

#### Issue Date 21-Feb-2006

Revision Date 14-Feb-2023

Version 3.1

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)	67549
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Product Name Sodium Carb	onate Solution
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Unique Formula Identifier (UFI) 4VK6-RE3G-N00M-X078

Molecular weight No data available

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

Recommended Use Laboratory Reagent. Determination of Tannin/Lignin.

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 2 - (H319)

#### 2.2. Label elements

Contains Disodium carbonate



Signal word Warning

#### Hazard statements

H319 - Causes serious eye irritation

#### 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

P337 + P313 - If eye irritation persists: Get medical advice/attention

#### 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)
Disodium carbonate	497-19-8 (011-005-00-2) 207-838-8 011-005-00-2	10 - 20%	Eye Irrit. 2 - H319 Acute Tox. 4 - H332	-	-	-
Butanedioic acid, 2,3-dihydroxy-[R-(R*, R*)]-, disodium salt	868-18-8 212-773-3 -	1 - 5%	Not classified	-	_	-

#### 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
Disodium carbonate 497-19-8	4090 mg/kg	2210 mg/kg	1.15 mg/L	None reported	None reported
Butanedioic acid, 2,3-dihydroxy-[R-(R*,R*)]-, disodium salt 868-18-8	4360 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.		
Inhalation	Remove to fresh air.		
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 medical attention if irritation develops and persists.		
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.		
Ingestion	Rinse mouth. 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	May cause redness and tearing of the eyes. 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. Product itself does not burn.

Unsuitable extinguishing media No information available.

#### 5.2. Special hazards arising from the substance or mixture

**Specific hazards arising from the** Thermal decomposition can lead to release of irritating and toxic gases and vapours. **chemical** 

#### 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	Should not be released into the environment. See Section 12 for additional Ecological Information.
6.3. Methods and material for conta	inment 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. Clean contaminated surface thoroughly.
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.		
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. Wash hands before breaks and after work.		
7.2. Conditions for safe storage, including any incompatibilities			
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at temperatures between 10 and 30 °C. Protect from sunlight. Keep away from heat.		
7.3. Specific end use(s)			
Specific use(s)	Analytical reagent.		

 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**

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
Short term	Wear protective nitrile rubber	0,20 mm	>30 minutes
	gloves		
Long term (repeated)	Wear protective Viton™	0,70 mm	>480 minutes
	gloves		
Skin and body protection	Wear suitable protective clothi	ing. Avoid contact with eyes, sl	kin and 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.		
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. Wash hands before breaks and after work.		
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

Colour colourless

Odour Odourless

Odour threshold No data available

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Property	Values	Remarks • Method
Molecular weight	No data available	
рН	10.6	@ 20 °C
Melting point / freezing point	~ -9 °C / 15.8 °F	
Initial boiling point and boiling range	~ 100 °C / 212 °F	
Evaporation rate	0.6 (water = 1)	
Vapour pressure	22.802 mm Hg $/$ 3.04 kPa $$ at $$ 25 °C $/$ 77 °	F
Relative vapor density	0.62	
Specific Gravity	1.186	
Partition coefficient	Not applicable	
Soil Organic Carbon-Water Partition Coefficient	Not applicable	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	No data available	
Kinematic viscosity Relative density	No data available 1.186 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

No data available. No data available

#### **Oxidising properties**

**Bulk density** 

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 reactions

**Possibility of hazardous reactions** None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

## 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
Butanedioic acid, 2,3-dihydroxy-[R-(R*, R*)]-, disodium salt	Mouse LD50	4360 mg/kg	None reported	None reported	EPA

#### Dermal Exposure Route:

|--|

	type	dose	time		sources for data
Disodium carbonate	Mouse	2210 mg/kg	None reported	None reported	No information available
	LD50				

#### Inhalation (Dust/Mist) Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Disodium carbonate	Rat LC <sub>50</sub>	1.15 mg/L	4 hours	None reported	IUCLID

#### Acute Toxicity Estimate (ATE)

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

ATEmix (inhalation-dust/mist)
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#### Unknown acute toxicity

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

#### **Skin corrosion/irritation**

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

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
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 serious eye irritation.

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
Disodium carbonate	Draize Test	Rabbit	100 mg	24 hours	Eye irritant	HSDB
Butanedioic acid, 2,3-dihydroxy-[R-(R*, R*)]-, disodium salt	None reported	Human	None reported	None reported	Not corrosive or irritating to eyes	ECHA

#### **Respiratory or skin sensitisation**

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

Mixture No data available.

Substance

Test data reported below.

#### Skin Sensitization Exposure Route:

Chemical name	Test method	Species	Results	Key literature references and sources for data
Butanedioic acid,	None reported	Human	No sensitisation responses were	ECHA

2,3-dihydroxy-[R-(R*,		observed.	
R*)]-, disodium salt			

#### **Respiratory Sensitization Exposure Route:**

Chemical name	Test method	Species	Results	Key literature references and sources for data
Butanedioic acid, 2,3-dihydroxy-[R-(R*, R*)]-, disodium salt	None reported	Human	No sensitisation responses were observed.	ECHA

#### 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 <b>Data</b>	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
Disodium carbonate	96 hours	Lepomis macrochirus	LC50	300 mg/L	IUCLID
Butanedioic acid, 2,3-dihydroxy-[R-(R* ,R*)]-, disodium salt		None reported	LC50	612000 mg/L	ECOSARS

Crustacea:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Disodium carbonate	48 Hours	Daphnia magna	EC50	265 mg/L	IUCLID
Butanedioic acid, 2,3-dihydroxy-[R-(R* ,R*)]-, disodium salt		None reported	LC50	263000 mg/L	ECOSARS

Algae:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Butanedioic acid, 2,3-dihydroxy-[R-(R*	96 hours	None reported	EC50	623770 mg/L	ECOSARS
,R*)]-, disodium salt					

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
<u>12.4. Mobility in soil</u>	
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
Disodium carbonate	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<br/>productsDispose of in accordance with local regulations. Dispose of waste in accordance with<br/>environmental legislation.

#### Waste disposal number of waste from residues/unused products

160506WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and<br/>discarded chemicals; laboratory chemicals, consisting of or containing hazardous<br/>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	Do not reuse empty containers.

## 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	

<u>ADR</u>	
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
IATA 14.1 UN number or ID number	Not regulated Not regulated
	5
14.1 UN number or ID number	Not regulated
14.1 UN number or ID number 14.2 Proper shipping name	Not regulated Not regulated
14.1 UN number or ID number 14.2 Proper shipping name 14.3 Transport hazard class(es)	Not regulated Not regulated Not regulated

#### 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 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
Disodium carbonate - 497-19-8	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 - 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	21-Feb-2006
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 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 CLP	Maximum limit value 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 IMDG	European Standard
IATA	International Maritime Dangerous Goods (IMDG) International Air Transport Association (IATA)
IATA-DGR	International Air Transport Association (IATA) 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

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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 lim	it
	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	
PNEC	Predicted No Effect Concentration (PNEC)	
REACH	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals Registration, Evaluation, Authorisation and Restriction of Chemicals [Regulation (EC) No.	
REACH	1907/2006])	
RID	Règlement international concernant le transport des marchandises dangereuses par chemi	in
	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+	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 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

#### Full text of H-Statements referred to under section 3

H319 - Causes serious eye irritation H332 - Harmful if inhaled

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