg, 5Kg, 10Kg, Bulk

Cat. No:

272081

Aluminium oxide neutral 0.05-0.15mm

For chromatography

Standard pack:

27208181 1 KG 6X1KG HDPE

■ 5'-Amino modifier C6

See section: DNA & RNA Synthesis

■ Amino modifier C6 dT

See section: DNA & RNA Synthesis

■ 5'-Amino modifier C6 TFA

See section: DNA & RNA Synthesis

■ Ammonia solution

see Ammonium hydroxide solution

■ Ammonia 16% in Methanol

H₃N

D 0.81

M 17.02

UN 3286,3+6.1+8,II,FTC

Danger H:225-314-331-370 P:210-303+361+353-305+351+338-310



Cat. No:

013799

Ammonia 16% in Methanol

General Reagent

Standard pack:

01379968 34 L 1X34L HDPE

Appearance

Clear liquid

Residue after evaporation

max. 0.02%w/w

Purity of Ammonia

min. 99.98%

Water (KF)

max. 0.05%w/w

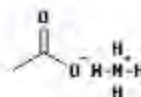
Assay (T)

16-18%w/w



A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

Ammonium acetate



$C_2H_7NO_2$ EC 211-162-8
M 77.08 CAS [631-81-8]
m.p. 110-112 °C

Cat. No: Ammonium acetate

012441

ULC/MS

Assay (T, dry)	99.0-101.0%w/w	T280nm (1M)	min. 98%
Water (KF)	max. 1%w/w	Chloride (Cl)	max. 0.0005%
Appearance of solution (1M in Water)	Complete, colorless solution	Sulfate (SO4)	max. 0.001%
Filter test (1M in Water)	Passes test	Al (Aluminium)	max. 1ppm
pH (1M in Water)	6.0-7.5	Ca (Calcium)	max. 5ppm
Grad. elution H.Peak at 254nm	max. 0.002AU	Fe (Iron)	max. 1ppm
Grad. elution drift at 254nm	max. 0.010AU	K (Potassium)	max. 5ppm
F254nm (0.1%, as Quinine)	max. 0.5ppb	Mg (Magnesium)	max. 1ppm
F365nm (0.1%, as Quinine)	max. 0.5ppb	Na (Sodium)	max. 5ppm
T260nm (1M)	min. 96%		

Standard pack:

01244153	25 GR	6X25G HDPE
01244156	100 GR	6X100G HDPE
01244191	1 KG	6X1KG HDPE

Filtered through 0.1µm, before final crystallization.

Cat. No: Ammonium acetate

012478

LC-MS

Assay (T, dry)	98.0-101.0%w/w	Chloride (Cl)	max. 0.005%
Water (KF)	max. 2%w/w	Sulfate (SO4)	max. 0.005%
Appearance of solution (1M in Water)	Clear colorless solution	Al (Aluminium)	max. 0.0005%
Filter test (1M in Water)	Passes test	Ca (Calcium)	max. 0.001%
pH (1M in Water)	5.5-7.5	Fe (Iron)	max. 0.0005%
Grad. elution H.Peak at 254nm	max. 0.004AU	K (Potassium)	max. 0.001%
T280nm (1M)	min. 90%	Mg (Magnesium)	max. 0.0005%
T280nm (1M)	min. 95%	Na (Sodium)	max. 0.001%

Standard pack:

01247856	100 GR	6X100G HDPE
01247891	1 KG	6X1KG HDPE

Filtered through 0.2µm, before final crystallization.

Cat. No: Ammonium acetate

012406

HPLC

Assay (T, dry)	98-102%w/w	A250nm (10%)	max. 0.04AU
Water (KF)	max. 3%w/w	A260nm (10%)	max. 0.02AU
pH (1M in Water)	6.0-8.0	A280nm (10%)	max. 0.01AU
Filter test (1M in Water)	Passes test		

Standard pack:

01240691	1 KG	6X1KG HDPE
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Cat. No: Ammonium acetate

012423

Molecular biology

Application: Ammonium acetate aqueous solution may be used, typically, at a concentration of 10M in ethanol for DNA precipitation from polymerase chain reaction (PCR).

Appearance	White crystalline mater	A280nm (1M)	max. 0.01AU
Iron (Fe)	max. 0.0005%	DNase activity	Not detected
Heavy metals (as Pb)	max. 0.0005%	RNase activity	Not detected
pH (5% in Water)	6.5-7.5	Protease activity	Not detected
Assay (T)	min. 97%w/w		

Standard pack:

01242357	250 GR	6X250G HDPE
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Cat. No: Ammonium acetate

012405

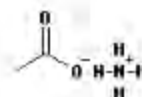
AR

Appearance	White crystalline mater	Sulfate (SO4)	max. 0.001%
Nitrate (NO3)	max. 0.001%	Heavy metals (as Pb)	max. 0.0005%
Chloride (Cl)	max. 0.0005%	pH (5% in Water)	6.7-7.3
Iron (Fe)	max. 0.0005%	Residue after ignition	max. 0.01%
Water insoluble	max. 0.005%	Assay (T, dry)	98-101%w/w

Standard pack:

01240557	250 G	6X250G HDPE
01240591	1 KG	6X1KG HDPE

Ammonium acetate 1mM



$C_2H_7NO_2$ EC 211-162-8
M 77.08 CAS [631-61-8]
D 1.0

Cat. No: **Ammonium acetate 1mM**
028641 ULC/MS

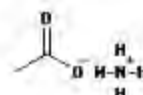
Appearance	Clear colorless liquid	T205nm	min. 75%
Color (APHA)	max. 5	T215nm	min. 80%
Assay (T)	0.95-1.05mM	T225nm	min. 97%
F254nm (as Quinine)	max. 0.5ppb	Al (Aluminum)	max. 20ppb
F365nm (as Quinine)	max. 0.5ppb	Ca (Calcium)	max. 100ppb
Grad. elution H.Peak at 210nm	max. 0.002AU	Fe (Iron)	max. 30ppb
Grad. elution H.Peak at 254nm	max. 0.001AU	K (Potassium)	max. 50ppb
Filter test	Passes test	Mg (Magnesium)	max. 20ppb
T185nm	min. 30%	Na (Sodium)	max. 100ppb

Standard pack:

028641B1 1 L 6X1L G. Bottle 45

Filtered through 0.1µm, filled under inert gas.

Ammonium acetate 10mM



$C_2H_7NO_2$ EC 211-162-8
M 77.08 CAS [631-61-8]
D 1.0

Cat. No: **Ammonium acetate 10mM**
233106 HPLC

Appearance	Clear solution	T230nm	min. 90%
Color (APHA)	max. 10	T254nm	min. 98%
Assay (T)	9.5-10.5mM	Grad. elution H.Peak at 280nm	max. 0.001AU
T220nm	min. 85%		

Standard pack:

23310601 1 L 6X1L G. Bottle 45
23310602 2.5 L 4X2.5L G. Bottle 45

Filtered through 0.2µm, filled under inert gas.

Ammonium acetate 10mM in Water/ACN 95:5 v/v



D 0.981
UN 1848,3,II,F1
Danger H:225 P:210-240-241-280-303+361+353

Cat. No: **Ammonium acetate 10mM in Water/ACN 95:5 v/v**
017406 HPLC

Appearance	Clear solution	T230nm	min. 85%
Assay (T)	9.5-10.5mM	T254nm	min. 97%
Water (KF)	94-96%w/v	Grad. elution H.Peak at 254nm	max. 0.001AU
T220nm	min. 85%		

Standard pack:

01740601 1 L 6X1L G. Bottle 45
01740602 2.5 L 4X2.5L G. Bottle 45

Filtered through 0.2µm, filled under inert gas.

Ammonium acetate 10mM in Water/ACN 10:90 v/v

Cat. No: 017506



Ammonium acetate 10mM in Water/ACN 90:10 v/v

C₂H₇NO₂ EC 211-162-8
 M 77.08 UN 1648,3,II,F1
 D 0.98 CAS [6361-81-8]
 Danger H:225 P:210-240-241-280-303+361+353

Cat. No: Ammonium acetate 10mM in Water/ACN 90:10 v/v

018606

HPLC

Appearance	Clear solution	T220nm	min. 65%
pH	6.8-7.0	T230nm	min. 85%
Assay (T)	9.5-10.5mM	T254nm	min. 98%
Water (KF)	89-91%w/v		

Standard pack:

01860602 2.5 L 4X2.5L G. Bottle 45

Filtered through 0.2µm, filled under inert gas.

Ammonium acetate 25mM in Water/ACN 10:90 v/v

Cat. No: 017706

Ammonium acetate 25mM in Water/ACN 90:10 v/v

C₂H₇NO₂ EC 211-162-8
 M 77.08 UN 1648,3,II,F1
 D 0.98 CAS [6361-81-8]
 Danger H:225-319 P:101-102-103-210-241-280-303+361+353-305+351+338

Cat. No: Ammonium acetate 25mM in Water/ACN 90:10 v/v

018406

HPLC

Appearance	Clear solution	T220nm	min. 38%
pH	6.8-7.0	T230nm	min. 78%
Assay (T)	24.5-25.5mM	T254nm	min. 98%
Water (KF)	89-91%w/v		

Standard pack:

01840602 2.5 L 4X2.5L G. Bottle 45

Filtered through 0.2µm, filled under inert gas.

Ammonium acetate 25mM in Water/ACN 95:5 v/v

Cat. No: 017606

Ammonium acetate 25mM in Water/Methanol 50:50 v/v

C₂H₇NO₂ EC 211-162-8
 M 77.08 UN 1230,3 (6.1),II,FT1
 D 0.89 CAS [631-61-8]
 Danger H:225-331-370 P:210-241-260-303+361+353

Cat. No: Ammonium acetate 25mM in Water/Methanol 50:50 v/v

018706

HPLC

Appearance	Clear solution	T220nm	min. 40%
Assay (T)	24.5-25.5mM	T230nm	min. 79%
Water (KF)	49.5-50.5%w/v	T254nm	min. 98%

Standard pack:

01870602 2.5 L 4X2.5L G. Bottle 45

Filtered through 0.2µm, filled under inert gas.

Ammonium acetate 50mM in Water/Methanol 50:50 v/v

$C_2H_7NO_2$ EC 211-162-8
 M 77.09 UN 1230,3 (6.1),I,FT1
 D 0.89 CAS [6361-61-8]
 Danger H:225-331-370 P:210-241-260-303+361+353



Cat. No: **Ammonium acetate 50mM in Water/Methanol 50:50 v/v**
018806 **HPLC**

Appearance	Clear solution	T220nm	min. 15%
Assay (T)	49.5-50.5mM	T230nm	min. 65%
Water (KF)	49.5-50.5%w/v	T254nm	min. 99%

Standard pack:

01880601 1 L 6X1L G. Bottle 45

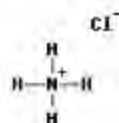
Filtered through 0.2µm, filled under inert gas.

