

Issue Date 23-Nov-2016

Revision Date 04-Sep-2023

Version 3.5

SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code(s)	31425		
Product Name	Potassium Hydroxide Pellets		
Synonyms	Caustic potash Potassium Hydroxide		
CAS No	1310-58-3		
Formula	КОН		
Molecular weight	56.1 g/mole		
1.2. Relevant identified uses of the substance or mixture and uses advised against			
Recommended Use	Laboratory Reagent.		
Uses advised against	Consumer use		
1.3. Details of the supplier of the sa	fety data sheet		
Supplier HACH UK Laser House Ground Floor, Suite B Waterfront Quay, Salford Quays			

Waterfront Quay, Salford Quay GB - Manchester, M50 3XW Tel. +44 (0) 161 872 1487 info-uk@hach.com

HACH Ireland Unit 34 GB Business Park Little Island IRL-Co. Cork T45 H681 Tel. +353 (0)146 02 522 info-ie@hach.com

1.4. Emergency telephone number

UK: Chemtrec: +44 20 3807 3798 IE: National Poisons Information Centre (NPIC) 01 809 2566 (24/7)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Corrosive to metals	Category 1 - (H290)
Acute toxicity - Oral	Category 4 - (H302)
Skin corrosion/irritation	Category 1 Sub-category A - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)

2.2. Label elements

Regulation (EC) No 1272/2008

EC-Label	215-181-3
CAS No	1310-58-3
Contains Potassium hydroxide	



Signal word Danger

Hazard statements

H290 - May be corrosive to metals H302 - Harmful if swallowed H314 - Causes severe skin burns and eye damage

Precautionary statements

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P264 - Wash hands thoroughly after handling

P280 - Wear protective gloves/protective clothing and eye/face protection

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

P390 - Absorb spillage to prevent material damage

2.3. Other hazards

No information available.

<u>PBT & vPvB</u> This substance does not meet the PBT/vPvB criteria of REACH, annex XIII

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical name	CAS No. EC No. Index No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Potassium hydroxide	1310-58-3 215-181-3 019-002-00-8	100%	Met. Corr. 1 - H290 Acute Tox. 4 - H302 Skin Corr. 1A - H314 Eye Dam. 1 - H318	Eye Irrit. 2 :H319: 0.5%<=C<2% Skin Corr. 1A :H314: C>=5% Skin Corr. 1B :H314: 2%<=C<5% Skin Irrit. 2 :H315: 0.5%<=C<2%	_	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Potassium hydroxide 1310-58-3	333 mg/kg	None reported	None reported	None reported	None reported

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Inhalation	Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical attention.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical attention.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical attention.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce

	vomiting. Get immediate medical attention.	
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.	
4.2. Most important symptoms and	effects, both acute and delayed	
Symptoms	Burning sensation.	
4.3. Indication of any immediate me	edical attention and special treatment needed	
Note to doctors	Delayed pulmonary edema may occur. Treat symptomatically.	
	Section 5: FIREFIGHTING MEASURES	
5.1. Extinguishing media		
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
Unsuitable extinguishing media	No information available.	
5.2. Special hazards arising from the	ne substance or mixture	
Specific hazards arising from the chemical	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours.	
Hazardous combustion products	This material will not burn.	
5.3. Advice for firefighters		
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.	
Additional information	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.	

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.	
For emergency responders	Use personal protection recommended in Section 8.	
6.2. Environmental precautions		
Environmental precautions	Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.	
6.3. Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	

Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.
6.4. Reference to other sections	
Reference to other sections	See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.
General hygiene considerations	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Avoid creating dust.
7.2. Conditions for safe storage, inc	cluding any incompatibilities

Storage ConditionsKeep containers tightly closed in a dry, cool and well-ventilated place. Protect from
moisture. Keep out of the reach of children. Store away from other materials.

