

# SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.0  
Prepared on : 10.02.2026  
Revised on : -

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

### 1.1 Product identifiers

**Product name** Sulphuric acid  
**Product Number** PSR50254  
**Brand** PureSynth research chemicals  
**CAS No.** 7664-93-9

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

**Identified uses** : Laboratory chemicals

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

**Company** PureSynth Research Chemicals Pvt. Ltd.  
64683 Einhausen Marie-Curie-StraBe. 3, Germany

### 1.4 Emergency telephone number

**Worldwide Helpline No.:** 1800-8908-260

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Corrosive to metals, (Category 1) H290: May be corrosive to metals.  
Skin corrosion, (Sub-category 1A) H314: Causes severe skin burns and eye damage.  
Serious eye damage, (Category 1) H318: Causes serious eye damage.

### 2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008**

**Pictogram**



**Signal word** Danger

**Hazard statement(s)**

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.

**Precautionary statement(s)**

P234 Keep only in original packaging.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

**2.3 Other hazards:** This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher

### SECTION 3: Composition / information on ingredients

#### 3.1 Substances

Common names & Synonyms	Mol. formula	CAS number
-	H <sub>2</sub> O <sub>4</sub> S	7664-93-9
Component	Classification	Concentration
sulphuric acid	Met. Corr. 1; Skin Corr. 1A; Eye Dam. 1; H290, H314, H318 Concentration limits: >= 15 %: Skin Corr. 1A, H314; 5 - < 15 %: Skin Irrit. 2, H315; 5 - < 15 %: Eye Irrit. 2, H319; >= 0,3 %: Met. Corr. 1, H290;	<= 100 %

### SECTION 4: First aid measures

#### Description of first aid measures

<b>General advice</b>	First aiders need to protect themselves. Show this safety data sheet to the doctor in attendance.
<b>If inhaled</b>	After inhalation: fresh air. Call in physician.
<b>In case of skin contact</b>	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
<b>In case of eye contact</b>	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
<b>If swallowed</b>	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.
<b>Most important symptoms and effects, both acute and delayed</b>	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
<b>Indication of any immediate medical attention and special treatment needed</b>	No data available

## SECTION 5: Fire fighting measures

<b>Extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Suitable extinguishing media</b>	For this substance/mixture no limitations of extinguishing agents are given.
<b>Unsuitable extinguishing media</b>	Sulphur oxides
<b>Special hazards arising from the substance or mixture</b>	Not combustible. Ambient fire may liberate hazardous vapours.
<b>Advice for fire-fighters</b>	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
<b>Further information</b>	Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
<b>Environmental precautions</b>	Do not let product enter drains.
<b>Methods and materials for containment and cleaning up</b>	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent and neutralising material. Dispose of properly. Clean up affected area.
<b>Reference to other sections</b>	For disposal see section 13.

## SECTION 7: Handling and storage

<b>Precautions for safe handling</b>	For precautions see section 2.2.
<b>Conditions for safe storage, including any incompatibilities</b>	No metal containers. Tightly closed. Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials
<b>Specific end use(s)</b>	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls / Personal protection

<b>Control parameters</b>	Ingredients with workplace control parameters
<b>Exposure controls</b>	
<b>Personal protective equipment:</b>	
<b>Eye / face protection</b>	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves
<b>Skin protection</b>	

<b>Body Protection</b>	Acid-resistant protective clothing
<b>Respiratory protection</b>	Recommended Filter type: Filter type P2
<b>Control of environmental exposure</b>	Do not let product enter drains.

## SECTION 9: Physical and chemical properties

<b>Appearance</b>	Form: clear, liquid Colour: colourless
<b>Odour</b>	odourless
<b>pH - Value</b>	1.2 at 5 g/l
<b>Density</b>	1.84 g/cm <sup>3</sup> at 25 °C
<b>Boiling Point</b>	290 °C
<b>Melting Point</b>	10.31 °C
<b>Solubility in water</b>	soluble
<b>Flash point</b>	No data available
<b>Vapour pressure</b>	1.33 hPa at 145.8 °C
<b>Auto-ignition temperature</b>	No data available
<b>Vapour density</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Partition coefficient: n- octanol / water</b>	Not applicable for inorganic substances
<b>Viscosity</b>	Viscosity, kinematic: No data available Viscosity, dynamic: 23 mPa.s at 20 °C
<b>Explosive properties</b>	Not classified as explosive.
<b>Upper / lower flammability or explosive limits</b>	No data available
<b>Oxidizing properties</b>	none