Ammonium acetate-d3, 99 atom%D

See section: NMR

Ammonium chloride

ClH_4N EC 235-186-4
 M 53.49 CAS [12125-02-9]
 m.p. 340 °C
 Warning H:302-319 P:264-280-301+312-305+351+338-337+313



Cat. No: **Ammonium chloride**
012605 **AR**

Appearance	White crystalline powder	pH (5% in water)	4.5-5.5
Assay	min. 99.5%	Phosphate (PO ₄)	max. 0.0002%
Iron (Fe)	max. 0.0002%	Residue after ignition	max. 0.01%
Sulfate (SO ₄)	max. 0.002%	Calcium, Magnesium & R2O3 precipitat	max. 0.002%
Heavy metals (as Pb)	max. 0.0005%		

Standard pack:

01260501 1 KG 6X1KG HDPE

Cat. No: **Ammonium chloride**
012603 **Meets EP/BP spec.**

Appearance of Solution	Clear colorless solution	Loss on drying (105°C)	max. 1%
Acidity or Alkalinity	Passes EP/BP test	Sulfate (SO ₄)	max. 0.015%
Identification	Passes EP/BP test	Heavy metals (as Pb)	max. 0.001%
Calcium (Ca)	max. 0.02%	Bromides & Iodides	Passes EP/BP test
Assay	99-100.5%	Sulphated ash	max. 0.1%
Iron (Fe)	max. 0.002%		

Standard pack:

01260301 1 KG 6X1KG HDPE

Cat. No: **Ammonium chloride**
012602 **CP**

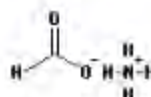
Assay	min. 99%	pH (5% in water)	4.5-6
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Standard pack:

01260201 1 KG 6X1KG HDPE



Ammonium formate



CH₃NO₂ EC 208-753-9
 M 63.05 CAS [540-68-2]
 m.p. 115 - 120 °C
 Warning H:315-319-335 P:281-280-305+351+333-321

Cat. No: Ammonium formate

019841

ULC/MS

Standard pack:

Assay (T, dry)	99.0-100.5%w/w	T280nm (1M)	min. 98%
pH (1M in Water)	5.5-7.5	Chloride (Cl)	max. 0.005%
Fiber test (1M in Water)	Passes test	Sulfate (SO ₄)	max. 0.005%
Appearance of solution (1M in Water)	Complete, colorless solution	Al (Aluminium)	max. 1ppm
Water (KF)	max. 2%w/w	Ca (Calcium)	max. 5ppm
Grad. elution H.P.peak at 254nm	max. 0.002AU	Fe (Iron)	max. 1ppm
Grad. elution drift at 254nm	max. 0.010AU	K (Potassium)	max. 5ppm
F254nm (0.1%, as Quinine)	max. 0.5ppb	Mg (Magnesium)	max. 1ppm
F365nm (0.1%, as Quinine)	max. 0.5ppb	Na (Sodium)	max. 5ppm
T260nm (1M)	min. 98%		

01984191 1 KG

Filtered through 0.1µm, before final crystallization.

Cat. No: Ammonium formate

019878

LC-MS

Standard pack:

Assay (T, dry)	98.0-101.0%w/w	Chloride (Cl)	max. 0.005%
pH (1M in Water)	5.5-7.5	Sulfate (SO ₄)	max. 0.005%
Fiber test (1M in Water)	Passes test	Al (Aluminium)	max. 0.0005%
Appearance of solution (1M in Water)	Clear colorless solution	Ca (Calcium)	max. 0.001%
Water (KF)	max. 3%w/w	Fe (Iron)	max. 0.0005%
Grad. elution H.P.peak at 254nm	max. 0.006AU	K (Potassium)	max. 0.001%
T280nm (1M)	min. 90%	Mg (Magnesium)	max. 0.0005%
T280nm (1M)	min. 95%	Na (Sodium)	max. 0.001%

01987891 1 KG

Filtered through 0.2µm, before final crystallization.

Cat. No: Ammonium formate

019802

CP

Standard pack:

Appearance	Damp white solid	Chloride (Cl)	max. 0.05%
Assay (T, dry)	95-105%w/w	Sulfate (SO ₄)	max. 0.05%
pH (10% in Water)	5.0-8.0		

01980291 1 KG

Ammonium formate 10mM

CH₃NO₂ EC 208-753-9
 M 63.06 CAS [540-68-2]

Cat. No: Ammonium formate 10mM

019706

HPLC

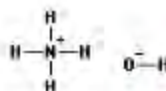
Standard pack:

Appearance	Clear colorless liquid	T220nm	min. 60%
pH	6.0-8.0	T240nm	min. 96%
Assay (T)	9.0-11.0mM	T260nm	min. 98%

01970602 2.5 L 4X2.5L.G. Bottle 45

Filtered through 0.2µm, filled under inert gas.

Ammonium hydroxide solution



H_2NO	m.p. -57 °C
M 35.05	EC 215-647-6
b.p. 38 °C	UN 2672,8,III,C5
D 0.910	CAS [1336-21-6]
Danger H:314-335-336-400 P:280-303+361+353-305+351+338-310	

Synonym: Ammonia solution

Cat. No: Ammonium hydroxide solution

012505

AR

Standard pack:

Appearance	Clear colorless liquid	Phosphate (PO ₄)	max. 2ppm	01250501	1 L	6X1L G. Bottle 45
Color (APHA)	max. 10	Nitrate (NO ₃)	max. 2ppm	01250502	2.5 L	4X2.5L G. Bottle 45
Assay (T)	24-30%w/w	Sulfate (SO ₄)	max. 2ppm	01250505	5 L	4X5L HDPE Jerrycan
Subs. reducing KMnO ₄	Passes test	Heavy metals (as Pb)	max. 0.5ppm	01250565	25 L	1X25L HDPE Drum
Carbon Dioxide	max. 0.002%	Iron (Fe)	max. 0.2ppm			
Chloride (Cl)	max. 0.5ppm	Residue after ignition	max. 0.002%			

Cat. No: Ammonium hydroxide solution

012503

Meets EP/BP spec.

Standard pack:

Identification A	Passes EP/BP test	Residue after evaporation	max. 0.002%w/w	01250301	1 L	6X1L G. Bottle 45
Identification B	Passes EP/BP test	Oxidisable substances	Passes EP/BP test			
Identification C	Passes EP/BP test	Chloride (Cl)	max. 1ppm			
Appearance	Clear colorless liquid	Sulfate (SO ₄)	max. 5ppm			
Appearance of Solution	Clear colorless solution	Carbonate (CO ₃)	max. 0.006%w/v			
Iron (Fe)	max. 0.25ppm	Assay (at filling)	25.0-30.0%w/v			
Heavy metals (as Pb)	max. 1ppm	A252nm (Pyridine & related subst.)	max. 0.06AU			

Cat. No: Ammonium hydroxide solution

012502

CP

Standard pack:

Color (APHA)	max. 20	01250201	1 L	6X1L G. Bottle 45
Residue after evaporation	max. 0.005%w/w	01250223	1 L	12X1L HDPE Bottle
Assay (T)	22-30%w/w	01250202	2.5 L	4X2.5L G. Bottle 45
		01250265	25 L	1X25L HDPE Drum

Cat. No: Ammonium hydroxide solution

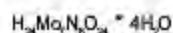
012501

Technical

Standard pack:

Color (APHA)	max. 20	01250105	5 L	4X5L HDPE Jerrycan
Assay (T)	22-30%w/w	01250177	200 L	1X200L HDPE Drum

Ammonium molybdate tetrahydrate



EC No 234-722-4

Cat. No: 0129

M 1235.86

CAS 12054-85-2

Ammonium nitrate



EC No 229-347-8

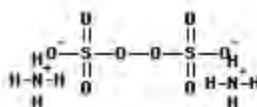
Cat. No: 0127

M 80.04

CAS 6484-52-2

Ammonium persulfate

$H_2N_2O_8S_2$ EC 231-786-5
 M 228.20 UN 1444, 5.1, III, O2
 m.p. 120 °C CAS [7727-54-0]
 Danger H:272-302-315-317-319-334-335 P:210-221-285-305+351+338



Synonym: APS, Ammonium peroxodisulfate, Ammonium peroxydisulfate

Application: Catalyst for acrylamide gel polymerization. Generally used in conjunction with TEMED.

Cat. No:

010923

Ammonium persulfate

Molecular biology

Assay	min. 98%w/w	Chloride & Chlorates	max. 0.002%
Acidity at bottling (as H2SO4)	max. 0.2%	Sulphated ash	max. 0.1%
pH (5% in water)	1-4	DNase activity	Not detected
Iron (Fe)	max. 0.001%	RNase activity	Not detected
Heavy metals (as Pb)	max. 0.005%	Protease activity	Not detected

Standard pack:

01092356	100 GR	6X100G HDPE
01092357	250 GR	6X250G HDPE
01092358	500 GR	6X500G HDPE
01092381	1 KG	6X1KG HDPE
01092381	20 KG	1X20KG

Cat. No:

010905

Ammonium persulfate

AR

Iron (Fe)	max. 0.001%	Acidity at bottling (as H2SO4)	max. 0.2%
Assay	min. 98%w/w	Chloride & Chlorates	max. 0.001%
Heavy metals (as Pb)	max. 0.005%		

Standard pack:

01090581	1 KG	6X1KG HDPE
01090585	25 KG	1X25KG Drum

Cat. No:

010902

Ammonium persulfate

CP

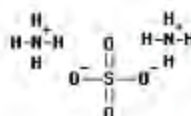
Chloride (Cl)	max. 0.005%		
Iron (Fe)	max. 0.01%		
Assay	min. 98%w/w		

Standard pack:

01090281	1 KG	6X1KG HDPE
01090285	25 KG	1X25KG Drum

Ammonium sulfate

$H_2N_2O_4S$ EC 231-934-1
 M 132.13 UN 3493, 5.1, III, O2
 m.p. 280 °C CAS [7783-20-2]
 Warning H:315-319-335 P:281-280-305+351+338-321



Cat. No:

012323

Ammonium sulfate

Molecular biology

Application: Commonly used for the purification of proteins and antibodies.

Useful for conjugation of enzymes to antibodies, and for crystallographic analysis of nucleic acids and proteins.

Iron (Fe)	max. 0.0005%	Assay (T)	min. 99%w/w
Water insoluble	max. 0.005%	DNase activity	Not detected
Heavy metals (as Pb)	max. 0.0005%	RNase activity	Not detected
pH (5% in water)	5-6	Protease activity	Not detected

Standard pack:

01232356	100 GR	6X100G HDPE
01232359	500 GR	6X500G HDPE
01232391	1 KG	6X1KG HDPE

Cat. No:

012305

Ammonium sulfate

AR

Assay (T)	min. 99.5%w/w	Iron (Fe)	max. 0.0005%
pH (5% in water)	5.0-6.0	Nitrate (NO3)	max. 0.001%
Chloride (Cl)	max. 0.0005%	Phosphate (PO4)	max. 0.0005%
Heavy metals (as Pb)	max. 0.0005%	Residue after ignition	max. 0.005%

Standard pack:

01230581	1 KG	6X1KG HDPE
01230585	25 KG	1X25KG Drum

Cat. No:

012302

Ammonium sulfate

CP

Appearance	White crystalline powder	Residue after ignition	max. 0.1%
pH (5% in water)	4.5-6.0	Assay (T)	min. 99%w/w

Standard pack:

01230281	1 KG	6X1KG HDPE
01230285	25 KG	1X25KG Drum

Ammonium-d4 formate-d, 98 atom%D

See section: NMR

AMP 95

C₂H₇N₃O

M 89.14

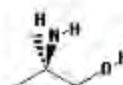
D 0.97

Warning H:315-319-412 P:273-280-305+351+338-321-362

Synonym: 2-Amino-2-methyl-1-propanol

EC 204-709-9

CAS [124-68-5]



Cat. No:

011299

Color (APHA)

Water (KF)

AMP 95

General Reagent

max. 25

4.8-5.8%

Standard pack:

01129965 25 L 1X25L HDPE Drum

01129977 200 L 1X200L HDPE Drum

N-Arachidoyl-D-erythro-sphingosine

See section: Sphingolipids & Phospholipids

L-Arginine-p-nitroanilide dihydrochloride

C₁₂H₂₀N₆O₃·2HCl

M 367.23

CAS [40127-11-5]

Cat. No:

274033

Appearance

Assay (T, argen.)

