

Safety Data Sheet

according to UK REACH Regulation

Sulphuric acid 96 -98%, conc.

Revision date: 17.05.2023

Product code: 15915.xxxxx

Page 2 of 11

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/doctor.
P390	Absorb spillage to prevent material damage.

Labelling of packages where the contents do not exceed 125 ml
Signal word: Danger

Pictograms:

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
3.1. Substances

Sum formula:	H ₂ O ₄ S
Molecular weight:	98,07g/mol

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
7664-93-9	sulphuric acid			95 - < 100 %
	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. Limits, M-factors and ATE		
7664-93-9	231-639-5	sulphuric acid	95 - < 100 %
	oral: LD50 = 2140 mg/kg Skin Corr. 1A; H314: >= 15 - 100 Skin Irrit. 2; H315: >= 5 - < 15 Eye Irrit. 2; H319: >= 5 - < 15		

SECTION 4: First aid measures
4.1. Description of first aid measures

Safety Data Sheet

according to UK REACH Regulation

Sulphuric acid 96 -98%, conc.

Revision date: 17.05.2023

Product code: 15915.xxxxx

Page 3 of 11

General information

First aider: Pay attention to self-protection! Avoid contact with skin, eyes and clothes. Take off immediately all contaminated clothing and wash it before reuse. Remove affected person from the danger area and lay down.

After inhalation

Provide fresh air. Medical treatment necessary.

After contact with skin

Remove mechanically (e.g. dab away using wadding or cellulose material) then thoroughly wash the affected skin with a mild cleansing agent and water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

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.

After ingestion

Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk. Let water be drunk in little sips (dilution effect).

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

Following inhalation: Cough. Chest pain. shortage of breath. Respiratory complaints. Irritant. Following ingestion: Gastrointestinal complaints. Gastric perforation. vomiting. strongly corrosive. Irritation and etching. Following skin contact: Causes severe burns. Causes poorly healing wounds. After eye contact: 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**

Suitable: Carbon dioxide (CO₂), alcohol-resistant foam, dry extinguishing agent, water spray. Adjust extinguishing measures to the environment. Suitable: Carbon dioxide (CO₂), alcohol-resistant foam, dry extinguishing agent, water spray. Adjust extinguishing measures to the environment.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-combustible corrosive substances Non-combustible corrosive substances Non-combustible corrosive substances In case of fire may be liberated: Sulphur oxides(SO_x).

5.3. Advice for firefighters

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

Additional information

Use water spray jet to protect personnel and to cool endangered containers. 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**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.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Clean contaminated articles and floor according to the environmental legislation.

Safety Data Sheet

according to UK REACH Regulation

Sulphuric acid 96 -98%, conc.

Revision date: 17.05.2023

Product code: 15915.xxxxx

Page 4 of 11

6.3. Methods and material for containment and cleaning up**For containment**

Cover drains.

Other information

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. Seal off the sewer.

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**

Use extractor hood (laboratory). Provide adequate ventilation. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Handle with care - avoid bumps, friction and impact. Always close containers tightly after the removal of product. Wear personal protection equipment (refer to section 8). Clear contaminated areas thoroughly.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

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.

Further information on handling

Wash hands and face before breaks and after work and take a shower if necessary. Draw up and observe skin protection programme. Street clothing should be stored separately from work clothing. Take off contaminated clothing and wash it before reuse. When using do not eat, drink, smoke, sniff.

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 exhaust at critical locations. Unsuitable container/equipment material: Metal Suitable material: Acid-resistant.

Hints on joint storage

Keep away from: aldehydes. Alkalis (alkalis). Alkali metals. metals. Carbide. Alkaline earth metals. peroxides, for example hydrogen peroxide. phosphoric and phosphorous acid. Water. Hydrogenium peroxide. Nitrates. Perchlorates. Chromium oxides. Ammonia. Nitrile. halogenated hydrocarbons. organic materials. Chlorates. phosphorus. permanganates, e.g. potassium permanganate. Bromate.

Further information on storage conditions

Keep away from heat. UV-radiation/sunlight. Keep container tightly closed. Store in a well-ventilated place.

Recommended storage temperature: 15 - 25°C.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Safety Data Sheet

according to UK REACH Regulation

Sulphuric acid 96 -98%, conc.

Revision date: 17.05.2023

Product code: 15915.xxxxx

Page 5 of 11

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7664-93-9	Sulphuric acid (mist)	-	0.05		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
7664-93-9	sulphuric acid			
Worker DNEL, long-term		inhalation	local	0,05 mg/m ³
Worker DNEL, acute		inhalation	local	0,1 mg/m ³

PNEC values

CAS No	Substance	Value
7664-93-9	sulphuric acid	
Freshwater		0,003 mg/l
Marine water		0 mg/l
Freshwater sediment		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

Provide adequate ventilation. Use extractor hood (laboratory). 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.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: Eye glasses with side protection Eye-shade.

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.

Suitable material: FKM (fluororubber). Thickness of material:0,7mm Breakthrough time>480min.

Skin protection

Use of protective clothing:Acid protective suit or work clothing with apron.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. When working with acids: Respiratory protection is required at: aerosol or mist formation. Type: ABEK (combination filter for gases and vapours, identification colour: brown/grey/yellow/green).

