

## **SAFETY DATA SHEET**

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

Issue Date 07-Nov-2005 Revision Date 14-Feb-2023 Version 3.4

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

#### 1.1. Product identifier

Product Code(s) LCK653-1

Product Name LCK 653 Sulfid/Sulfide/Sulfure, Sample cuvette; 1/2

Unique Formula Identifier (UFI) S9Y6-9FMH-180J-YTNS

Molecular weight Not applicable

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

**Recommended Use** Water Analysis. Determination of sulfides.

Uses advised against No information available

#### 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

Corrosive to metals	Category 1 - (H290)
Aspiration hazard	Classification not possible
Skin corrosion/irritation	Category 1 Sub-category A - (H314)

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Serious eye damage/eye irritation	Category 1 - (H318)
Respiratory sensitisation	Classification not possible
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive toxicity	Classification not possible
Specific target organ toxicity — single exposure	Classification not possible

#### 2.2. Label elements

Contains Sulfuric acid 30%



Signal word Danger

#### **Hazard statements**

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

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

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

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

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

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

May be harmful if swallowed.

#### 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)
Water	7732-18-5	60 - 70%	Not classified	-	-	-

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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)
	231-791-2 -					
Sulfuric acid	7664-93-9 (016-020-00-8) 231-639-5 016-020-00-8	30 - 40%	Skin Corr. 1A - H314	Eye Irrit. 2 :: 5%<=C<15% Skin Corr. 1A :: C>=15% Skin Irrit. 2 :: 5%<=C<15%	-	-
1,4-Benzenediamine, N,N-dimethyl-, dihydrochloride	536-46-9 208-635-7 -	<1%	Acute Tox. 2 - H300 Acute Tox. 3 - H311 Eye Irrit. 2 - H319 Acute Tox. 3 - H331	-	-	-

Chemical name	REACH registration number	
Sulfuric acid	01-2119458838-20-xxxx	

## 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. Show this safety data sheet to the

doctor in attendance.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. If breathing is difficult, (trained personnel should) give oxygen. 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.

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.

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## **Section 5: FIREFIGHTING MEASURES**

5.1. Extinguishing media

surrounding environment.

**Unsuitable extinguishing media** No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Product itself does not burn. Thermal decomposition can lead to release of irritating gases and vapours. Reacts

violently with water. Contact with metals may evolve flammable hydrogen gas.

**Hazardous combustion products** None reported.

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.

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 Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Place in appropriate chemical waste container.

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. Ensure adequate

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ventilation. Avoid contact with skin, eyes or clothing. 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 after work. Barrier creams may help to protect the exposed areas of skin.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep 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
Sulfuric acid	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 ppm
7664-93-9	-	STEL: 0.15 mg/m <sup>3</sup>	STEL: 0.15 ppm

Derived No Effect Level (DNEL) No information available.

**Predicted No Effect Concentration** 

(PNEC)

No information available.

Additional information Other dangerous properties can not be excluded. Handle in accordance with good industrial

hygiene and safety practice.

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. 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. Barrier creams may help to protect the exposed areas of skin.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
Long term (repeated)	Wear protective Viton™ gloves	0,70 mm	>480 minutes

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Short term	Wear protective nitrile rubber	0,20 mm	>30 minutes
	gloves		

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate

certified respirators.

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 after work. 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

Colour colourless Odour Odourless

Odour threshold Not applicable

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Molecular weight Not applicable

**pH** < 1 @ 20 °C

Melting point / freezing point < -4 °C / 24.8 °F

Initial boiling point and boiling range > 100 °C / 212 °F

**Evaporation rate** No data available

Vapour pressure 15.002 mm Hg  $\,/\,$  2 kPa  $\,$  at  $\,$  20 °C  $\,/\,$  68 °F

Relative vapor density No data available

Specific Gravity No data available

Partition coefficient No data available

**Soil Organic Carbon-Water Partition** 

Coefficient

No data available

Autoignition temperature No data available

**Decomposition temperature**No data available

Dynamic viscosity No data available

Kinematic viscosity

No data available

Relative density 1.2 g/mL @ 20 °C

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#### Solubility(ies)

## Water solubility

Water solubility classification	Water solubility_	Water Solubility Temperature_
No information available	No data available	No information available

#### Solubility in other solvents

Chemical Name_	Solubility classification	<u>Solubility</u>	Solubility Temperature_
None reported	No information available	No data available	No information available

**Metal Corrosivity** 

Classified as corrosive to metal according to CLP criteria

**Steel Corrosion Rate** 

Aluminum Corrosion Rate No data available

**Explosive properties** 

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point No data available

**Flammability** 

Upper flammability limit:No data availableLower flammability limitNo 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** Corrosive to metal.