L-Arginine-p-nitroanilide dihydrochloride

Peptide synthesis

Solid

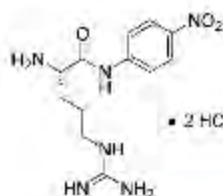
97.5-102.5% w/w

Purity (TLC)

S. Rotation (C=1 in Water)

min. 98%

70.0-74.0°



• 2 HCl

Standard pack:

27403381 1 KG 6X1KG HDPE

A-TNA Phosphoramidite

See section: DNA & RNA Synthesis

O-(7-Azabenzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate

see HATU

BCIP, p-Toluidine salt

C₉H₈BrClNO₄P⁺C₇H₉N

M 433.84

Warning H:302-312-332 P:281-280-301+312-304+340-322

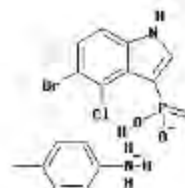
Synonym: 5-Bromo-4-chloro-3-indolyl phosphate p-toluidine salt

Application: Commonly used in the colorimetric detection of Alkaline Phosphatase in conjunction with Nitro Blue Tetrazolium (NBT).

The BCIP/NBT substrate system is also suitable for use in immunohistochemistry, immunoblot staining, and ELISA applications.

EC 228-908-1

CAS [6578-06-9]



Cat. No:

023123

Solubility (2% in DMF)

Assay (UV)

DNase activity

BCIP, p-Toluidine salt

Molecular biology

Clear colorless solution

min. 98%

Not detected

RNase activity

Protease activity

Not detected

Not detected

Standard pack:

02312383 100 MG/6X25G HDPE

■ Benzene-d6, 100 atom%D

See section: NMR

■ Benzene-d6, 99.8 atom%D

See section: NMR

■ Benzene-d6, 99.6 atom%D

See section: NMR

■ Benzimidazoliumtriflate 0.2M in Acetonitrile

$C_7H_6N_2CF_3SO_3H$ D 0.8
 M 268.22 UN 1993,3,II,F1
 Danger H:225-312-315-318-332 P:210-241-303+361+353-305+351+338-310



Cat. No: **Benzimidazoliumtriflate 0.2M in Acetonitrile**
023433 Peptide synthesis
Appearance Clear, pale yellow liquid Water (KF) max. 0.005%
Assay (as Triflic Acid) 0.19-0.21M
 Filtered through 0.2µm, filled under inert gas.

Standard pack:
 02343301 1 L 6X1L G. Bottle #5

■ Benzotriazole-1-carboxamidinium tosylate

$C_7H_6N_4OC_7H_9O_3S$ CAS [5833-29-9]
 M 334.29

Cat. No: **Benzotriazole-1-carboxamidinium tosylate**
025780 For synthesis
Appearance White crystalline powder **Assay (T)** min. 99%w/w
Loss on drying (105°C) max. 0.3% **Purity (HPLC)** min. 99.2%
Melting point 190-195°C **Solubility (6% in methanol)** Clear colorless solution

Standard pack:
 02578026 30 GR 1X30G
 02578091 1 KG 6X1KG HDPE

■ O-(Benzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate

see HBTU

■ O-(Benzotriazol-1-yl)-N,N,N',N'-tetramethyluronium tetrafluoroborate

see TBTU

■ (Benzotriazol-1-yloxy)tripyrrolidinophosphonium hexafluorophosphate

see PyBOP®

■ Benzyl alcohol

C_7H_8O m.p. -15 °C
 M 108.14 EC 202-859-9
 b.p. 205 °C CAS [100-51-6]
 D 1.044
 Warning H:302-332 P:281-284-301+312-304+340-312



Synonym: Benzenemethanol

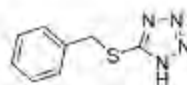
Cat. No: **Benzyl alcohol**
022405 AR
Alkalinity (as Ammonia) max. 0.002% **Assay (GC, on anhydrous basis)** min. 99.5%
Color (APHA) max. 10 **Peroxides (as H₂O₂)** max. 0.001%
Benzaldehyde max. 0.1% **Acidity (as Benzoic acid)** max. 0.01%
Halogenated compounds & Halides max. 0.001% **Water (KF)** max. 0.1%

Standard pack:
 02240501 1 L 6X1L G. Bottle 45
 02247501 1 L 6X1L G. Bottle 45

1,3-Benzylidene sphingosine

See section: Sphingolipids & Phospholipids

5-(Benzylthio)-1H-Tetrazole



$C_8H_8N_4S$ CAS [21871-47-6]
 M 192.24
 Danger H:315-318-335 P:261-305+351+338-310-321-405
 Synonym: BTT

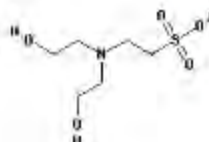
Cat. No: 027024 **5-(Benzylthio)-1H-Tetrazole**

Appearance: White crystalline powder Assay (T)
Solubility (0.25M in ACN): Clear colorless solution Purity of BTT (HPLC)
Water (KF): max. 0.1%

98.5-100.5%w/w
 min. 98.8%

Standard pack:
 02702458 100 GR 6X100G HDPE
 02702459 500 GR 6X500G HDPE
 02702491 1 KG 6X1KG HDPE

BES



$C_8H_{16}NO_5S$ EC 233-465-5
 M 213.25 CAS [10191-18-1]
 Warning H:315-319-335 P:261-280-305+351+338-321

Synonym: *N,N*-Bis(2-hydroxyethyl)-2-aminoethanesulfonic acid, *N,N*-Bis(2-hydroxyethyl)taurine

Application: Commonly used for preparation of buffered saline for transfection of DNA into mammalian cells.
 pKa =7.1 at 25° C; useful pH range 6.4 - 7.8.

Cat. No: 023223 **BES**

Appearance: White powder A265 10%)
Solubility (10% in Water): Clear colorless solution A280nm (10%)
Loss on drying (105c): max. 0.5%
pH (10% in water): 3.5-5
Assay (T): min. 98%w/w

max. 0.1AU
 max. 0.1AU
 Not detected
 Not detected
 Not detected

Standard pack:
 02322353 25 GR 6X25G HDPE

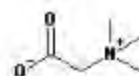
Betaine

$C_5H_{11}NO_2$
 M 117.15

EC No 203-480-6
 CAS 107-43-7

Cat. No: 0264

Betaine 5M



$C_5H_{11}NO_2$ CAS [107-43-7]
 M 117.15
 Warning H:302 P:264-270-301+312-330

Synonym: (Carboxymethyl)trimethylammonium Inner salt, Oxyneurine

Cat. No: 026557 **Betaine 5M**

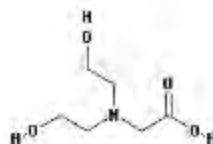
Appearance: Clear solution
Assay (T): 4.8-5.2M
DNase activity: Not detected

RNase activity
 Protease activity
 Not detected
 Not detected

Standard pack:
 02655747 20 ML 1X20ML G. Bottle
 026557V2 1.5 ML 6X1.5ML Vial

Bicine

$C_6H_{13}NO_4$ EC 205-755-1
 M 163.17 CAS [150-25-4]



Synonym: N,N-Bis(2-hydroxyethyl)glycine

Application: Commonly used as buffering substance useful at pH range 7.6 - 9.0. pKa = 8.26 at 25°C.

Cat. No:

023323

Appearance
Solubility (1M in water)
Loss on drying (105°C)
Heavy metals (as Pb)
pH (1M in water)
Assay (T)

Bicine

Molecular biology

White powder A280nm (1M)
Clear colorless solution A280nm (1M)
max. 0.5% DNase activity
max. 0.001% RNase activity
3.5-5 Protease activity
min. 98.5%w/w

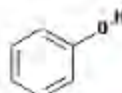
max. 0.1AU
 max. 0.1AU
 Not detected
 Not detected
 Not detected

Standard pack:

02332353 25 GR 6X25G HDPE

Biophenol™ water saturated

C_6H_6O EC 203-632-7
 M 94.041 LIN 2821,6.1,II,T1
 D 1.06 CAS [108-95-2]



Danger H:302-312-314-331-341-373 **P:**260-303+361+353-305+351+338-310-405

Synonym: Phenol, Hydroxybenzene

Cat. No:

169623

Appearance
iron (Fe)
Heavy metals (as Pb)
Water (KF)

Biophenol™ water saturated

Molecular biology

Clear colorless liquid Purity of Biophenol
max. 0.0001% DNase activity
max. 0.0001% RNase activity
25-32%w/v Protease activity

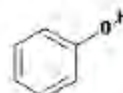
min. 99.8%
 Not detected
 Not detected
 Not detected

Standard pack:

16962344 500 ML 4X0.5/1L G. Bottle 32

Biophenol™ water saturated, stabilized

C_6H_6O EC 203-632-7
 M 94.04 LIN 2810,6.1,II,T1
 D 1.06 CAS [108-95-2]



Danger H:301-311-314-331-341-350-373 **P:**301+310-303+361+353-305+351+338-310-361

Synonym: Phenol, Hydroxybenzene

Cat. No:

169523

Appearance
Iron (Fe)
Heavy metals (as Pb)
Stabilizer (Hydroxyquinoline)
Water (KF)

Biophenol™ water saturated, stabilized

Molecular biology

Clear liquid Purity of Biophenol
max. 0.0001% DNase activity
max. 0.0001% RNase activity
0.06-0.12% Protease activity
25-32%w/v

min. 99.8%
 Not detected
 Not detected
 Not detected

Standard pack:

16952331 100 ML 6X100ML G. Bottle
 16952343 100 ML 6X100/250ML G. Bottle
 16952332 250 ML 6X250ML G. Bottle 32
 16952344 500 ML 4XD.5/1L G. Bottle 32
 16952335 500 ML 6X0.5L G. Bottle 32

■ Biophenol™ / Chloroform / Isoamyl alcohol, 25:24:1, 2-Part kit, unstabilized

D 1.28 CAS [136112-00-0]
 UN 1892,3+6.1,II,FT1
 Danger H:225-302-311-314-331-341-351-373 P:303+361+353-305+351+338-310-361

Application: This mixture is commonly used for extracting protein from crude nucleic acid preparations.

Composition: Part A - Biophenol™ / Chloroform / Isoamyl alcohol, 25:24:1; Part B - TE Buffer 0.5M.



Cat. No: **169823** **Biophenol™ / Chloroform / Isoamyl alcohol, 25:24:1, 2-Part kit, unstabilized**

	Molecular biology		Standard pack:
Appearance - Part A	Clear solution	Purity of Isoamylalcohol	min. 99% 16982335 500 ML 6X0.5L G. Bottle 32
Composition (GC) - Part A	Complex	Appearance - Part B	Clear solution
Iron (Fe) - Part A	max. 0.0001%	pH of reconstitute kit (25°C)	7.8-8.2
Heavy metals (as Pb) - Part A	max. 0.0001%	DNase activity	Not detected
Purity of Biophenol	min. 99.8%	RNase activity	Not detected
Purity of Chloroform	min. 99.8%	Protease activity	Not detected

■ Biophenol™ / Chloroform / Isoamyl alcohol, 25:24:1, 3-Part kit

D 1.28 CAS [136112-00-0]
 UN 1892,3+6.1,II,FT1
 Danger H:225-302-311-314-331-341-351-373 P:303+361+353-305+351+338-310-361

Application: This mixture is commonly used for extracting protein from crude nucleic acid preparations.

Composition: Part A - Biophenol™ / Chloroform / Isoamyl alcohol, 25:24:1; Part B - TE Buffer 0.5M; Part C - Hydroxyquinoline stabilizer.



