# Safety data sheet

***according to 1907/2006/EC, Article 31 Commission regulation (EU) 2020/878***

*Printing date 10.07.2023* *Version number 5.0 (replaces version 4.0)* *Revision: 10.07.2023*

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

· ***1.1 Product identifier***

· ***Trade name:*** Sulfuric acid, solution 4 mol/l (8 N), for COD determination, according to ISO 6060

· ***Article number:*** AC2075

· ***1.2 Relevant identified uses of the substance or mixture and uses advised against***
No further relevant information available.

· ***Application of the substance / the preparation:*** Laboratory reagent

· ***1.3 Details of the supplier of the safety data sheet***

· ***Manufacturer/Supplier:***
Scharlab, S.L.
C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa
08181 Sentmenat (Barcelona) SPAIN
Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65
email: scharlab@scharlab.com
Internet Web Site: www.scharlab.com

· ***Regional representation:***
Scharlab, S.L.
C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa
08181 Sentmenat (Barcelona) SPAIN
Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65
email: scharlab@scharlab.com
Internet Web Site: www.scharlab.com

· ***Further information obtainable from:*** Technical Department

· ***1.4 Emergency telephone number:***
Toxicological Information National Institute of Toxicology and Forensic Sciences: + 34 91 562 04 20. The information will be provided (24h/365 days)
Please contact the regional Scharlab distributor/dealer in your country
During normal opening times: Scharlab, S.L. (+34) 93 715 18 11

## SECTION 2: Hazards identification

· ***2.1 Classification of the substance or mixture***

· ***Classification according to Regulation (EC) No 1272/2008***

corrosion

Met. Corr.1 H290 May be corrosive to metals.
Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

· ***2.2 Label elements***

· ***Labelling according to Regulation (EC) No 1272/2008***
The product is classified and labelled according to the GB CLP regulation.

· ***Hazard pictograms***

GHS05

· ***Signal word*** Danger

· ***Hazard-determining components of labelling:***
sulphuric acid

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· ***Hazard statements***
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
· ***Precautionary statements***
P260 Do not breathe dusts or mists.
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.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· ***2.3 Other hazards***
· ***Results of PBT and vPvB assessment***
· ***PBT:*** Not applicable.
· ***vPvB:*** Not applicable.

## SECTION 3: Composition/information on ingredients

· ***3.2 Mixtures***
· ***Description:*** Aqueous solution

· ***Dangerous components:***

| | | |
|---|---|---|
| CAS: 7664-93-9<br>EINECS: 231-639-5<br>Reg.nr.: 01-2119458838-20-XXXX | sulphuric acid<br>Met. Corr.1, H290; Skin Corr. 1A, H314<br>Specific concentration limits:<br>Skin Corr. 1A; H314: C ≥ 15%<br>Skin Irrit. 2; H315: 5 % ≤ C < 15 %<br>Eye Irrit. 2; H319: 5 % ≤ C < 15 % | 25-50% |

· ***Additional information:*** For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

· ***4.1 Description of first aid measures***
· ***General information:*** Immediately remove any clothing soiled by the product.
· ***After inhalation:*** In case of unconsciousness place patient stably in side position for transportation.
· ***After skin contact:*** Immediately wash with water and soap and rinse thoroughly.
· ***After eye contact:***
Rinse opened eye for several minutes under running water. Then consult a doctor.
· ***After swallowing:*** Drink plenty of water and provide fresh air. Call for a doctor immediately.
· ***4.2 Most important symptoms and effects, both acute and delayed***
No further relevant information available.
· ***4.3 Indication of any immediate medical attention and special treatment needed***
No further relevant information available.

## SECTION 5: Firefighting measures

· ***5.1 Extinguishing media***
· ***Suitable extinguishing agents:***
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· ***5.2 Special hazards arising from the substance or mixture***
No further relevant information available.

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· ***5.3 Advice for firefighters***
· ***Protective equipment:*** No special measures required.

## SECTION 6: Accidental release measures

· ***6.1 Personal precautions, protective equipment and emergency procedures***
Wear protective equipment. Keep unprotected persons away.
· ***6.2 Environmental precautions:***
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· ***6.3 Methods and material for containment and cleaning up:***
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· ***6.4 Reference to other sections***
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

## SECTION 7: Handling and storage

· ***7.1 Precautions for safe handling***
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Do not eat, drink or smoke during use.
Wash hands after handling.
· ***Information about fire - and explosion protection:*** No special measures required.

· ***7.2 Conditions for safe storage, including any incompatibilities***
· ***Storage:***
· ***Requirements to be met by storerooms and receptacles:*** No special requirements.
· ***Information about storage in one common storage facility:*** Not required.
· ***Further information about storage conditions:***
Keep container tightly sealed.
See product label for storage temperature.
· ***7.3 Specific end use(s)*** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

· ***8.1 Control parameters***
· ***Ingredients with limit values that require monitoring at the workplace:***

**7664-93-9 sulphuric acid**
WEL Long-term value: 0.05* mg/m³
*mist: defined as thoracic fraction
· ***Additional information:*** The lists valid during the making were used as basis.