7.3. Specific end use(s)

Specific use(s)	Analytical reagent.
Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

Chemical name	European Union	United Kingdom	Ireland
Potassium hydroxide	-	STEL: 2 mg/m ³	STEL: 2 mg/m ³
1310-58-3			

Information on monitoring procedures	Refer to European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) or equivalent national standard(s).
Derived No Effect Level (DNEL)	No information available.
Predicted No Effect Concentration (PNEC)	No information available.

Additional information	No information available.
8.2. Exposure controls	
Engineering controls	Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Personal protective equipment Eye/face protection	Wear safety glasses with side shields (or goggles).
Hand protection	Wear suitable gloves. Barrier creams may help to protect the exposed areas of skin. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374-1:2016 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III acco.

Gloves					
Duration of contact	PPE - Glove material	Glove thickness	Break through time		
Long term (repeated)	Wear protective Viton™	0,70 mm	>480 minutes		
	gloves				
Short term	Wear protective nitrile rubber gloves	0,20 mm	>30 minutes		
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing.				
Respiratory protection	Ensure adequate ventilation. No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. Wear breathing apparatus if exposed to vapours/dusts/aerosols.				
Recommended Filter type:	ABEK-P3.				
General hygiene considerations	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Avoid creating dust.				
Environmental exposure controls	Do not allow into any sewer, o	n the ground or into any body	of water.		

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Solid		
Colour white	Odour Odourless	
Odour threshold Not applicable		
Property	Values	Remarks • Method
Molecular weight	56.1 g/mole	

рН	13.5	1% @ 20°C
Melting point / freezing point	360 °C / 680 °F	
Initial boiling point and boiling range	1320 °C / 2408 °F	
Evaporation rate	Not applicable	
Vapour pressure	Not applicable	
Relative vapor density	No data available	
Partition coefficient	log K _{ow} ~ 0	
Soil Organic Carbon-Water Partition Coefficient	log K _{oc} ~ 0	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	Not applicable	
Kinematic viscosity Relative density	Not applicable 2.044 g/cm ³	@ 20 °C

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Completely soluble	1130000 mg/L	20 °C / 68 °F

Solubility in other solvents

Chemical Name	Solubility classification	Solubility	Solubility Temperature
Ethyl alcohol	Soluble	> 1000 mg/L	25 °C / 77 °F
glycerol	Soluble	> 1000 mg/L	25 °C / 77 °F
Acid	Violent reaction will occur	No data available	20 °C / 68 °F

Metal Corrosivity

Classified as corrosive to metal according to CLP criteria Steel Corrosion Rate Aluminum Corrosion Rate	No data available No data available
Explosive properties	
Upper explosion limit Lower explosion limit	No data available No data available
Flammable properties	
Flash point	Not applicable
Flammability	
Upper flammability limit: Lower flammability limit	No data available No data available
Oxidising properties	No data available.

Bulk	density	

Not applicable

9.2. Other information

No information available.

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity	
Reactivity	Corrosive to metal.
10.2. Chemical stability	
Stability	Stable under normal conditions.
10.3. Possibility of hazardous reacti	ons
Possibility of hazardous reactions	None under normal processing.
10.4. Conditions to avoid	
Conditions to avoid	Exposure to air or moisture over prolonged periods.
10.5. Incompatible materials	
Incompatible materials	Oxidising agent. Acids. Bases.
10.6. Hazardous decomposition pro	ducts_

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating and toxic gases and vapours.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if swallowed

Mixture If available, see ingredient data below.

Substance Test data reported below.

Oral Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Potassium hydroxide	Rat LD ₅₀	333 mg/kg	None reported	None reported	Vendor SDS

Acute Toxicity Estimate (ATE)

Not applicable

The following values are calculated based on chapter 3.1 of the GHS document

Skin corrosion/irritation

Causes severe burns.

Mixture

If available, see ingredient data below.

Substance

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Potassium hydroxide	Draize Test	Human	50 mg	24 hours	Corrosive to skin	RTECS

Serious eye damage/eye irritation

Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.

Mixture

If available, see ingredient data below.

