

according to UK REACH Regulation

### Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 1 of 13

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Sulfuric Acid 2.5 mol/l

UFI: 3RK4-219U-M00J-X4TG

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

#### Use of the substance/mixture

Use as laboratory reagent.

### Uses advised against

Any non-intended use.

# 1.3. Details of the supplier of the safety data sheet

Company name: MORPHISTO GmbH
Street: Schumannstr. 142/144
Place: D-63069 Offenbach

Telephone: +49 (0) 69 / 400 3019-60 Telefax: +49 (0) 69 / 400 3019-64

E-mail: info@morphisto.de Contact person: Morphisto GmbH

E-mail: gefahrstoffmanagement@morphisto.de

Internet: http://www.morphisto.de

**1.4. Emergency telephone** Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

number:

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

# **GB CLP Regulation**

Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

# 2.2. Label elements

# **GB CLP Regulation**

# Hazard components for labelling

sulphuric acid...%

Signal word: Danger

Pictograms:



# **Hazard statements**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

# **Precautionary statements**

P234 Keep only in original packaging.
P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

water or shower.



according to UK REACH Regulation

Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 2 of 13

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

Special labelling of certain mixtures

EUH071 Corrosive to the respiratory tract.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:

P310



#### **Hazard statements**

H314

# **Precautionary statements**

P260-P280-P303+P361+P353-P305+P351+P338-P310

#### 2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

# **SECTION 3: Composition/information on ingredients**

# 3.2. Mixtures

## **Chemical characterization**

aqueous solution

### Relevant ingredients

CAS No	Chemical name	Chemical name			
	EC No	Index No	REACH No		
	Classification (GB CLP Regulation	)			
7732-18-5	AQUA (Water)			75 - < 80 %	
	231-791-2				
7664-93-9	sulphuric acid%	sulphuric acid%			
	231-639-5	016-020-00-8			
	Met. Corr. 1, Skin Corr. 1A, Eye Dam. 1; H290 H314 H318				

Full text of H and EUH statements: see section 16.

## Specific Conc. Limits. M-factors and ATE

CAS No	EC No	Chemical name	Quantity		
	Specific Conc. I	Limits, M-factors and ATE			
7732-18-5	231-791-2	AQUA (Water)	75 - < 80 %		
	oral: LD50 = >8	oral: LD50 = >89800 mg/kg			
7664-93-9	231-639-5	39-5 sulphuric acid%			
	oral: LD50 = 2	oral: LD50 = 2140 mg/kg Skin Corr. 1A; H314: >= 15 - 100 Skin Irrit. 2; H315: >= 5 - < 15			
	Eye Irrit. 2; H31	Eye Irrit. 2; H319: >= 5 - < 15			



according to UK REACH Regulation

#### Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 3 of 13

#### **Further Information**

This product contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.

### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### **General information**

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove contaminated, saturated clothing immediately.

#### After inhalation

Provide fresh air. Medical treatment necessary. Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Where appropriate artificial ventilation. Call a physician immediately.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

## After ingestion

Observe risk of aspiration if vomiting occurs. Adverse human health effects and symptoms: Gastric perforation. Do not allow a neutralisation agent to be drunk. Rinse mouth. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Do not attempt to neutralise with alkalis, do not give active charcoal! Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Corrosion. Gastric perforation. vomiting. Cough. shortage of breath. Risk of serious damage to eyes. Danger of blindness!

# 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

### Unsuitable extinguishing media

Full water jet

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

Non-flammable. In case of fire may be liberated: Sulphur oxides

### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

In case of fire: Use acid-proof equipment only.

In case of fire and/or explosion do not breathe fumes.

# **Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### **SECTION 6: Accidental release measures**



according to UK REACH Regulation

#### Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 4 of 13

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Ventilate affected area. Remove persons to safety.

## For non-emergency personnel

Clear danger zone. Follow emergency plan. Consult an expert.

### For emergency responders

In case of fire: Use acid-proof equipment only.

# 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Before discharge into sewage plants the product normally needs to be neutralised.

#### 6.3. Methods and material for containment and cleaning up

#### For containment

Cover drains.

#### For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### Other information

Ventilate affected area. Clean contaminated objects and areas thoroughly observing environmental regulations.

#### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

# Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation. Use extractor hood (laboratory). Avoid contact with skin, eyes and clothes. Wear suitable protective clothing. (See section 8.)

When diluting/dissolving, always have the water ready first, then slowly stir in the product. Always close containers tightly after the removal of product. Clear contaminated areas thoroughly.

#### Advice on protection against fire and explosion

Usual measures for fire prevention.

### Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product.

# Further information on handling

Wear personal protection equipment (refer to section 8). Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Street clothing should be stored separately from work clothing. When using do not eat, drink, smoke, sniff. Wash hands and face before breaks and after work and take a shower if necessary. Draw up and observe skin protection programme. Protect skin by using skin protective cream.

# 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Metal. Keep/Store only in original container.



according to UK REACH Regulation

### Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 5 of 13

Make sure spills can be contained, e.g. in sump pallets or kerbed areas. Keep away from: alkali Unsuitable container/equipment material: Metal, base

# Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Radioactive substances. Infectious substances.

