

SAFETY DATA SHEET

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

Issue Date 07-Aug-2019

Revision Date 14-Feb-2023

Version 1.9

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

1.1. Product identifier

Product Name TN (Total Nitrogen) Hydroxide Reagent

Unique Formula Identifier (UFI) 7VEY-67WK-R30P-V81U

Molecular weight No data available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Determination of total nitrogen.

Uses advised against Consumer use

1.3. Details of the supplier of the safety data sheet

Supplier

HACH UK Laser House Ground Floor, Suite B Waterfront Quay, Salford Quays 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: Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service 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

Serious eye damage/eye irritation

Category 1 - (H318)

2.2. Label elements

Contains Sodium hydroxide 1%



Signal word Danger

Hazard statements

H318 - Causes serious eye damage

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear eye protection/ face protection 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

2.3. Other hazards

No information available.

PBT & vPvB

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT) This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

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)
Sodium hydroxide	1310-73-2 (011-002-00-6) 215-185-5 011-002-00-6	<1%	Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318	Eye Irrit. 2 :: 0.5%<=C<2% Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Skin Irrit. 2 :: 0.5%<=C<2%	-	-

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

Acute Toxicity Estimate No information available

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	Take off contaminated clothing and shoes immediately. Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.	
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.	
Eye contact	Get immediate medical attention. 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.	
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.	
Ingestion	Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.	
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).	
4.2. Most important symptoms and	effects, both acute and delayed	
Symptoms	Burning sensation.	
4.3. Indication of any immediate medical attention and special treatment needed		
Note to doctors	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	Product itself does not burn. Thermal decomposition can lead to release of irritating and toxic gases and vapours.
Hazardous combustion products	Carbon oxides. Sodium oxides.
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. Use personal protective equipment as required.		
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.		
6.3. Methods and material for contai	nment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.		
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal.		
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. Do not eat, drink or smoke when using this product. Provide a good standard of controlled ventilation (10 to 15 air changes per hour).
General hygiene considerations	Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Take off all contaminated clothing and wash it before reuse. Barrier creams may help to protect the exposed areas of skin.
7.2. Conditions for safe storage, inc	cluding any incompatibilities
Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of children.	
7.3. Specific end use(s)	
Specific use(s) Risk Management Methods (RMM)	Analytical reagent. 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
Sodium hydroxide 1310-73-2	-	STEL: 2 mg/m ³	STEL: 2 mg/m ³

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	use of personal protective equ	opriate working operations sho iipment. The type of protective a and amount of the dangerous	equipment must be selected		
Personal protective equipment Eye/face protection	Wear safety glasses with side	shields (or goggles).			
Hand protection	Wear suitable gloves. 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™ gloves	0,70 mm	>480 minutes		

	gloves			
Short term	Wear protective nitrile rubber gloves	0,20 mm	>30 minutes	
Skin and body protection	Avoid contact with eyes, skin a sleeved clothing.	and clothing. Wash conta	minated clothing before reuse. Long	
Respiratory protection	Wear breathing apparatus if exposed to vapours/dusts/aerosols.			
Recommended filter type:	ABEK-P3.			
General hygiene considerations	Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Take off all contaminated clothing and wash it before reuse. Barrier creams may help to protect the exposed areas of skin.			

Environmental exposure controls Do not allow into any sewer, on 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 Liquid
 Odour Odourless

 Colour colourless
 Odour Odourless

 Odour threshold No data available
 Remarks • Method

 Property
 Values
 Remarks • Method

 Molecular weight
 No data available
 @ 20 °C

 pH
 12.93
 @ 20 °C

 Melting point / freezing point
 ~ 0 °C / 32 °F

Initial boiling point and boiling range	~ 100 °C / 212 °F	
Evaporation rate	1 (water = 1)	
Vapour pressure	24.002 mm Hg $$ / $$ 3.2 kPa $$ at $$ 25 °C $$ / $$ 77 °F $$	
Relative vapor density	0.62	
Specific Gravity	1	
Partition coefficient	Not applicable	
Soil Organic Carbon-Water Partition Coefficient	Not applicable	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	~ 1 cP (mPa s) at 20 °C / 68 °F	
Kinematic viscosity Relative density	~ 1 cSt (mm²/s) at 20 °C / 68 °F 1.00 g/mL	@ 20 °C

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

Chemical Name	Solubility classification	<u>Solubility</u>	Solubility Temperature
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

Metal Corrosivity

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	No data available
Flammability	
Upper flammability limit: Lower flammability limit	No data available No data available
Oxidising properties	No data available.
Bulk density	No data available
9.2. Other information	

No information available.

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity	
Reactivity	No information available.
10.2. Chemical stability	
Stability	Stable under normal conditions.
10.3. Possibility of hazardous reaction	ons
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerisation	None under normal processing.
10.4. Conditions to avoid	
Conditions to avoid	Extremes of temperature and direct sunlight.
10.5. Incompatible materials	
Incompatible materials	Strong acids. Strong oxidising agents.
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 toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met

Mixture No data available.

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
Disodium carbonate	Rat LD₅₀	4090 mg/kg	None reported	None reported	IUCLID

Dermal Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Disodium carbonate	Mouse LD50	2210 mg/kg	None reported	None reported	No information available

Inhalation (Dust/Mist) Exposure Route:

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data

Disodium carbonate	Rat LC50	1.15 mg/L	4 hours	None reported	IUCLID
--------------------	-------------	-----------	---------	---------------	--------

Acute Toxicity Estimate (ATE)

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

Skin corrosion/irritation

May cause skin irritation.