Substance

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Potassium hydroxide	Existing human experience	Human	None reported	None reported	Corrosive to eyes	ERMA

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Mixture

If available, see ingredient data below.

Substance

Test data reported below.

Skin Sensitization Exposure Route:

Chemical name	Test method	Species	Results	Key literature references and sources for data
Potassium hydroxide	Intracuteaneus Test	Guinea pig	No sensitisation responses were observed.	IUCLID

<u>STOT - single exposure</u> Based on available data, the classification criteria are not met.

Mixture	If available, see ingredient data below.	
Substance	No data available.	
STOT - repeated exposure Based on available data, the classification criteria are not met.		
Mixture	If available, see ingredient data below.	
Substance	No data available.	
Germ cell mutagenicity Based on available data, the classification criteria are not met.		

Mixture invitro Data

If available, see ingredient data below.

Substance invitro Data	ubstance invitro Data Test data reported below.					
Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Potassium hydroxide	Cytogenetic analysis	Rat ascites tumor	1800 mg/kg	None reported	Positive test result for mutagenicity	RTECS
Mixture invivo Data	lf a	vailable, see ingre	edient data below.			
Substance invivo Data	No	data available.				
Carcinogenicity Based on available data,	the classification	criteria are not me	et.			
Mixture	lf a	vailable, see ingre	edient data below.			
Substance	No	data available.				
Reproductive toxicity Based on available data,	the classification	criteria are not me	ət.			
Mixture	No	data available.				
Substance	No	data available.				
Aspiration hazard Based on available data,	the classification	criteria are not me	ət.			
<u>11.2.</u> Information on of Other dangerous properti		cluded. Handle in a	accordance with g	ood industrial hyg	iene and safety p	practice.
11.2.1. Endocrine disru Endocrine disrupting p	upting properties roperties Thi		t contain any knov	wn or suspected e	ndocrine disrupto	ors.
11.2.2. Other informati Other adverse effects	1.2.2. Other information other adverse effects No information available.					
	Sect	ion 12: ECOL	OGICAL INF	ORMATION		
<u>12.1. Toxicity</u>						
Ecotoxicity	cotoxicity Based on available data, the classification criteria are not met.					
Mixture						
Acute aquatic toxicity:	If available, see ingredient data below.					
Aquatic Chronic Toxicit	t y: Ifa	If available, see ingredient data below.				
Substance	Substance					
Acute aquatic toxicity:	Te	st data reported be	elow.			
Fish:	Fish:					
Chemical name Ex	xposure	Species	Endpoint typ	e Reported dose	e Key literature	e references and

	time				sources for data
Potassium hydroxide	96 hours	Gambusia affinis	LC50	80 mg/L	ERMA
Aquatic Chronic Toxicity:		No data available.			
12.2. Persistence ar	nd degradabili	ity			
Mixture		No data available.			
12.3. Bioaccumulati	ve potential				
Mixture:		No data available.			
Partition coefficient		log Kow ~ 0			
<u>12.4. Mobility in soil</u>	l				
Soil Organic Carbon-V Coefficient	Vater Partition	log K _{oc} ~ 0			

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Chemical name	PBT and vPvB assessment	
Potassium hydroxide	The substance is not PBT / vPvB	

12.6. Endocrine disrupting properties

Endocrine Disruptor Information: This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

No information available.

Ozone: Not applicable

Ozone depletion potential (ODP): No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Advice on Disposal

Waste from residues/unused	Dispose of in accordance with local regulations. Dispose of waste in accordance with				
products	environmental legislation.				

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste.