· ***8.2 Exposure controls***
· ***Appropriate engineering controls*** No further data; see section 7.
· ***Individual protection measures, such as personal protective equipment***
· ***General protective and hygienic measures:***
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing

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Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· ***Respiratory protection:***
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· ***Hand protection***

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· ***Material of gloves***
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· ***Penetration time of glove material***
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· ***Eye/face protection***

Tightly sealed goggles

## SECTION 9: Physical and chemical properties

| | |
|---|---|
| · ***9.1 Information on basic physical and chemical properties*** | |
| · ***General Information*** | |
| · ***Physical state*** | Fluid |
| · ***Colour:*** | Colourless |
| · ***Odour:*** | Odourless |
| · ***Odour threshold:*** | Not determined. |
| · ***Melting point/freezing point:*** | Undetermined. |
| · ***Boiling point or initial boiling point and boiling range*** | 100 °C |
| · ***Flammability*** | Not applicable. |
| · ***Lower and upper explosion limit*** | |
| · ***Lower:*** | Not determined. |
| · ***Upper:*** | Not determined. |
| · ***Flash point:*** | Not applicable. |
| · ***Decomposition temperature:*** | Not determined. |
| · ***pH*** | Not determined. |
| · ***Viscosity:*** | |
| · ***Kinematic viscosity*** | Not determined. |
| · ***Dynamic:*** | Not determined. |

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| | |
|---|---|
| · ***Solubility*** | |
| · ***water:*** | Fully miscible. |
| · ***Partition coefficient n-octanol/water (log value)*** | Not determined. |
| · ***Vapour pressure at 20 °C:*** | 23 hPa |
| · ***Density and/or relative density*** | |
| · ***Density at 20 °C:*** | 1.3295 g/cm³ |
| · ***Relative density*** | Not determined. |
| · ***Vapour density*** | Not determined. |
| · ***9.2 Other information*** | |
| · ***Appearance:*** | |
| · ***Form:*** | Fluid |
| · ***Important information on protection of health and environment, and on safety.*** | |
| · ***Ignition temperature:*** | Product is not selfigniting. |
| · ***Explosive properties:*** | Product does not present an explosion hazard. |
| · ***Solvent content:*** | |
| · ***Water:*** | 60.8 % |
| · ***Solids content:*** | 39.2 % |
| · ***Change in condition*** | |
| · ***Evaporation rate*** | Not determined. |
| · ***Information with regard to physical hazard classes*** | |
| · ***Explosives*** | Void |
| · ***Flammable gases*** | Void |
| · ***Aerosols*** | Void |
| · ***Oxidising gases*** | Void |
| · ***Gases under pressure*** | Void |
| · ***Flammable liquids*** | Void |
| · ***Flammable solids*** | Void |
| · ***Self-reactive substances and mixtures*** | Void |
| · ***Pyrophoric liquids*** | Void |
| · ***Pyrophoric solids*** | Void |
| · ***Self-heating substances and mixtures*** | Void |
| · ***Substances and mixtures, which emit flammable gases in contact with water*** | Void |
| · ***Oxidising liquids*** | Void |
| · ***Oxidising solids*** | Void |
| · ***Organic peroxides*** | Void |
| · ***Corrosive to metals*** | May be corrosive to metals. |
| · ***Desensitised explosives*** | Void |

## SECTION 10: Stability and reactivity

· ***10.1 Reactivity*** No further relevant information available.
· ***10.2 Chemical stability***
· ***Thermal decomposition / conditions to be avoided:***
No decomposition if used according to specifications.
· ***10.3 Possibility of hazardous reactions*** No dangerous reactions known.
· ***10.4 Conditions to avoid*** No further relevant information available.
· ***10.5 Incompatible materials:*** No further relevant information available.

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· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

## SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity** Based on available data, the classification criteria are not met.
· **Skin corrosion/irritation** Causes severe skin burns and eye damage.
· **Serious eye damage/irritation** Causes serious eye damage.
· **11.2 Information on other hazards**
· **Endocrine disrupting properties**

None of the ingredients is listed.

## SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
· **12.7 Other adverse effects**
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.

## SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## SECTION 14: Transport information

· **14.1 UN number or ID number**
· **ADR, IMDG, IATA** UN2796
· **14.2 UN proper shipping name**
· **ADR** 2796 SULPHURIC ACID
· **IMDG, IATA** SULPHURIC ACID

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· ***14.3 Transport hazard class(es)***

· ***ADR, IMDG, IATA***

| | |
|---|---|
| · ***Class*** | 8 Corrosive substances. |
| · ***Label*** | 8 |
| · ***14.4 Packing group*** | |
| · ***ADR, IMDG, IATA*** | II |
| · ***14.5 Environmental hazards:*** | |
| · ***Marine pollutant:*** | No |
| · ***14.6 Special precautions for user*** | Warning: Corrosive substances. |
| · ***Hazard identification number (Kemler code):*** | 80 |
| · ***EMS Number:*** | F-A,S-B |
| · ***Segregation groups*** | (SGG1) Acids |
| · ***Stowage Category*** | B |
| · ***14.7 Maritime transport in bulk according to IMO instruments*** | Not applicable. |

· ***Transport/Additional information:***

| | |
|---|---|
| · ***ADR*** | |
| · ***Limited quantities (LQ)*** | 1L |
| · ***Transport category*** | 2 |
| · ***Tunnel restriction code*** | E |
| · ***UN "Model Regulation":*** | UN 2796 SULPHURIC ACID, 8, II |

## SECTION 15: Regulatory information

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

· ***Directive 2012/18/EU***
· ***Named dangerous substances - ANNEX I*** N/A
· ***15.2 Chemical safety assessment:*** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· ***Relevant phrases***
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

· ***Department issuing SDS:*** Product Safety Department
· ***Contact:*** msds@scharlab.com
· ***Abbreviations and acronyms:***
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Met. Corr.1: Corrosive to metals – Category 1
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Eye Dam. 1: Serious eye damage/eye irritation – Category 1