### Further information on storage conditions

Protect against: UV-radiation/sunlight., Heat, Frost, Humidity

Recommended storage temperature: 15-25°C.

# 7.3. Specific end use(s)

See section 1.

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7664-93-9	Sulphuric acid (mist)	-	0.05		TWA (8 h)	WEL

#### **DNEL/DMEL values**

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
7664-93-9	sulphuric acid%					
Worker DNEL, long-term		inhalation	local	0,05 mg/m³		
Worker DNEL, acute		inhalation	local	0,1 mg/m³		

# **PNEC** values

CAS No	Substance		
Environmental compartment Value			
7664-93-9 sulphuric acid%			
Freshwater 0,003 mg/l			
Marine water 0		0 mg/l	
Freshwater sediment 0,002		0,002 mg/kg	
Marine sediment		0,002 mg/kg	
Micro-organisms in sewage treatment plants (STP)  8,8 mg/l			

### 8.2. Exposure controls





# Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Technical measures and the application of suitable work processes have priority over personal protection equipment. Provide washing facilities at the workplace, provide an eye shower or eyewash bottle and mark them. Provide adequate ventilation as well as local exhaustion at critical locations. Use extractor hood (laboratory).

Individual protection measures, such as personal protective equipment



according to UK REACH Regulation

### Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 6 of 13

## Eye/face protection

Suitable eye protection: goggles. Safety goggles with side protection. In case of increased risk add protective face shield. (EN 166)

#### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time >= 8 h

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. Protect skin by using skin protective cream. Draw up and observe skin protection programme.

#### Skin protection

Use of protective clothing. Lab apron. Material, acid-resistant

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Respiratory protection necessary at:

exceeding exposure limit values

insufficient ventilation

generation/formation of aerosols

Suitable respiratory protective equipment: Combination filtering device (EN 14387) Type: ABEK-P2.

Identification color: white/brown/yellow/green.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Details on the requirements for use and maximum concentrations can be found in the "Rules for the use of respiratory protective devices" (BGR 190).

# **Environmental exposure controls**

Do not allow uncontrolled discharge of product into the environment.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: colourless, clear

Odour: stinging

Melting point/freezing point:

Boiling point or initial boiling point and

not determined
not determined

boiling range:

Flammability:

Lower explosion limits:

Upper explosion limits:

not determined

Upper explosion limits:

not determined

Flash point:

not determined

Auto-ignition temperature:

not determined

Decomposition temperature:

not determined

pH-Value (at 20 °C):

Uiscosity / kinematic:

not determined



### according to UK REACH Regulation

# Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 7 of 13

Water solubility: miscible

(at 20 °C)

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined Vapour pressure: 23 hPa

(at 20 °C)

Vapour pressure: 123 hPa

(at 50 °C)

Density (at 20 °C): 1,12 g/cm³
Relative vapour density: not determined
Particle characteristics: not applicable

#### 9.2. Other information

## Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Sustaining combustion: No data available

Self-ignition temperature

Solid: not determined Gas: not determined

Oxidizing properties

none

# Other safety characteristics

Evaporation rate:

Solvent separation test:

Solid content:

Pour point:

Viscosity / dynamic:

Flow time:

not determined

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

Corrosive to metals. Possibility of hazardous reactions. Oxidizing agents, strong.

# 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature. Thermal decomposition: Keep away from heat.

## 10.3. Possibility of hazardous reactions

Base, Peroxides, Oxidizing agent. Exothermic reaction with: alkali. Reducing agent. aldehydes. Alkali metals. Carbide. Alkaline earth metals. peroxides. Phosphorus oxides. Water. Hydrogen peroxide. Nitrates.

Perchlorates. Chromium oxides. Ammonia. Nitrile. metals. organic materials. Chlorates. Bromate.

permanganates, e.g. potassium permanganate

### 10.4. Conditions to avoid

Protect from direct sunlight.

Keep away from heat.

# 10.5. Incompatible materials

Metal. Keep away from: Base, Oxidizing agent, Peroxides. alkali, Reducing agent, organic materials. metals. Amines.

# 10.6. Hazardous decomposition products

In case of fire may be liberated: Sulphur oxides



according to UK REACH Regulation

### Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 8 of 13

## **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in GB CLP Regulation

#### **Acute toxicity**

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

#### ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name	Chemical name					
	Exposure route	Dose		Species	Source	Method	
7732-18-5	AQUA (Water)						
	oral	LD50 mg/kg	>89800		Food Research. Vol. 21, Pg. 348, 1956		
7664-93-9	sulphuric acid%	sulphuric acid%					
	oral	LD50 mg/kg	2140	Rat	suppliers SDS.		

### Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Corrosive to the respiratory tract.

# Sensitising effects

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

## Carcinogenic/mutagenic/toxic effects for reproduction

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

#### STOT-single exposure

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

### STOT-repeated exposure

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

#### Aspiration hazard

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

#### 11.2. Information on other hazards

# **Endocrine disrupting properties**

This product does not contain any substance that has endocrine disrupting properties in humans as no ingredient meets the criteria.

#### Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

# **SECTION 12: Ecological information**

# 12.1. Toxicity

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

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
7664-93-9	sulphuric acid%						
	Acute algae toxicity	ErC50 mg/l	>100	72 h		suppliers SDS.	
	Acute crustacea toxicity	EC50 mg/l	>100	48 h		suppliers SDS.	



according to UK REACH Regulation

#### Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 9 of 13

### 12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

## 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

### 12.4. Mobility in soil

The product has not been tested.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

No information available.

#### **Further information**

Avoid release to the environment.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

#### Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

# List of Wastes Code - residues/unused products

060704 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of halogens and halogen chemical processes; solutions and acids, for example contact acid; hazardous waste

#### List of Wastes Code - used product

060704 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of halogens and halogen chemical processes; solutions and acids, for example contact acid; hazardous waste

# List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately

collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

#### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

# **SECTION 14: Transport information**

# Land transport (ADR/RID)

14.1. UN number or ID number: UN 2796

14.2. UN proper shipping name: SULPHURIC ACID

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8





MORPHISTO	Safety Data Sfieet					
Laborchemikalien & Histologieservice	according to UK REACH Regulation					
Sulfuric Acid 2.5 mol/l						
Revision date: 13.02.2024	Product code: 12856.xxxxx	Page 10 of 13				
Classification code:	C1					
Limited quantity:	1 L					
Excepted quantity:	E2					
Transport category:	2					
Hazard No:	80					
Tunnel restriction code:	E					
Inland waterways transport (ADN)						
14.1. UN number or ID number:	UN 2796					
14.2. UN proper shipping name:	Sulphuric acid					
14.3. Transport hazard class(es):	8					
14.4. Packing group:	II					
Hazard label:	8					
	8					
Classification code:	C1					
Limited quantity:	1 L					
Excepted quantity:	E2					
· · · · ·	LZ					
Marine transport (IMDG)	LIN 0700					
14.1. UN number or ID number:	UN 2796					
14.2. UN proper shipping name:	SULPHURIC ACID					
14.3. Transport hazard class(es):	8					
14.4. Packing group:	II					
Hazard label:	8					
	8					
Special Provisions:	-					
Limited quantity:	1 L					
Excepted quantity:	E2					
EmS:	F-A, S-B					
Segregation group:	1 - acids					
Air transport (ICAO-TI/IATA-DGR)						
14.1. UN number or ID number:	UN 2796					
14.2. UN proper shipping name:	SULPHURIC ACID					
14.3. Transport hazard class(es):	8					
14.4. Packing group:						
Hazard label:	8					
	Â					



Limited quantity Passenger: 0.5 L

Passenger LQ: Y840

Excepted quantity: E2

IATA-packing instructions - Passenger:

IATA-max. quantity - Passenger:

IATA-packing instructions - Cargo:

IATA-max. quantity - Cargo:

30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user



according to UK REACH Regulation

## Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 11 of 13

Warning: strongly corrosive. Refer to section 6-8

### 14.7. Maritime transport in bulk according to IMO instruments

not relevant

# **SECTION 15: Regulatory information**

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

### **EU** regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Information according to Directive

Not subject to 2012/18/EU (SEVESO III)

2012/18/EU (SEVESO III):

Marketing and use of explosives precursors (Regulation (EU) 2019/1148):

Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

#### **Additional information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

### **National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

#### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out: sulphuric acid...%

### **SECTION 16: Other information**

# Changes

Rev. 2,0; 13.02.2024; Individual safety data sheet based on 14872.xxxxx



## according to UK REACH Regulation

#### Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 12 of 13

### Abbreviations and acronyms

Met. Corr: Corrosive to metals Skin Corr: Skin corrosion Eye Dam: Eye damage

ADR: Accord européen sur le transport des marchandises dangereuses par Route

CAS Chemical Abstracts Service DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level NOAEC: No observed adverse effect level

NTP: National Toxicology Program

N/A: not applicable

OSHA: Occupational Safety and Health Administration

PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de

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

SARA: Superfund Amendments and Reauthorization Act

SVHC: substance of very high concern TRGS Technische Regeln fuerGefahrstoffe TSCA: Toxic Substances Control Act VOC: Volatile Organic Compounds

VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe

WGK: Wassergefaehrdungsklasse

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

**UN: United Nations** 

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail



according to UK REACH Regulation

#### Sulfuric Acid 2.5 mol/l

Revision date: 13.02.2024 Product code: 12856.xxxxx Page 13 of 13

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation

intérieures)

EmS: Emergency Schedules MFAG: Medical First Aid Guide

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu EC/EEC: European Community/European Economic Community

EU: European Union M-factor: Multiplying factor

IATA: International Air Transport Association DGR: Dangerous Goods Regulations

ICAO: International Civil Aviation Organization

TI: Technical Instructions

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

#### Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1A; H314	Calculation method
Eye Dam. 1; H318	Calculation method

### Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage. EUH071 Corrosive to the respiratory tract.

#### **Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)