Cat. No: **168823** **Biophenol™ / Chloroform / Isoamyl alcohol, 25:24:1, 3-Part kit**

	Molecular biology		Standard pack:
Appearance - Part A	Clear colorless liquid	Purity of Isoamylalcohol	min. 99% 16882328 250 ML 6X250/500ML G. Bottle
Color (APHA) - Part A	max. 10	Appearance - Part B	Clear colorless liquid
Composition (GC) - Part A	Complex	Purity of H. Quinoline - Part C	min. 99%
Iron (Fe) - Part A	max. 0.0001%	pH of reconstitute kit (25°C)	7.8-8.2
Heavy metals (as Pb) - Part A	max. 0.0001%	DNase activity	Not detected
Purity of Biophenol	min. 99.8%	RNase activity	Not detected
Purity of Chloroform	min. 99.8%	Protease activity	Not detected

■ Biophenol™ / Chloroform / Isoamyl alcohol, 25:24:1, stabilized

D 1.28 CAS [136112-00-0]
 UN 1892,3+6.1,II,FT1
 Danger H:225-302-311-314-331-341-350-373 P:303+361+353-305+351+338-310-361

Application: This mixture is commonly used for extracting protein from crude nucleic acid preparations.



Cat. No: **169723** **Biophenol™ / Chloroform / Isoamyl alcohol, 25:24:1, stabilized**

	Molecular biology		Standard pack:
Appearance	Clear liquid	Purity of Biophenol	min. 99.8% 16972331 100 ML 6X100ML G. Bottle
Iron (Fe)	max. 0.0001%	Purity of Chloroform	min. 99.9% 16972343 100 ML 6X100/250ML G. Bottle
Heavy metals (as Pb)	max. 0.0001%	Purity of Isoamylalcohol	min. 99% 16972335 500 ML 4X0.5L G. Bottle
pH	7.8-8.2	DNase activity	Not detected 16972344 500 ML 4X0.5/1L G. Bottle 32
Stabilizer (Hydroxyquinoline)	0.08-0.12%	RNase activity	Not detected 16972301 1 L 6X1L G. Bottle 45
Solvent composition	Complex	Protease activity	Not detected 16972302 2.5 L 4X2.5L G. Bottle 45

■ Biophenol™ saturated, Tris-buffered pH 8, stabilized

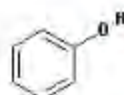
C₆H₆O
M 94.1

UN 2821, 6.1, I, LT1
CAS [108-95-2]

EC 203-632-7

Danger H:302-312-314-331-341-373 P:260-303+361+353-305+351+338-310-405

Application: Commonly used For DNA extractions needing high pH



Cat. No: **169123** Biophenol™ saturated, Tris-buffered pH 8, stabilized Molecular biology

Appearance	Clear liquid	Water (KF)	25-32%w/v
Iron (Fe)	max. 0.0001%	Purity of Biophenol	min. 99.8%
Heavy metals (as Pb)	max. 0.0001%	DNase activity	Not detected
pH	7.8-8.2	RNase activity	Not detected
Stabilizer (Hydroxyquinoline)	0.06-0.12%	Protease activity	Not detected

Standard pack:

16912331	100 ML 6X100ML G. Bottle
16912343	100 ML 6X100/250ML G. Bottle
16912344	500 ML 4X0.5/1L G. Bottle 32
16912335	500 ML 6X0.5L G. Bottle 32
16912342	2.5 L 4X1L G. Bottle

■ Biophenol™ / Tris saturated, 2-part kit

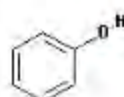
C₆H₆O
M 94.1

UN 2821, 6.1, I, LT1
CAS [108-95-2]

EC 203-632-7

Danger H:302-312-314-331-341-373 P:260-303+361+353-305+351+338-310-405

Composition: Part A - Biophenol™ / Tris pH=6.4-6.8; Part B - TE Buffer 1.0M.



Cat. No: **169223** Biophenol™ / Tris saturated, 2-part kit Molecular biology

Appearance - Part A	Clear colorless liquid	pH of reconstitute kit (25°C)	7.8-8.2
Iron (Fe) - Part A	max. 0.0001%	DNase activity	Not detects
Heavy metals (as Pb) - Part A	max. 0.0001%	RNase activity	Not detects
Purity of Biophenol	min. 99.8%	Protease activity	Not detects
Appearance - Part B	Clear colorless liquid		

Standard pack:

16922343	100 ML
16922334	400 ML
16922344	500 ML

■ Biophenol™ / Tris saturated, 3-parts kit

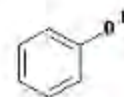
C₆H₆O
M 94.1

UN 2821, 6.1, I, LT1
CAS [108-95-2]

EC 203-632-7

Danger H:302-312-314-331-341-373 P:260-303+361+353-305+351+338-310-405

Composition: Part A - Biophenol™ / Tris pH=6.4-6.8; Part B - TE Buffer 1.0M; Part C - Hydroxyquinoline stabilizer.



Cat. No: **168723** Biophenol™ / Tris saturated, 3-part kit Molecular biology

Color (APHA) - Part A	max. 10	Purity of H. Quinoline - Part C	min. 99%
Appearance - Part A	Clear colorless liquid	pH of reconstitute kit (25°C)	7.8-8.2
Iron (Fe) - Part A	max. 0.0001%	DNase activity	Not detected
Heavy metals (as Pb) - Part A	max. 0.0001%	RNase activity	Not detected
Purity of Biophenol	min. 99.8%	Protease activity	Not detected
Appearance - Part B	Clear colorless liquid		

Standard pack:

16872328	250 ML 6X250/500ML G. Bottle
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■ Biotin phosphoramidite

See section: DNA & RNA Synthesis

■ 5'-Biotin phosphoramidite

See section: DNA & RNA Synthesis

Biotin-TEG Phosphoramidite

See section: DNA & RNA Synthesis

bis-Acrylamide

see N,N'-Methylenebisacrylamide

1,4-bis(Acryloyl)piperazine

see also Acrylamide Solutions

$C_{16}H_{14}N_2O_2$
M 194.23

CAS 6342-17-2

Cat. No: 162223

BIS-TRIS

$C_8H_{10}NO_5$

EC 230-237-7

M 209.24

UN 3259,8,III,T2

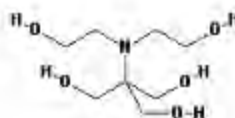
m.p. 103-104 °C

CAS [6976-37-0]

Warning H:315-319-335 P:261-280-305+351+338-321-405

Synonyms: 2,2-Bis(hydroxymethyl)-2,2',2''-nitriilotriethanol, 2-Bis(2-hydroxyethyl)amino-2-(hydroxymethyl)-1,3-propanediol, Bis(2-hydroxyethyl)amino-tris(hydroxymethyl)methane

Application: Commonly used as buffering substance useful at pH range 5.8 - 7.2, pKa = 6.50 at 25°C.



Cat. No:

BIS-TRIS

203223

Molecular biology

Appearance

White powder

Assay (T)

min. 99%wtw

Standard pack:

20322356 100 GR 6X100G HDPE

Solubility (1M in water)

Clear colorless solution

A280nm (1M)

max. 0.4AU

20322358 500 GR 6X500G HDPE

Chloride (Cl)

max. 0.005%

DNase activity

Not detected

20322361 1 KG 6X1KG HDPE

Iron (Fe)

max. 0.0005%

RNase activity

Not detected

Heavy metals (as Pb)

max. 0.0005%

Protease activity

Not detected

pH (1M in water)

9.5-11

N-Boc-ethylenediamine

Cat. No: 230633

$C_{12}H_{18}N_2O_2$
M 160.21

CAS 57260-73-6

Boc-Lys(2-Cl-Z)-OH

See section: Amino acids derivatives

BOP

$C_{12}H_{22}N_6OPPF_6$

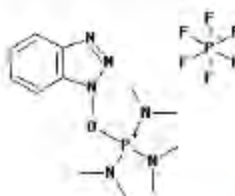
EC 260-279-1

M 442.27

CAS [58602-33-6]

Warning H:315-319-335 P:261-280-305+351+338-321-405

Synonym: (Benzotriazol-1-yloxy)tris(dimethylamino)phosphonium hexafluorophosphate



Cat. No:

BOP

024733

Peptide synthesis

Appearance

White powder

Melting point

132-140°C

Standard pack:

02473356 100 GR 6X100G HDPE

Loss on drying (105°C)

max. 0.5%

Assay (HPLC)

min. 98%

02473361 1 KG 6X1KG HDPE

02473369 5 KG 1X5KG HDPE

02473380 10 KG 1X10KG HDPE

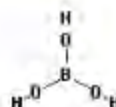
02473385 25 KG 1X25KG Drum



Boric acid

H_3BO_3
M 61.83
m.p. 169 °C
Danger H:360FD P:281-308+313

EC 233-139-2
CAS [10043-35-3]



Cat. No:
020123

Appearance
Iron (Fe)
Heavy metals (as Pb)
pH (3.3 % in water)
Assay (T, dry)

Boric acid
Molecular biology

White solid
max. 0.001%
max. 0.001%
3.8-4.8
99.5-100.5%w/w

A280nm (0.1M)
A280nm (0.1M)
DNase activity
RNase activity
Protease activity

max. 0.02AU
max. 0.02AU
Not detected
Not detected
Not detected

Standard pack:

02012381 1 KG 6X1KG HDPE

Cat. No:
020105

Appearance
Chloride (Cl)
Iron (Fe)

Boric acid
AR

White solid
max. 0.001%
max. 0.0005%

Heavy metals (as Pb)
pH (3.3 % in water)
Assay (T)

max. 0.001%
3.8-4.8
99.5-100.5%w/w

Standard pack:

02010581 1 KG 6X1KG HDPE

Cat. No:
020103

Appearance
Clarity and color of sol.
Organic matter
Solubility in Alcohol

Boric acid
Meets EP/BP spec.

White solid
Clear, colorless solution
Passes test
Passes test

Sulfate (SO₄)
Heavy metals (as Pb)
pH (3.3 % in water)
Assay (T)

max. 0.045%
max. 0.0015%
3.8-4.8
99.5-100.5%w/w

Standard pack:

02010381 1 KG 6X1KG HDPE

Cat. No:
020102

Appearance
pH (3.3 % in water)

Boric acid
CP

White solid
3.8-4.8
Assay (T)

99-101%w/w

Standard pack:

02010281 1 KG 6X1KG HDPE

Boric acid-d₃, 98 atom%D

See section: NMR

Bromoform-d, 99.5 atom%D

See section: NMR

1-Bromohexadecane

Cat. No: 0283

$C_{16}H_{33}Br$
M 305.33

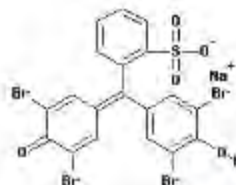
EC No 204-008-7
CAS 112-82-3

Bromophenol blue sodium salt

$C_{19}H_{10}Br_2NaO_6S$
M 691.84

EC 252-170-2
CAS [34725-61-8]

Application: Commonly used as tracking dye for nucleic acid or protein electrophoresis.