Mixture

Test data reported below.

Test method	Species	Results	Key literature references and sources for data
Draize Test	Rabbit	Not corrosive or irritating to skin	Outside testing

Substance

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium hydroxide	Patch test	Human	20 mg	24 hours	Corrosive to skin	RTECS
Disodium carbonate	Draize Test	Rabbit	500 mg	24 hours	Mild skin irritant	ECHA HSDB

Serious eye damage/eye irritation

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

Mixture

No data available.

Substance

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium hydroxide	Draize Test	Rabbit	0.05 mg	24 hours	Corrosive to eyes	RTECS
Disodium carbonate	Draize Test	Rabbit	100 mg	24 hours	Eye irritant	HSDB

Respiratory or skin sensitisation

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

Mixture No data available.

Substance No data available.

STOT - single exposure

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

Mixture No data available.

Substance No data available.

STOT - repeated exposure

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

Mixture	No data available.
---------	--------------------

Substance	No data available.

Germ cell mutagenicity

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

Mixture invitro Data	No data available.
Substance invitro Data	No data available.
Mixture invivo Data	No data available.
Substance invivo Data	No data available.

Carcinogenicity

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

Mixture	No data available.
Substance	No data available.

Reproductive toxicity

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

Mixture	No data available.

Substance	No data available.

Aspiration hazard

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

11.2 Information on other hazards

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

11.2.1. Endocrine disrupting properties Endocrine disrupting properties No information available.

11.2.2. Other information Other adverse effects

No information available.

Section 12: ECOLOGICAL INFORMATION

<u>12.1. Toxicity</u>	
Ecotoxicity	Based on available data, the classification criteria are not met.
Unknown aquatic toxicity	Contains 0 % of components with unknown hazards to the aquatic environment.
<u>Mixture</u>	
Acute aquatic toxicity:	No data available.
Aquatic Chronic Toxicity:	No data available.
Substance	
Acute aquatic toxicity:	Test data reported below.

Fish:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium hydroxide	96 hours	Oncorhynchus mykiss	LC50	45.4 mg/L	IUCLID
Disodium carbonate	96 hours	Lepomis macrochirus	LC50	300 mg/L	IUCLID

Crustacea:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium hydroxide	48 Hours	Daphnia sp.	EC ₅₀	40.4 mg/L	IUCLID
Disodium carbonate	48 Hours	Daphnia magna	EC50	265 mg/L	IUCLID

Aquatic Chronic Toxicity: No data available.

12.2. Persistence and degradability

Mixture	No data available.
12.3. Bioaccumulative potential	
Mixture:	No data available.
Partition coefficient	Not applicable
12.4. Mobility in soil	

Soil Organic Carbon-Water Partition Not applicable Coefficient

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	
Sodium 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 pro	oduct
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

IMDG

14.1 UN number or ID number	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Marine pollutant	Not applicable
14.6 Special precautions for user	See section 6-8 for more information
14.7. Transport in bulk according to	Not applicable
Annex II of MARPOL and the IBC	
Code	
ADR	
14.1 UN number or ID number	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	See section 6-8 for more information
IATA	Not regulated
14.1 UN number or ID number	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	A3, A803

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

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorisation per
	Annex XVII	REACH Annex XIV
Sodium hydroxide - 1310-73-2	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)

non-hazardous to water (nwg)

International Inventories	
EINECS/ELINCS	Complies
TSCA	Complies
DSL/NDSL	Complies
ENCS	Complies
IECSC	Complies
KECL - Existing substances	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 07-Aug-2019

Revision Date 14-Feb-2023

Issue Date	07-Aug-2019		
Revision Date	14-Feb-2023		
Revision Note	New SDS, SDS sections updated, 3, 9, 11, 12.		
Key or legend to abbrevia	ations and acronyms used in the safety data sheet		
Legend			
**	Hazard Designation		
ADN	Accord européen relatif au transport international des marchandises dangereuses par voie 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 ECHA	European Community ECHA (The European Chemicals Agency)		
ECFA EC50	Effective Concentration to 50% of a test population		
EEC	European Economic Community		
EN	European Standard		
IMDG	International Maritime Dangerous Goods (IMDG)		
АТА	International Air Transport Association (IATA)		
ATA-DGR	International Air Transport Association - Dangerous Goods Regulations		
CAO	International Civil Aviation Organization		
ICAO-TI	International Civil Aviation Organization - Technical Instructions		
	IUCLID (The International Uniform Chemical Information Database)		
GHS LOAEL	Globally Harmonized System of Classification and Labelling of Chemicals Lowest observed adverse effect level		
LOALL	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 lin		
	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 PNEC	Predicted Effect Concentration 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])		
RID	Règlement international concernant le transport des marchandises dangereuses par chem		
	de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)		
RTECS	RTECS (Registry of Toxic Effects of Chemical Substances)		
TWA	TWA (time-weighted average)		
SKN*	Skin designation		
SKN+ STEL	Skin sensitisation 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 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	On basis of test data
Serious eye damage/eye irritation	On basis of test data
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

Full text of H-Statements referred to under section 3

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