Safety Data Sheet

according to UK REACH Regulation

Sulphuric acid 96 -98%, conc.

Revision date: 17.05.2023

Product code: 15915.xxxxx

Page 6 of 11

Environmental exposure controls

Do not allow to enter into surface water or drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	colourless
Odour:	odourless
Melting point/freezing point:	-15 °C
Boiling point or initial boiling point and boiling range:	295-315 °C
Flammability:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	>100 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value (at 20 °C):	0-1
Viscosity / kinematic: (at 20 °C)	14,62 mm ² /s
Water solubility:	easily soluble
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	< 0,01 hPa
Density:	1,84 g/cm ³
Relative vapour density:	not determined

9.2. Other information**Information with regard to physical hazard classes**

Explosive properties

The product is not: Explosive.

Oxidizing properties

Not oxidising.

SECTION 10: Stability and reactivity**10.1. Reactivity**

Corrosive to metals. Possibility of hazardous reactions. May cause fire or explosion; strong oxidiser.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Base, Peroxides, Oxidizing agent. see section:7.2!

10.4. Conditions to avoid

Keep away from heat. s. SECTION 7: Handling and storage

10.5. Incompatible materials

Metal. Keep away from: Base, Oxidizing agent, Peroxides. see section: 7.2!

10.6. Hazardous decomposition products

Decomposition products in case of fire: see section 5.

Safety Data Sheet

according to UK REACH Regulation

Sulphuric acid 96 -98%, conc.

Revision date: 17.05.2023

Product code: 15915.xxxxx

Page 7 of 11

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.

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
7664-93-9	sulphuric acid					
	oral	LD50 mg/kg	2140	Rat	suppliers SDS.	

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

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.

Information on likely routes of exposure

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

After inhalation: cough, pain, shortness of breath and general respiratory problems, irritant effects, After ingestion: Gastrointestinal discomfort, vomiting, corrosivity, gastric perforation, After skin contact: Causes severe burns, Causes poorly healing wounds, After eye contact: Risk of serious eye damage, Risk of blindness.

11.2. Information on other hazards
Endocrine disrupting properties

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

SECTION 12: Ecological information
12.1. Toxicity

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

The product is not: Ecotoxic.

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.	

12.2. Persistence and degradability

The product has not been tested.

Safety Data Sheet

according to UK REACH Regulation

Sulphuric acid 96 -98%, conc.

Revision date: 17.05.2023

Product code: 15915.xxxxx

Page 8 of 11

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of UK REACH.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment. slightly hazardous to water.

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

List of Wastes Code - residues/unused products

060101 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; sulphuric acid and sulphurous acid; hazardous waste

List of Wastes Code - used product

060101 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; sulphuric acid and sulphurous acid; hazardous waste

List of Wastes Code - contaminated packaging

060101 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; sulphuric acid and sulphurous acid; hazardous waste

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information**Land transport (ADR/RID)**

<u>14.1. UN number or ID number:</u>	UN 1830
<u>14.2. UN proper shipping name:</u>	SULPHURIC ACID
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	II
Hazard label:	8



Classification code:	C1
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

Marine transport (IMDG)

<u>14.1. UN number or ID number:</u>	UN 1830
---	---------

Safety Data Sheet

according to UK REACH Regulation

Sulphuric acid 96 -98%, conc.

Revision date: 17.05.2023

Product code: 15915.xxxxx

Page 9 of 11

14.2. UN proper shipping name: SULPHURIC ACID
14.3. Transport hazard class(es): 8
14.4. Packing group: II
 Hazard label: 8



Special Provisions: -
 Limited quantity: 1 L
 Excepted quantity: E2
 EmS: F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1830
14.2. UN proper shipping name: SULPHURIC ACID
14.3. Transport hazard class(es): 8
14.4. Packing group: II
 Hazard label: 8



Limited quantity Passenger: 0.5 L
 Passenger LQ: Y840
 Excepted quantity: E2
 IATA-packing instructions - Passenger: 851
 IATA-max. quantity - Passenger: 1 L
 IATA-packing instructions - Cargo: 855
 IATA-max. quantity - Cargo: 30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: strongly corrosive.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of child-bearing age.

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

Skin resorption/Sensitization: Permeates easily through outer skin and causes poisoning. Causes allergic hypersensitivity reactions.

Safety Data Sheet

according to UK REACH Regulation

Sulphuric acid 96 -98%, conc.

Revision date: 17.05.2023

Product code: 15915.xxxxx

Page 10 of 11

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**

This data sheet contains changes from the previous version in section(s): 1,2,4,5,6,7,9,10,11,12,13,14,15,16.

Rev.1,0; 14.12.2020; Initial release nachsuppliers SDS.

Rev.1,1; 17.05.2023; general adjustment(s)

Abbreviations and acronyms

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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

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

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)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

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

IBC: Intermediate Bulk Container

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

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.

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

Safety Data Sheet

according to UK REACH Regulation

Sulphuric acid 96 -98%, conc.

Revision date: 17.05.2023

Product code: 15915.xxxxx

Page 11 of 11

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.