Cat. No:
025023

Appearance
Color (1% in water pH = 3.0)
Color (1% in water pH = 4.6)

Bromophenol blue sodium salt
Molecular biology

Dark green powder
Greenish yellow
Blue violet

DNase activity
RNase activity
Protease activity

Not detected
Not detected
Not detected

Standard pack:

02502352 5 GR 6X5G HDPE

1-Bromotetradecane

Cat. No: 0285

$C_{14}H_{29}Br$
M 277.28

EC No 203-998-3
CAS 112-71-0

Buffer Solutions for Molecular Biology

See section: Reagent & Chemicals List for Molecular Biology

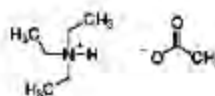
Buffer A - TEAA 0.1M pH 7

$C_8H_{19}NO_2$
M 161.24
D 1.0

EC 225-995-0
CAS [5204-74-0]

Warning H:315-319-335-336 P:261-280-305+351+338-321-405

Application: Used for detection of genetic variations



Cat. No:
210006

Buffer A - TEAA 0.1M pH 7
HPLC

Appearance
pH
Assay (T)
Filter test

Clear solution
6.9-7.1
0.095-0.105M
Passes test

Residue after evaporation
A254nm
A270nm

max. 0.0005%/w/w
max. 0.01AU
max. 0.01AU

Standard pack:

21000601 1 L 6X1L G. Bottle 45
21000602 2.5 L 4X2.5L G. Bottle 45

Filtered through absolute 0.2µm, bottled under aseptic conditions.

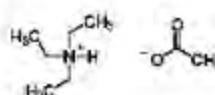
Buffer B - TEAA 0.1M in Water / Acetonitrile 75:25

$C_8H_{19}NO_2$
M 161.24
D 0.962

EC 225-995-0
LIN 1993,3,II,F1
CAS [5204-74-0]

Danger H:225-315-319-335-336 P:210-241-303+361+353-305+351+336-405

Application: Used for detection of genetic variations



Cat. No:
210106

Buffer B - TEAA 0.1M in Water/Acetonitrile 75:25
HPLC

Appearance
Density (20M°C)
Filter test

Clear solution
0.95-0.97gr/ml
Passes test

Assay (T)
A270nm

0.095-0.105M
max. 0.02AU

Standard pack:

21010602 2.5 L 4X2.5L G. Bottle 45

Filtered through 0.2µm, filled under inert gas.

Buffer C - Water / Acetonitrile 92:8

D 0.988
LIN 1648,3,II,F1

Danger H:225 P:210-240-241-280-303+361+353

Application: Used for detection of genetic variations



Cat. No:
212606

Buffer C - Water / Acetonitrile 92:8
HPLC

Appearance
Density (20M°C)
T185nm

Clear colorless liquid
0.98-1.00gr/ml
min. 90%

T200nm
T210nm
T>220nm

min. 96%
min. 97%
min. 99%

Standard pack:

21260602 2.5 L 4X2.5L G. Bottle 45

Filtered through 0.2µm, filled under inert gas.



■ Buffer D - Water / Acetonitrile 25:75

D 0.848

UN 1848,3,II,F1

Danger: H:225-312-319-332 P:210-241-261-303+361+353-305+351+338

Application: Used for detection of genetic variations

Cat. No: Buffer D - Water / Acetonitrile 25:75

212706

HPLC

Appearance	Clear colorless liquid	T200nm	min. 90%
Density (20M°C)	0.84-0.86g/ml	T210nm	min. 95%
T195nm	min. 88%	T>220nm	min. 98%

Filtered through 0.2µm, filled under inert gas.

Standard pack:

21270602 2.5 L 4X2.5L G. Bottle 45

■ Buffer phosphate 10mM, pH 3.3

KH₂PO₄

M 136.09

D 1.0

EC 231-913-4

CAS [7778-77-0]

Cat. No: Buffer phosphate 10mM, pH 3.3

028906

HPLC

Appearance	Clear liquid	T200nm	min. 95%
Color (APHA)	max. 10	T210nm	min. 97%
Assay (T)	9.5-10.5mM	T254nm	min. 98%
pH	3.2-3.4	Grad. elution H.Peak at 215nm	max. 0.005AU
T195nm	min. 90%	Grad. elution H.Peak at 254nm	max. 0.001AU

Filtered through 0.2µm, filled under inert gas.

Standard pack:

02890602 2.5 L 4X2.5L G. Bottle 45

■ 1-Butanesulfonic acid sodium salt

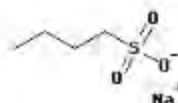
C₄H₉NaO₂S

M 160.17

m.p. > 300 °C

EC 219-201-1

CAS [2386-54-1]



Cat. No: 1-Butanesulfonic acid sodium salt

022106

HPLC

Appearance	White powder	T200nm (5mM)	min. 70%
Loss on drying (105°C)	max. 2%	T220nm (5mM)	min. 90%
Assay (T)	min. 99%w/w	T250nm (5mM)	min. 98%

Filtered through 0.2µm, filled under inert gas.

Standard pack:

02210652 1 GR 1X1G Viel
02210656 100 GR 6X100G HDPE

■ n-Butanol

C₄H₁₀O

M 74.12

b.p. 117.6 °C

D 0.810

m.p. -89 °C

EC 200-751-6

UN 1120,3,III,F1

CAS [71-36-3]

Danger H:226-302-315-318-335-336 P:210-303+361+353-305+351+338-310

Synonym: 1-Butanol, 1-Butyl alcohol



Cat. No: n-Butanol

022006

HPLC

Appearance	Clear colorless liquid	Water (KF)	max. 0.05%
Acidity (as Acetic acid)	max. 0.002%	T210nm	min. 20%
Color (APHA)	max. 10	T230nm	min. 70%
Assay (GC, on anhydrous basis)	min. 99.8%	T270nm	min. 90%
Residue after evaporation	max. 0.0005%w/w	T310nm	min. 98%

Filtered through 0.2µm, filled under inert gas.

Standard pack:

02200601 1 L 6X1L G. Bottle 45
02200602 2.5 L 4X2.5L G. Bottle 45

Cat. No:
022051

Appearance
Acidity (as Acetic acid)
Color (APHA)
Subs. darkened by Sulfuric Acid
Assay (GC, on anhydrous basis)
Residue after evaporation
Water (KF)
Al (Aluminium)
B (Boron)
Ba (Barium)
Ca (Calcium)

n-Butanol
AR-S glass distilled

Clear colorless liquid	Cd (Cadmium)	max. 0.05ppm
max. 0.002%	Co (Cobalt)	max. 0.02ppm
max. 10	Cr (Chromium)	max. 0.02ppm
Passes test	Cu (Copper)	max. 0.02ppm
min. 99.7%	Fe (Iron)	max. 0.1ppm
max. 0.0005% w/w	Mg (Magnesium)	max. 0.1ppm
max. 0.1%	Mn (Manganese)	max. 0.02ppm
max. 0.5ppm	Ni (Nickel)	max. 0.02ppm
max. 0.02ppm	Pb (Lead)	max. 0.1ppm
max. 0.1ppm	Sn (Tin)	max. 0.1ppm
max. 0.5ppm	Zn (Zinc)	max. 0.1ppm

Standard pack:
02205101 1 L 6X1L G. Bottle 45

Cat. No:
022005

Appearance
Acidity (as Acetic acid)
Color (APHA)
Assay (GC, on anhydrous basis)

n-Butanol
AR

Clear colorless liquid	Residue after evaporation	max. 0.001% w/w
max. 0.002%	Water (KF)	max. 0.1%
max. 10	Dibutyl ether	max. 0.2%
min. 99.5%		

Standard pack:
02200501 1 L 6X1L G. Bottle 45
02200502 2.5 L 4X2.5L G. Bottle 45
02200505 25 L 1X25L HDPE Drum

Cat. No:
022002

Appearance
Assay (GC, on anhydrous basis)

n-Butanol
CP

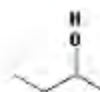
Clear liquid	Residue after evaporation	max. 0.005% w/w
min. 99%		

Standard pack:
02200201 1 L 6X1L G. Bottle 45

■ 2-Butanol

C ₄ H ₁₀ O	m.p. -115 °C
M 74.12	EC 201-158-5
b.p. 99 °C	UN 1120,3,III,F1
D 0.80	CAS [78-92-2]

Warning: H:226-319-335-336 P:210-241-303+361+353-305+351+339-405
Synonym: *sec-Butyl alcohol*



Cat. No:
022951

Appearance
Acidity (as Acetic acid)
Color (APHA)
Assay (GC, on anhydrous basis)
Water (KF)
2-Propanol
Methyl ethyl ketone
tert-Butanol
Dibutyl ether
Al (Aluminium)
B (Boron)
Ba (Barium)

2-Butanol
AR-S glass distilled

Clear colorless liquid	Ca (Calcium)	max. 0.5ppm
max. 0.002%	Cd (Cadmium)	max. 0.05ppm
max. 10	Co (Cobalt)	max. 0.02ppm
min. 99.8%	Cr (Chromium)	max. 0.02ppm
max. 0.2%	Cu (Copper)	max. 0.02ppm
max. 0.2%	Fe (Iron)	max. 0.1ppm
max. 0.1%	Mg (Magnesium)	max. 0.1ppm
max. 0.1%	Mn (Manganese)	max. 0.02ppm
max. 0.2%	Ni (Nickel)	max. 0.02ppm
max. 0.5ppm	Pb (Lead)	max. 0.1ppm
max. 0.02ppm	Sn (Tin)	max. 0.1ppm
max. 0.1ppm	Zn (Zinc)	max. 0.1ppm

Standard pack:
02295101 1 L 6X1L G. Bottle 45

Cat. No:
022905

Appearance
Acidity (as Acetic acid)
Color (APHA)
Assay (GC, on anhydrous basis)
Residue after evaporation

2-Butanol
AR

Clear colorless liquid	Water (KF)	max. 0.2%
max. 0.002%	2-Propanol	max. 0.2%
max. 10	Methyl ethyl ketone	max. 0.1%
min. 99.5%	tert-Butanol	max. 0.1%
max. 0.001% w/w	Dibutyl ether	max. 0.2%

Standard pack:
02290501 1 L 6X1L G. Bottle 45



Cat. No: 022902
2-Butanol
CP

Appearance Clear colorless liquid
Assay (GC, on anhydrous basis) min. 99.5%
Water (KF) max. 0.2%

Standard pack:

02290201 1 L 6X1L G. Bottle 45
02290285 25 L 1X25L HDPE Drum
02290277 200 L 1X200L Metal drum

■ **(R)-(-)-2-Butanol 99%**

Cat. No: 0280

C₄H₁₀O

M 74.12

EC No 238-967-8

CAS 14866-79-4

■ **(S)-(+)-2-Butanol 99%**

Cat. No: 0281

C₄H₁₀O

M 74.12

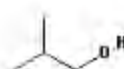
EC No 224-168-1

CAS 4221-99-2

■ **Iso-Butanol**

C₄H₁₀O m.p. -108 °C
M 74.12 EC 201-148-0
b.p. 108 °C UN 1212,3,III,F1
D 0.803 CAS [78-83-1]
Danger H:226-315-318-335-336 P:210-303+361+353-305+351+338-310

Synonym: 2-Methyl-1-propanol, Isobutyl alcohol



Cat. No: 020951
Iso-Butanol
AR-S glass distilled

Appearance	Clear colorless liquid	Ba (Barium)	max. 0.1ppm
Color (APHA)	max. 10	Ce (Cesium)	max. 0.5ppm
Assay (GC, on anhydrous basis)	min. 99.5%	Cd (Cadmium)	max. 0.05ppm
Acidity (as Acetic acid)	max. 0.003%	Co (Cobalt)	max. 0.02ppm
Residue after evaporation	max. 0.0002%w/w	Cr (Chromium)	max. 0.02ppm
Water (KF)	max. 0.05%	Cu (Copper)	max. 0.02ppm
Solubility	Passes ACS test	Fe (Iron)	max. 0.1ppm
1-Butanol	max. 0.1%	Mg (Magnesium)	max. 0.1ppm
2-Butanol	max. 0.02%	Mn (Manganese)	max. 0.02ppm
Isobutyraldehyde	max. 0.01%	Ni (Nickel)	max. 0.02ppm
Methyl ethyl ketone	max. 0.02%	Pb (Lead)	max. 0.1ppm
Al (Aluminium)	max. 0.5ppm	Sn (Tin)	max. 0.1ppm
B (Boron)	max. 0.02ppm	Zn (Zinc)	max. 0.1ppm