10.2. Chemical stability

**Stability** Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Reacts violently with water.

**Hazardous polymerisation** Hazardous polymerisation does not occur.

10.4. Conditions to avoid

**Conditions to avoid** Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

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**Incompatible materials** Oxidising agent. Bases.

#### 10.6. Hazardous decomposition products

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 No data available.

## **Acute Toxicity Estimate (ATE)**

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

ATEmix (oral)	2,982.14 mg/kg
ATEmix (inhalation-dust/mist)	298.21 mg/l

#### 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

Causes severe burns.

Mixture No data available.

Substance No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sulfuric acid	Existing human experience	Human	None reported	None reported	Corrosive to skin	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 No data available.

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

Respiratory or skin sensitisation

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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.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sulfuric acid	Human TD∟₀	0.144 mg/L	5 minutes	Lungs, Thorax, or Respiration Dyspnea	RTECS

#### STOT - repeated exposure

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

Mixture No data available.

Substance No data available.

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Sulfuric acid	Human	0.003 mg/L	168 days	Musculoskeletal	RTECS
	TCLo			Changes in teeth and supporting	
				structures	

## 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.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature
			_	-		references and
						sources for data
Sulfuric acid	Cytogenetic analysis	Hamster ovary	4 mmol/L	None reported	Positive test result for	No information available
					mutagenicity	

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.

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Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Sulfuric acid	Rabbit	0.02 mg/L	7 hours	Specific Developmental	No information available
	TCLo	_		Abnormalities	
				Musculoskeletal system	

#### **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**

12.1. Toxicity

**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.

**Mixture** 

Acute aquatic toxicity: No data available.

Aquatic Chronic Toxicity: No data available.

**Substance** 

Acute aquatic toxicity: No data available.

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 No data available

12.4. Mobility in soil

Soil Organic Carbon-Water Partition No data available

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
Sulfuric acid	The substance is not PBT / vPvB

#### 12.6. Endocrine disrupting properties

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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

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Our local agencies will accept used cuvettes to ensure their

proper disposal.

#### 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

#### **IMDG**

14.1 UN number or ID number UN3316 14.2 Proper shipping name Not regulated

14.3 Transport hazard class(es)

14.4 Packing Group Not regulated 14.5 Marine pollutant Not applicable 251, 340 14.6 Special precautions for user **EmS-No** F-A, S-P 14.7. Transport in bulk according to Not applicable

Annex II of MARPOL and the IBC

Code

#### ADR

UN3316 14.1 UN number or ID number CHEMICAL KIT 14.2 Proper shipping name

14.3 Transport hazard class(es) 9 Labels 14.4 Packing Group Ш

Description UN3316, CHEMICAL KIT, 9, II, (E)

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14.5 Environmental hazardsNot applicable14.6 Special precautions for user251, 340Classification codeM11Tunnel restriction code(E)

#### IATA

14.1 UN number or ID numberUN331614.2 Proper shipping nameNot regulated14.3 Transport hazard class(es)9

14.4 Packing group

14.5 Environmental hazards Not applicable
14.6 Special precautions for user ERG Code Not applicable
A163, A44
9L

#### Additional information

This product forms part of a kit. Information in this section relates to the kit as a whole.

## **Section 15: REGULATORY INFORMATION**

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

#### **National regulations**

## **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 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
Sulfuric acid - 7664-93-9	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)

**France** 

Occupational Illnesses (R-463-3, France)

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Chemical name	French RG number	Title
Sulfuric acid	RG 5,RG 14,RG 15,RG	-
7664-93-9	15bis,RG 20bis	
	RG 14,RG 20bis,RG 65	

**International Inventories** 

**EINECS/ELINCS** Complies Complies **TSCA DSL/NDSL** Complies Does not comply **ENCS** Complies **IECSC KECL - Existing substances** Complies Complies **PICCS 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-Nov-2005

 Revision Date
 14-Feb-2023

**Revision Note** New SDS, SDS sections updated, 3, 9, 11, 12.

## Key or legend to abbreviations 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 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 (The European Chemicals Agency)

EC50 Effective Concentration to 50% of a test population

EEC European Economic Community

EN European Standard

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IMDG International Maritime Dangerous Goods (IMDG)
IATA 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 (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 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])

RID Règlement international concernant le transport des marchandises dangereuses par chemin

de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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

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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

H300 - Fatal if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H331 - Toxic if inhaled

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 Not determined

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

**End of Safety Data Sheet** 

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