**Other safety information:** Surface tension: 55.1 mN/m at 20 °C  
Relative vapour density: 3.39 - (Air = 1.0)

**SECTION 10: Stability and reactivity**

<b>Reactivity</b>	No data available
<b>Chemical stability</b>	<p>The product is chemically stable under standard ambient conditions (room temperature).</p> <p>A risk of explosion and/or of toxic gas formation exists with the following substances:</p> <p>Water</p> <p>Alkali metals</p> <p>alkali compounds</p> <p>Ammonia</p> <p>Aldehydes</p> <p>acetonitrile</p> <p>Alkaline earth metals</p> <p>alkalines</p> <p>Acids</p> <p>alkaline earth compounds</p> <p>Metals</p> <p>metal alloys</p> <p>Oxides of phosphorus</p> <p>phosphorus</p> <p>hydrides</p> <p>halogen-halogen compounds</p> <p>oxyhalogenic compounds</p> <p>permanganates</p> <p>nitrates</p> <p>carbides</p> <p>combustible substances</p> <p>organic solvent</p> <p>acetylidene</p> <p>Nitriles</p> <p>organic nitro compounds</p> <p>anilines</p> <p>Peroxides</p> <p>picrates</p> <p>nitrides</p> <p>lithium silicide</p> <p>iron(III) compounds</p> <p>bromates</p> <p>chlorates</p> <p>Amines</p> <p>perchlorates</p> <p>hydrogen peroxide</p>
<b>Possibility of hazardous reactions</b>	
<b>Condition to avoid</b>	no information available
<b>Incompatible materials</b>	animal/vegetable tissues Contact with metals liberates hydrogen gas.
<b>Hazardous decomposition products</b>	In the event of fire: see section 5

## SECTION 11: Toxicological information

<b>Acute toxicity</b>	LD50 Oral - Rat - male and female - 2.140 mg/kg Inhalation: No data available Dermal: No data available
<b>Skin corrosion/irritation</b>	Skin - Rabbit Result: Extremely corrosive and destructive to tissue.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.
<b>Respiratory or skin sensitization</b>	No data available Test Type: Ames test Test system: Salmonella typhimurium
<b>Germ cell mutagenicity</b>	Result: negative Remarks: (HSDB)
<b>Carcinogenicity</b>	No data available
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity - single exposure</b>	No data available
<b>Specific target organ toxicity - repeated exposure</b>	No data available
<b>Aspiration hazard</b>	No data available
<b>Additional Information</b>	No data available
<b>Endocrine disrupting properties</b>	
<b>Assessment</b>	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

## SECTION 12: Ecological information

<b>Toxicity</b>	
<b>Toxicity to daphnia and other aquatic invertebrates</b>	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h
<b>Toxicity to algae</b>	static test ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h
<b>Persistence and degradability</b>	The methods for determining the biological degradability are not applicable to inorganic substances.
<b>Bio accumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Results of PBT and vPvB assessment</b>	This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at Levels of 0.1% or higher. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
<b>Endocrine disrupting properties</b>	Biological effects:
<b>Other adverse effects</b>	Harmful effect due to pH shift. Caustic even in diluted form. Does not cause biological oxygen deficit.

Endangers drinking-water supplies if allowed to enter soil and/or waters in large quantities.

Neutralisation possible in waste water treatment plants.

Discharge into the environment must be avoided.

### SECTION 13: Disposal considerations

<b>Waste treatment methods</b>	Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.
<b>Products</b>	
<b>Contaminated packaging</b>	Dispose of as unused product.

### SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
<b>ADR / RID</b>	1830	SULPHURIC ACID	8	II	No
<b>IMDG</b>	1830	SULPHURIC ACID	8	II	No
<b>IATA</b>	1830	Sulphuric acid	8	II	No

### SECTION 15: Regulatory information

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

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

**Chemical safety assessment**

A Chemical Safety Assessment has been carried out for this substance.

### SECTION 16: Other information

The information in this SDS is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The user must be determined suitability of this information for his application.