Standard pack:

02095102 2.5 L 4X2.5L G. Bottle 45

Cat. No: 020905
Iso-Butanol
AR

Appearance	Clear colorless liquid	Solubility	Passes ACS test
Color (APHA)	max. 10	1-Butanol	max. 0.1%
Assay (GC, on anhydrous basis)	min. 99%	2-Butanol	max. 0.02%
Acidity (as Acetic acid)	max. 0.003%	Isobutyraldehyde	max. 0.05%
Residue after evaporation	max. 0.001%w/w	Methyl ethyl ketone	max. 0.02%
Water (KF)	max. 0.05%		

Standard pack:

02090501 1 L 6X1L G. Bottle 45
02090502 2.5 L 4X2.5L G. Bottle 45

Cat. No: 020902
Iso-Butanol
CP

Assay (GC, on anhydrous basis) min. 99%
Residue after evaporation max. 0.002%w/w
Water (KF) max. 0.1%

Standard pack:

02090201 1 L 6X1L G. Bottle 45
02090265 25 L 1X25L HDPE Drum
02090277 200 L 1X200L Metal drum
02090261 212 L 1X212L Metal drum

tert-Butanol



$C_4H_{10}O$	m.p. 25-25.5 °C
M 74.12	EC 200-389-7
b.p. 83 °C	UN 1120,3,II,F1
D 0.780	CAS [75-65-0]
Danger H:225-332	

Synonym: 2-Methyl-2-propanol, tert-Butyl alcohol, Trimethyl carbinol

Cat. No: **tert-Butanol**
022205 **AR**

Acidity (as Acetic acid)	max. 0.001%	Residue after evaporation	max. 0.001% w/w
Color (APHA)	max. 10	Water (KF)	max. 0.1%
Assay (GC, on anhydrous basis)	min. 99.5%		

Standard pack:

02220561	1 L	6X1L G. Bottle 45
02220537	200 L	1X200L Stain/Sl drum
02220577	200 L	1X200L Metal drum

Cat. No: **tert-Butanol**
022202 **CP**

Color (APHA)	max. 20
Assay (GC, on anhydrous basis)	min. 99%
Water (KF)	max. 0.2%

Standard pack:

02220201	1 L	6X1L G. Bottle 45
02220265	25 L	1X25L HDPE Drum
02220277	200 L	1X200L Metal drum

n-Butanol-d1, 99 atom%D

See section: NMR

n-Butanol-d10, 99 atom%D

See section: NMR

tert-Butanol-d1, 99 atom%D

See section: NMR

2-Butoxyethyl acetate



$C_8H_{16}O_3$	m.p. 0 °C
M 160.21	EC 203-933-3
D 0.94	CAS [112-07-2]

Warning H:312-332 P:261-280-304+340-312-322

Synonym: 1-Acetoxy-2-butoxyethane, Ethylene glycol monobutyl ether acetate

Cat. No: **2-Butoxyethyl acetate**
021902 **CP**

Acidity (as Acetic acid)	max. 0.005%	Color (APHA)	max. 30
Assay (GC, on anhydrous basis)	min. 98%	Identity (IR)	Conforms to standard
Water (KF)	max. 0.1%		

Standard pack:

02190201	1 L	6X1L G. Bottle 45
02190205	5 L	4X5L HDPE Jerrycan
02190265	25 L	1X25L HDPE Drum
02190277	202 L	1X202L Drum

n-Butyl acetate



$C_6H_{12}O_2$ m.p. -77.9 °C
 M 116.16 EC 204-659-1
 b.p. 127 °C UN 1123, 3, III, F1
 D 0.88 CAS [123-96-4]
 Warning: H:226-336 EUH:066 P:210-241-261-303+361+353

Cat. No: n-Butyl acetate

020407

HPLC-S

Appearance	Clear colorless liquid	T254nm	min. 10%
Color (APHA)	max. 10	T260nm	min. 60%
Assay (GC, on anhydrous basis)	min. 99.7%	T275nm	min. 90%
Acidity (as Acetic acid)	max. 0.003%	T300nm	min. 95%
Residue after evaporation	max. 0.0003%/w/w	T320nm	min. 98%
Water (KF)	max. 0.03%	T360nm	min. 98%

Filtered through 0.2µm, filled under inert gas.

Standard pack:

02040701 1 L 6X1L G. Bottle 4B

Cat. No: n-Butyl acetate

020406

HPLC

Appearance	Clear colorless liquid	T260nm	min. 50%
Color (APHA)	max. 10	T280nm	min. 80%
Assay (GC, on anhydrous basis)	min. 99.5%	T300nm	min. 90%
Acidity (as Acetic acid)	max. 0.005%	T320nm	min. 95%
Residue after evaporation	max. 0.0005%/w/w	T360nm	min. 98%
Water (KF)	max. 0.05%		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

02040601 1 L 6X1L G. Bottle 4B

Cat. No: n-Butyl acetate

020410

MOS

Appearance	Clear colorless liquid	Residue after evaporation	max. 0.0005%/w/w
Color (APHA)	max. 10	As (Arsenic)	max. 0.01ppm
Assay (GC, on anhydrous basis)	min. 99.5%	Ba (Barium)	max. 0.01ppm
Acidity (as Acetic acid)	max. 0.01%	Cu (Copper)	max. 0.02ppm
Water (KF)	max. 0.1%	Fe (Iron)	max. 0.02ppm

Filtered through 0.2µm, filled under inert gas.

Standard pack:

02041001 1 L 6X1L G. Bottle 4B

Cat. No: n-Butyl acetate

020405

AR

Appearance	Clear colorless liquid	Assay (GC, on anhydrous basis)	min. 99.5%
Acidity (as Acetic acid)	max. 0.01%	1-Butanol	max. 0.2%
Color (APHA)	max. 10	Residue after evaporation	max. 0.001%/w/w
Subs. darkened by Sulfuric Acid	Passes test	Water (KF)	max. 0.1%

Standard pack:

02040501 1 L 6X1L G. Bottle 4B
 02040505 25 L 1X25L HDPE Drum

Cat. No: n-Butyl acetate

020402

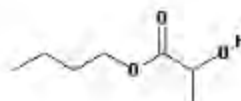
CP

Appearance	Clear colorless liquid	Residue after evaporation	max. 0.005%/w/w
Acidity (as Acetic acid)	max. 0.01%	Refractive index (20°C)	1.392-1.396
Density (20M°C)	0.875-0.885g/ml	Water (KF)	max. 0.1%
Assay (GC, on anhydrous basis)	min. 98%		

Standard pack:

02040201 1 L 6X1L G. Bottle 4B
 02040202 2.5 L 4X2.5L G. Bottle 4B
 02040205 5 L 4X5L HDPE Jerrycan
 02040205 25 L 1X25L HDPE Drum

(S)-(-)-Butyl lactate



$C_9H_{18}O_3$	m.p. -43 °C
M 146.19	EC 205-316-4
b.p. 170 °C	CAS [138-22-7]
D 0.984	

Cat. No: (S)-(-)-Butyl lactate

026302

Appearance

CP

Clear liquid

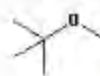
Assay (GC, on anhydrous basis)

min. 97%

Standard pack:

02630201 1 L 6X1L G. Bottle 45

tert-Butyl methyl ether



$C_5H_{12}O$	m.p. -110 °C
M 88.15	EC 216-653-1
b.p. 54-56 °C	UN 2388,3,II,F1
D 0.740	CAS [1634-04-4]
Danger H:225-315 P:210-241-280-303+361+353-321	

Synonym: MTBE, Methyl tert-butyl ether

Cat. No: tert-Butyl methyl ether

138906

Appearance

Acidity (as Acetic acid)

Color (APHA)

Assay (GC, on anhydrous basis)

Peroxides (as H_2O_2)

Filtered through 0.2µm, filled under inert gas.

HPLC

Clear colorless liquid

max. 0.002%

max. 10

min. 99.5%

max. 0.0005%

Residue after evaporation

Water (KF)

T250nm

T260nm

T280nm

max. 0.0002%/w/w

max. 0.02%

min. 60%

min. 90%

min. 98%

Standard pack:

13890601 1 L 6X1L G. Bottle 45

13890602 2.5 L 4X2.5L G. Bottle 45

13890604 4 L 4X4L G. Bottle 32

13890630 25 L 1X25L Stain/st. drum

13890677 200 L 1X200L Metal drum

Cat. No: tert-Butyl methyl ether

138926

Appearance

Assay (GC, on anhydrous basis)

Color (APHA)

Residue after evaporation

Suitable for residue analysis

Filtered through 0.2µm, filled under inert gas.

Pesti-S

Clear colorless liquid

min. 99.8%

max. 10

max. 0.0003%/w/w

Water (KF)

Peroxides (as H_2O_2)

GC/ECD any pesticide (as Lindene)

GC/NPD any pesticide (as Parathion)

max. 0.02%

max. 0.002%

max. 5ng/L

max. 10ng/L

Standard pack:

13892601 1 L 6X1L G. Bottle 45

13892604 4 L 4X4L G. Bottle 32

Cat. No: tert-Butyl methyl ether

138933

Appearance

Acidity (as Acetic acid)

Free Amines (Kaiser)

Assay (GC, on anhydrous basis)

Peroxides (as H_2O_2)

Filtered through 0.2µm, filled under inert gas.

Peptide synthesis

Clear colorless liquid

max. 0.001%

max. 0.0002%

min. 98%

max. 0.0005%

Water (KF)

Fe (Iron)

Mg (Magnesium)

Pb (Lead)

Zn (Zinc)

max. 0.01%

max. 0.1ppm

max. 0.1ppm

max. 0.1ppm

max. 0.1ppm

Standard pack:

13893302 2.5 L 4X2.5L G. Bottle 45



Cat. No:
138951

tert-Butyl methyl ether
AR-S glass distilled

Appearance	Clear colorless liquid	Cd (Cadmium)	max. 0.05ppm
Acidity (as Acetic acid)	max. 0.002%	Co (Cobalt)	max. 0.02ppm
Color (APHA)	max. 10	Cr (Chromium)	max. 0.02ppm
Assay (GC, on anhydrous basis)	min. 99.5%	Cu (Copper)	max. 0.02ppm
Peroxides (as H ₂ O ₂)	max. 0.0005%	Fe (Iron)	max. 0.1ppm
Residue after evaporation	max. 0.0005%/w/w	Mg (Magnesium)	max. 0.1ppm
Water (KF)	max. 0.02%	Mn (Manganese)	max. 0.02ppm
Al (Aluminium)	max. 0.5ppm	Ni (Nickel)	max. 0.02ppm
B (Boron)	max. 0.02ppm	Pb (Lead)	max. 0.1ppm
Ba (Barium)	max. 0.1ppm	Sn (Tin)	max. 0.1ppm
Ca (Calcium)	max. 0.5ppm	Zn (Zinc)	max. 0.1ppm

Standard pack:

13895102	2.5 L	4X2.5L G. Bottle 45
13895105	5 L	4X5L HDPE Jerrycan

Cat. No:
138905

tert-Butyl methyl ether
AR

Appearance	Clear colorless liquid	Peroxides (as H ₂ O ₂)	max. 0.0005%
Acidity (as Acetic acid)	max. 0.002%	Residue after evaporation	max. 0.001%/w/w
Color (APHA)	max. 10	Water (KF)	max. 0.02%
Assay (GC, on anhydrous basis)	min. 98%		