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous

	substances, including mixtures of laboratory chemicals; hazardous waste.
Contaminated packaging	Dispose of contents/containers in accordance with local regulations.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORT INFORMATION

ADR

ADR 14.1 UN number or ID number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing Group 14.5 Environmental hazards 14.6 Special precautions for user Special Provisions Classification code Tunnel restriction code	1813 POTASSIUM HYDROXIDE, SOLID 8 II Not applicable None C6 (E)
IATA 14.1 UN number or ID number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards 14.6 Special precautions for user Special Provisions	UN1813 Potassium hydroxide, solid 8 II Not applicable None
IMDG14.1UN number or ID number14.2UN proper shipping name14.3Transport hazard class(es)14.4Packing Group14.5Environmental hazards14.6Special precautions for user Special Provisions EmS-No14.7Maritime transport in bulk according to IMO instruments	UN1813 POTASSIUM HYDROXIDE, SOLID 8 II Not applicable None F-A, S-B No information available

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Take note of Directive 94/33/EC on the protection of young people at work

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Potassium hydroxide - 1310-58-3	75.	

Persistent Organic Pollutants Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

Non-controlled

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

Germany

Water hazard class (WGK)

slightly hazardous to water (WGK 1)

International Inventories	
EINECS/ELINCS	Complies
TSCA	Complies
DSL/NDSL	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report

Chemical safety assessments for substances in this mixture were not carried out.

Section 16: OTHER INFORMATION

Issue Date	23-Nov-2016
Revision Date	04-Sep-2023
Revision Note	updated SDS sections: 2 8 11 12 14

Key or legend to abbreviations and acronyms used in the safety data sheet

**	Hazard Designation
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies
	de navigation intérieure
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service Number
Ceiling	Maximum limit value
CLP	Classification, Labelling and Packaging of substances and mixtures [Regulation (EC) No. 1272/2008]
DNEL	Derived No Effect Level (DNEL)
EC	European Community
ECHA	ECHA (The European Chemicals Agency)
EC50	Effective Concentration to 50% of a test population
EEC	European Economic Community
EN	European Standard
IMDG	International Maritime Dangerous Goods (IMDG)
ΙΑΤΑ	International Air Transport Association (IATA)
IATA-DGR	International Air Transport Association - Dangerous Goods Regulations
ICAO	International Civil Aviation Organization
ICAO-TI	International Civil Aviation Organization - Technical Instructions
IUCLID	IUCLID (The International Uniform Chemical Information Database)
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
LOAEL	Lowest observed adverse effect level
LOAEC	Lowest observed adverse effect concentration
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
LOLI	LOLI (List of Lists - An International Chemical Regulatory Database)
MAK	Maximale Arbeitsplatz-Konzentration, a German expression corresponding to threshold limit
	value, which relates to safe daily exposure levels to chemical substances
NOAEL	NOAEL (No observed adverse effect level)
NOAEC	No observed adverse effect concentration
OSHA	OSHA (Occupational Safety and Health Administration of the US Department of Labour)
PEC	Predicted Effect Concentration
PNEC	Predicted No Effect Concentration (PNEC)
PBT	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals [Regulation (EC) No. 1907/2006])
RTECS	RTECS (Registry of Toxic Effects of Chemical Substances)
TWA	TWA (time-weighted average)
SKN*	Skin designation
SKN+	Skin sensitisation
STEL	STEL (Short Term Exposure Limit)
STOT	Specific Target Organ Toxicity
-	

STOT RE	Specific target organ toxicity — repeated exposure	
STOT SE	Specific target organ toxicity — single exposure	
SVHC	Substances of Very High Concern	
TLV	Threshold Limit Value	
TRGS	Technical rules for hazardous substances, Germany	
TSCA	Toxic Substances Control Act	
UN	United Nations	
vPvB	very persistent and very bioaccumulative	
VOC	Volatile organic compounds	
AwSV	Administrative regulation of water polluting substances, Germany	

Key literature references and sources for data See Section 11: TOXICOLOGICAL INFORMATION

See Section 11: TOXICOLOGICAL INFORMATIO See Section 12: ECOLOGICAL INFORMATION

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration toxicity	Calculation method
Ozone	Calculation method
Corrosive to metals	On basis of test data

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H290 - May be corrosive to metals

Training Advice

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Restrictions on use

For Laboratory Use Only.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

End of Safety Data Sheet