Standard pack:

13890501	1 L	6X1L G. Bottle 45
13890502	2.5 L	4X2.5L G. Bottle 45
138905M1	25 L	1X25L Metal drum
13890577	200 L	1X200L Metal drum

Cat. No:
138902

tert-Butyl methyl ether
CP

Assay (GC, on anhydrous basis)	min. 97%	Residue after evaporation	max. 0.003%/w/w
Peroxides (as H ₂ O ₂)	max. 0.003%	Water (KF)	max. 0.1%

Standard pack:

13890201	1 L	6X1L G. Bottle 45
13890202	2.5 L	4X2.5L G. Bottle 45
13890230	25 L	1X25L Stainl. drum
138902M1	25 L	1X25L Metal drum
13890277	200 L	1X200L Metal drum

■ N-Butyroyl-D-erythro-sphingosine

See section: Sphingolipids & Phospholipids

■ C(Ac)-OTBDMS-CE Phosphoramidite

See section: DNA & RNA Synthesis

■ Calcium carbonate

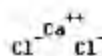
Cat. No: 0314

CCaO₃
M 100.09

EC No 207-439-8
CAS 471-34-1

■ Calcium chloride anhydrous

CaCl₂ EC 233-140-8
M 110.99 CAS [10043-52-4]
Warning H:319 P:264-280-305+351+338-337+313



Cat. No:
034099

Calcium chloride anhydrous
General Reagent

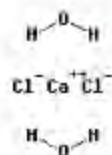
Appearance	White granules	Alkalinity [as Ca(OH) ₂]	max. 7%
Assay (on dry basis)	min. 93%		

Standard pack:

03409959	0.5 KG	6X500G HDPE
03409991	1 KG	6X1KG HDPE

■ Calcium chloride dihydrate

$\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ m.p. 175 °C
 M 147.01 CAS [7774-34-7]
 Warning H:319 P:264-280-305+351+338-337+313



Cat. No:
034223

Appearance
 Assay (on dry basis)
 Iron (Fe)
 Heavy metals (as Pb)

Calcium chloride dihydrate

Molecular biology

White powder pH (5% in water)
 98-102% DNase activity
 max. 0.001% RNase activity
 max. 0.0005% Protease activity

4.5-8.5
 Not detected
 Not detected
 Not detected

Standard pack:

03422358 500 GR 6X500G HDPE
 03422381 1 KG 6X1KG HDPE

Cat. No:
034205

Appearance
 Assay (on dry basis)
 Iron (Fe)

Calcium chloride dihydrate

AR

White matter Heavy metals (as Pb)
 99-101% pH (5% in water)
 max. 0.001% Alkalinity [as $\text{Ca}(\text{OH})_2$]

max. 0.0005%
 4.5-8.5
 max. 0.005%

Standard pack:

03420581 1 KG 6X1KG HDPE

Cat. No:
034202

Appearance
 Assay (on dry basis)

Calcium chloride dihydrate

CP

White matter Iron (Fe)
 97-103% Alkalinity [as $\text{Ca}(\text{OH})_2$]

max. 0.002%
 max. 0.02%

Standard pack:

03420281 1 KG 6X1KG HDPE
 03420285 25 KG 1X25KG Drum

■ Calcium chloride hexahydrate

$\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$
 M 219.08

CAS 7774-34-7

Cat. No: 0343

■ Cap A

See section: DNA & RNA Synthesis

■ Cap B

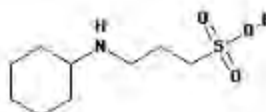
See section: DNA & RNA Synthesis

■ Caps

$\text{C}_9\text{H}_{19}\text{NO}_3\text{S}$ EC 214-482-1
 M 221.31 CAS [1135-40-6]

Synonym: 3-(Cyclohexylamino)-1-propanesulfonic acid

Application: Commonly used as buffering substance useful at pH range 8.7-11.1.



Cat. No:
035023

Appearance
 Solubility (10% in Water)
 Assay (T)
 A260nm (0.05M)

Caps

Molecular biology

White to off white powder A290nm (0.05M)
 Clear colorless solution DNase activity
 98-102%w/w RNase activity
 max. 0.02AU Protease activity

max. 0.02AU
 Not detected
 Not detected
 Not detected

Standard pack:

03502381 1 KG 6X1KG HDPE



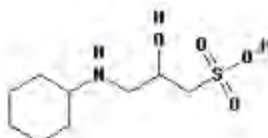
Capso

$C_{10}H_{19}NO_3S$
M 237.32

m.p. 270-274°C
CAS [73463-39-5]

Synonym: 3-(Cyclohexylamino)-2-hydroxy-1-propanesulfonic acid.

Application: Commonly used as buffering substance useful at pH range 8.9 – 10.3.



Cat. No.:
035123

Appearance
Solubility (0.1M in water)
Loss on drying (105°C)
Heavy metals (as Pb)
pH (0.1M in water)

Capso
Molecular biology

White to off white powder
Clear colorless solution
max. 2%
max. 0.0015%
11-12

Assay (T)
DNase activity
RNase activity
Protease activity

Standard pack:

03512381 1 KG 6X1KG HDPE

min. 98%w/w
Not detected
Not detected
Not detected

N,N'-Carbonyldiimidazole

$C_7H_8N_2O$
M 182.15

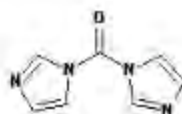
EC 208-488-9
UN 3283, 8, II, C8

m.p. 116-120 °C

CAS [530-62-1]

Danger H:302-314 P:260-303+361+353-305+351+338-310

Synonym: CDI



Cat. No.:
036033

Appearance
Purity (HPLC)

N,N'-Carbonyldiimidazole
Peptide synthesis

White to off-white solid
min. 98%

Water (KF)

Standard pack:

03603357 250 GR 6X250G HDPE

max. 0.5%w/w

N-(Carbonyl-methoxypolyethyleneglycol-2000)-1,2-dimyristoyl-sn-glycero-3-phosphoethanolamine, sodium salt

Synonym: MPEG-2000-DMPE

See section: Sphingolipids & Phospholipids

N-(Carbonyl-methoxypolyethyleneglycol-5000)-1,2-dimyristoyl-sn-glycero-3-phosphoethanolamine, sodium salt

Synonym: MPEG-5000-DMPE

See section: Sphingolipids & Phospholipids

N-(Carbonyl-methoxypolyethyleneglycol-2000)-1,2-dipalmitoyl-sn-glycero-3-phosphoethanolamine, sodium salt

Synonym: MPEG-2000-DPPE

See section: Sphingolipids & Phospholipids

N-(Carbonyl-methoxypolyethyleneglycol-5000)-1,2-dipalmitoyl-sn-glycero-3-phosphoethanolamine, sodium salt

Synonym: MPEG-5000-DPPE

See section: Sphingolipids & Phospholipids

N-(Carbonyl-methoxypolyethyleneglycol-750)-1,2-distearoyl-sn-glycero-3-phosphoethanolamine, sodium salt

Synonym: MPEG-750-DSPE

See section: Sphingolipids & Phospholipids

N-(Carbonyl-methoxypolyethyleneglycol-2000)-1,2-distearoyl-sn-glycero-3-phosphoethanolamine, sodium salt

Synonym: MPEG-2000-DSPE

See section: Sphingolipids & Phospholipids

N-(Carbonyl-methoxypolyethyleneglycol-5000)-1,2-distearoyl-sn-glycero-3-phosphoethanolamine, sodium salt

Synonym: MPEG-5000-DSPE

See section: Sphingolipids & Phospholipids

CDI

see N,N'-Carbonyldiimidazole

Ceramides

See section: Sphingolipids & Phospholipids

Cesium chloride



CICs EC 231-600-2
 M 168.36 CAS [7647-17-8]
 D 3.983

Application: Widely used for the isolation of viruses, nucleic acids and nucleoproteins in which low levels of metal-ion contamination is demanded.

Cat. No:
035323

Cesium chloride
Molecular biology

Appearance	White to off white solid	A280nm (50%)	max. 0.02AU
Assay (T, dry)	min. 98.8%	DNase activity	Not detected
Heavy metals (as Pb)	max. 0.0001%	RNase activity	Not detected
A260nm (50%)	max. 0.03AU	Protease activity	Not detected

Standard pack:

03532357	250 GR	6X250G HDPE
03532358	500 GR	6X500G HDPE
03532381	1 KG	6X1KG HDPE

Charcoal activated



C UN 1361, A, 2, II, S2
 M 12 CAS [7440-44-0]
 EC 231-153-3
 Danger H:226-251 P:210-241-280-303+361+353-420

Synonym: Carbon activated

Cat. No:
038180

Charcoal activated
For synthesis

Moisture	max. 5%	Apparent density	0.46-0.48g/ml
Loss on ignition	max. 15%	Particle size	Complex

Standard pack:

03818081	1 KG	6X1KG HDPE
03818085	25KG	1X25KG

2-Chlorobenzaldehyde

Cat. No: 0310

C₇H₅ClO
 M 140.57

EC No 201-956-3
 CAS 89-98-5

O-(6-Chlorobenzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate

see HCTU

■ 1-Chlorobutane

C₄H₉Cl m.p. -123 °C
 M 92.57 EC 203-698-6
 b.p. 77-78 °C LIN 1127,3,II,F1
 D 0.89 CAS [108-60-3]

Danger H:225 P:210-240-241-280-303+361+353

Synonym: Butyl chloride



Cat. No: 030906 **1-Chlorobutane**
HPLC

Appearance	Clear colorless liquid	Water (KF)	max. 0.01%
Acidity (as HCl)	max. 0.001%	T230nm	min. 70%
Color (APHA)	max. 10	T240nm	min. 80%
Assay (GC, on anhydrous basis)	min. 99.7%	T260nm	min. 96%
Residue after evaporation	max. 0.0005%/ww		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

03090601	1 L	6X1L G. Bottle 45
03090604	4 L	4X4L G. Bottle 32

■ Chloroform (stab./Amylene)

CHCl₃ m.p. - 63°C
 M 119.38 EC 200-663-8
 b.p. 61°C LIN 1888,6,1,III,T1
 D 1.48 CAS [67-66-3]

Warning H:302-315-351-373 P:280-280-281-321

Synonym: Methylidene trichloride, Trichloromethane



Cat. No: 030807 **Chloroform (stab./Amylene)**
HPLC-S

Appearance	Clear colorless liquid	Stabilizer (Amylene)	0.003-0.006%/ww
Acidity (as HCl)	max. 0.001%	Water (KF)	max. 0.01%
Alkalinity (as Ammonia)	max. 0.0002%	T255nm	min. 75%
Color (APHA)	max. 10	T260nm	min. 80%
Assay (GC, on anhydrous basis)	min. 99.0%	T>275nm	min. 98%
Residue after evaporation	max. 0.0003%/ww		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

03080701	1 L	6X1L G. Bottle 45
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Cat. No: 030806 **Chloroform (stab./Amylene)**
HPLC

Appearance	Clear colorless liquid	Stabilizer (Amylene)	0.003-0.006%/ww
Acidity (as HCl)	max. 0.001%	Water (KF)	max. 0.01%
Alkalinity (as Ammonia)	max. 0.0004%	T255nm	min. 70%
Color (APHA)	max. 10	T260nm	min. 85%
Assay (GC, on anhydrous basis)	min. 99.8%	T>280nm	min. 98%
Residue after evaporation	max. 0.0005%/ww		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

03080601	1 L	6X1L G. Bottle 45
03080602	2.5 L	4X2.5L G. Bottle 45

Cat. No: 030884 **Chloroform (stab./Amylene)**
LV-GC for organic trace analysis

Appearance	Clear colorless liquid	GC/FID suitability (as 2-Octanol)	max. 10ng/ml
Color (APHA)	max. 10	GC/ECD suitability (as H. Epoxide)	max. 10ng/L
Assay (GC, on anhydrous basis)	min. 99.9%	PAH test (<2ppb by HPLC)	Passes test
Acidity (as HCl)	max. 0.0005%	GC/ECD Dioxins, Furans & PCB's	max. 5ng/L
Residue after evaporation	max. 0.0003%/ww	GC/ECD any pesticide (as Lindane)	max. 5ng/L
Stabilizer (Amylene)	0.003-0.006%/ww	GC/NPD any pesticide (as Parathion)	max. 10ng/L
Water (KF)	max. 0.01%	GC/FID any hydrocarbon (C10-C40)	max. 0.1mg/L
F254nm (as Quinine)	max. 1ppb	T250nm	min. 45%
F365nm (as Quinine)	max. 1ppb		

Filtered through 0.2µm, filled under inert gas.

Standard pack:

03088402	2.5 L	4X2.5L G. Bottle 45
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Cat. No:
030860

Chloroform (stab./Amylene)
Dioxins, Pesti-S, Furans & PCB's analysis

Appearance	Clear colorless liquid	GC/ECD Dioxins, Furans & PCB's	max. 5ng/L
Acidity (as HCl)	max. 0.001%	GC/ECD any pesticide (as Lindene)	max. 5ng/L
Assay (GC, on anhydrous basis)	min. 99.9%	GC/NPD any pesticide (see Parathion)	max. 10ng/L
Stabilizer (Amylene)	0.003-0.006%w/w	Water (KF)	max. 0.01%
Residue after evaporation	max. 0.0005%w/w		

Standard pack:

03082601	1 L	6X1L G. Bottle 45
03082602	2.5 L	4X2.5L G. Bottle 45

Cat. No:
030838

Chloroform (stab./Amylene)
Spectrofluopure

Appearance	Clear colorless liquid	Stabilizer (Amylene)	0.003-0.006%w/w
Acidity (as HCl)	max. 0.001%	Water (KF)	max. 0.01%
Alkalinity (as Ammonia)	max. 0.0002%	T245nm	min. 10%
Color (APHA)	max. 10	T250nm	min. 50%
F254nm (as Quinine)	max. 1ppb	T257nm	min. 80%
F365nm (as Quinine)	max. 1ppb	T270nm	min. 97%
Assay (GC, on anhydrous basis)	min. 99.9%	T>280nm	min. 99%
Residue after evaporation	max. 0.0003%w/w		

Standard pack:

03083801	1 L	6X1L G. Bottle 45
03083802	2.5 L	4X2.5L G. Bottle 45

Cat. No:
030823

Chloroform (stab./Amylene)
Molecular biology

Application: Commonly used as cosolvent in nucleic acid purification.

Acidity (as HCl)	max. 0.001%	Water (KF)	max. 0.01%
Subs. darkened by Sulfuric Acid	Passes test	A280nm	max. 0.01AU
Assay (GC, on anhydrous basis)	min. 99.9%	DNase activity	Not detected
Heavy metals (as Pb)	max. 0.00005%	RNase activity	Not detected
Residue after evaporation	max. 0.001%w/w	Protease activity	Not detected
Stabilizer (Amylene)	0.003-0.006%w/w		

Standard pack:

03082301	1 L	6X1L G. Bottle 45
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Cat. No:
030810

Chloroform (stab./Amylene)
MOS

Color (APHA)	max. 10	Chloride (Cl)	max. 2ppm
Assay (GC, on anhydrous basis)	min. 99.9%	Heavy metals (as Pb)	max. 1ppm
Residue after evaporation	max. 0.0005%w/w	As (Arsenic)	max. 20ppb
Stabilizer (Amylene)	0.003-0.006%w/w	Ba (Barium)	max. 20ppb
Water (KF)	max. 0.01%	Cu (Copper)	max. 10ppb
Acidity (as HCl)	max. 0.001%	Fe (Iron)	max. 50ppb

Standard pack:

03081001	1 L	6X1L G. Bottle 45
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Cat. No:
030822

Chloroform (stab./Amylene)
Laser grade

Appearance	Clear colorless liquid	Heavy metals (as Pb)	max. 50ppb
Acidity (as HCl)	max. 0.001%	Residue after evaporation	max. 0.00009%w/w
Color (APHA)	max. 10	Stabilizer (Amylene)	0.003-0.006%w/w
Assay (GC, on anhydrous basis)	min. 99.9%	Water (KF)	max. 0.01%
Particle count >2um	max. 10P/ml		

Standard pack:

03082201	1 L	6X1L G. Bottle 45
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Cat. No:
030805

Chloroform (stab./Amylene)
AR

Appearance	Clear colorless liquid	Assay (GC, on anhydrous basis)	min. 99.9%
Acidity (as HCl)	max. 0.001%	Residue after evaporation	max. 0.001%w/w
Color (APHA)	max. 10	Stabilizer (Amylene)	0.003-0.006%w/w
Free Chlorine	Passes test, negative	Water (KF)	max. 0.01%
Subs. darkened by Sulfuric Acid	Passes test		

Standard pack:

03080521	1 L	6X1L G. Bottle 45
03080502	2.5 L	4X2.5L G. Bottle 45
03080504	4 L	4X4L G. Bottle 32
03080530	25 L	1X25L Stain/et. drum
030805A1	204 L	1X204L Drum



Cat. No: Chloroform (stab./Amylene)

030847

Appearance
Acidity (as HCl)
Assay (GC, on anhydrous basis)

Extra dry

Clear colorless liquid **Residue after evaporation**
max. 0.001% **Stabilizer (Amylene)**
min. 99.9% **Water (KF)**

max. 0.0005%w/w
0.003-0.006%w/w
max. 0.005%

Standard pack:

03084731 100 ML 6X100ML G. Bottle
03084732 250 ML 6X250ML G. Bottle 32
03084752 250 ML 6X250ML D.Cup Bottle 32
03084795 500 ML 6X0.5L D.Cup Bottle 32
03084701 1 L 6X1L G. Bottle 45
03084730 25 L 1X25L Stain/st. drum

Cat. No: Chloroform (stab./Amylene)

030802

Appearance
Assay (GC, on anhydrous basis)
Residue after evaporation

CP

Clear liquid **Stabilizer (Amylene)**
min. 99% **Water (KF)**
max. 0.005%w/w

0.003-0.006%w/w
max. 0.1%

Standard pack:

03080201 1 L 6X1L G. Bottle 45
03080221 1 L 6X1L G. Bottle 28
03080202 2.5 L 4X2.5L G. Bottle 45
03080230 25 L 1X25L Stain/st. drum
03080277 200 L 1X200L Metal drum

■ Chloroform (stab./Ethanol)

CHCl₃ **m.p. -63 °C**
M 119.38 **EC 200-663-8**
b.p. 61°C **UN 1888,6.1,III,T1**
D 1.48 **CAS [67-66-3]**

Warning H:302-315-351-373 P:280-280-281-321

Synonym: Methylidyne trichloride, Trichloromethane



Cat. No: Chloroform (stab./Ethanol)

034807

Appearance
Acidity (as HCl)
Alkalinity (as Ammonia)
Assay (GC, corr. stabilizers)
Color (APHA)
Residue after evaporation

HPLC-S

Clear colorless liquid **Stabilizer (EtOH)**
max. 0.001% **Water (KF)**
max. 0.0002% **T255nm**
min. 99.9% **T260nm**
max. 10 **T>275nm**

0.5-1.5%w/v
max. 0.05%
min. 75%
min. 80%
min. 98%

Standard pack:

03480702 2.5 L 4X2.5L G. Bottle 45

Filtered through 0.2µm, filled under inert gas.

Cat. No: Chloroform (stab./Ethanol)

034806

Appearance
Acidity (as HCl)
Alkalinity (as Ammonia)
Assay (GC, corr. stabilizers)
Color (APHA)
Residue after evaporation

HPLC

Clear colorless liquid **Stabilizer (EtOH)**
max. 0.001% **Water (KF)**
max. 0.0004% **T255nm**
min. 99.9% **T260nm**
max. 10 **T>280nm**

0.5-1.5%w/v
max. 0.05%
min. 70%
min. 85%
min. 98%

Standard pack:

03480601 1 L 6X1L G. Bottle 45
03480602 2.5 L 4X2.5L G. Bottle 45

Filtered through 0.2µm, filled under inert gas.

Cat. No: Chloroform (stab./Ethanol)

034805

Appearance
Acidity (as HCl)
Assay (GC, corr. stabilizers)
Color (APHA)
Free Chlorine

AR

Clear colorless liquid **Subs. darkened by Sulfuric Acid**
max. 0.001% **Residue after evaporation**
min. 99.9% **Stabilizer (EtOH)**
max. 10 **Water (KF)**
Passes test

Passes test
max. 0.001%w/w
0.5-1.5%w/v
max. 0.01%

Standard pack:

03480501 1 L 6X1L G. Bottle 45
03480502 2.5 L 4X2.5L G. Bottle 45
03480504 4 L 4X4L G. Bottle 32
03480530 25 L 1X25L Stain/st. drum
03480537 200 L 1X200L Stain/st. drum
03480577 200 L 1X200L Metal drum

Cat. No:
034803

Chloroform (stab./Ethanol)
Meets EP/BP spec.

Appearance	Clear colorless liquid	Residue after evaporation	max. 0.001%w/w
Acidity or Alkalinity	Passes EP/BP test	Stabilizer (EtOH)	0.5-1.5%w/v
Identification	Passes EP/BP test	Water (KF)	max. 0.01%
Assay (GC, corr. stabilizers)	min. 99.8%	Foreign Chlorine	Passes EP/BP test
Color (APHA)	max. 10	Aldehydes	Passes EP/BP test
Chloride (Cl)	Passes EP/BP test	Related substance	max. 1%
Free Chlorine	Passes EP/BP test	Distillation range	Passes EP/BP test
Density (20M°C)	1.474-1.479g/ml		

Standard pack:

03480301 1 L 6X1L G. Bottle 45

Cat. No:
034802

Chloroform (stab./Ethanol)
CP

Appearance	Clear liquid	Stabilizer (EtOH)	0.5-1.5%w/v
Assay (GC, corr. stabilizers)	min. 98%	Water (KF)	max. 0.1%
Residue after evaporation	max. 0.005%w/v		

Standard pack:

03480201 1 L 6X1L G. Bottle 45
03480202 2.5 L 4X2.5L G. Bottle 45
03480277 200 L 1X200L Metal drum

■ Chloroform / Isoamyl alcohol 24:1

D 1.45

UN 1992,3+6.1,II,FT1

Danger: H:225-302-315-351-373 P:210-241-280-303+361+353

Application: suitable for nucleic acid purification.



Cat. No:
030723

Chloroform / Isoamyl alcohol 24:1
Molecular biology

Appearance	Clear solution	DNase activity	Not detected
Purity of Isoamyl alcohol	min. 98%	RNase activity	Not detected
Purity of Chloroform	min. 99.8%	Protease activity	Not detected
Solvent Comp. by GC	Complies		

Standard pack:

03072335 500 ML 6X0.5L G. Bottle 32
03072301 1 L 6X1L G. Bottle 45

■ Chloroform-d, 100 atom%D

See section: NMR

■ Chloroform-d, 99.8 atom%D

See section: NMR

■ Chloroform-d w/ 0.03% TMS, 99.8 atom%D

See section: NMR

■ 6-Chloro-1-hydroxybenzotriazole

see Cl-HOBT

■ Cholesterol sulfate sodium salt

Synonym: SCS

See section: Sphingolipids & Phospholipids