

**Section 1: Identification**
**Product Name** Sulfuric Acid ACS Reagent

**Commercial Name** Hydrogen sulfate

**Product Use** Not available.

**Restrictions On Use** General reagent use.

**Product Code** 50-1721

**Company** PCCA  
9901 South Wilcrest  
Houston, TX 77099  
Phone: 1-800-331-2498  
Fax: 1-800-874-5760

In case of emergency contact:  
**CHEMTREC (24hr) 1-800-424-9300**
**Section 2: Hazard(s) Identification**
**OSHA Haz Com:** Acute toxicity - Inhalation (Gases) Category 2 Acute toxicity - Inhalation (Dusts/Mists) Category 2 Skin corrosion/irritation Category 1 Sub-category A Serious eye damage/eye irritation Category 1 Corrosive to metals Category 1  
**CFR 1910.1200**
**Signal Word** DANGER

**Hazard Statement(s)** May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation. Harmful to aquatic life with long lasting effects.

**Pictogram(s) or Symbol(s)**

**Precautionary Statement(s):**
**Prevention**

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Wear respiratory protection Wash face, hands and any exposed skin thoroughly after handling Keep only in original container

**Response**

Specific treatment is urgent (see .? on this label) Immediately call a POISON CENTER or doctor Specific treatment (see .? on this label) 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 or doctor IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower Wash contaminated clothing before reuse IF INHALED: Remove person to fresh air and keep comfortable for breathing Immediately call a POISON CENTER or doctor IF SWALLOWED: Rinse mouth. Do NOT induce vomiting Absorb spillage to prevent material damage

**Storage**

Store locked up. Store in a well-ventilated place. Keep container tightly closed Store in corrosive resistant container with a resistant inner liner

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Section 3: Composition/Information on Ingredients**
**Substance/Mixture** Substance

**Components** Sulfuric acid

**% By Weight** 100

**CAS#** 7664-93-9

**Molecular Weight** 98.08 g/mole

**Chemical Formula** H<sub>2</sub>SO<sub>4</sub>
**Synonym(s)** Sulfuric Acid/Oil of vitriol

**Mixtures**

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
			null	null

**Safety Data Sheet**

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

**Section 4: First-Aid Measures**

<b>Inhalation</b>	Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.
<b>Eye Contact</b>	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 advice/attention.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical advice/attention.
<b>Symptoms/Effects</b>	
<b>Acute</b>	Coughing and/ or wheezing. Difficulty in breathing. Burning sensation.
<b>Delayed</b>	Coughing and/ or wheezing. Difficulty in breathing. Burning sensation.

**Immediate Medical Attention**

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe vapor or mist. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

**Section 5: Fire-Fighting Measures****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable Extinguishing Media**

Do not scatter spilled material with high pressure water streams

**Products of Combustion**

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors

**Firefighters Special Equipment and Precautions**

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment

**Section 6: Accidental Release Measures**

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Do not breathe vapor or mist. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Attention! Corrosive material. Methods for containment Prevent further leakage or spillage if safe to do so. Methods for cleaning up Pick up and transfer to properly labeled containers

**Section 7: Handling and Storage**

Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

**Section 8: Exposure Controls/Personal Protection**

<b>Exposure Limits</b>	OSHA PEL: 1 mg/m3 TWA
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**Safety Data Sheet**

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

**Engineering Controls****Personal Protection**

Showers Eyewash stations Ventilation systems

Eye/face protection: Tight sealing safety goggles. Face protection shield. Hand protection: Wear suitable gloves. Impervious gloves. Skin and body protection: Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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. Do not breathe vapor or mist. 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 immediately after handling the product.

**Section 9: Physical and Chemical Properties**

<b>Appearance</b>	Liquid. Color: Colorless. Clear		
<b>Odor</b>	Not available		
<b>Odor Threshold</b>	Not available.		
<b>Melting Point</b>	10 °C / 50 °F	<b>pH</b>	<1
<b>Freezing Point</b>	Not available	<b>Vapor Pressure</b>	1.33hPa at 145.8C
<b>Boiling Point/Range</b>	>270 °C / °F	<b>Vapor Density</b>	3.4 (Air = 1)
<b>Decomposition temperature</b>	Not available.	<b>Viscosity</b>	Not available.
<b>Partition Coefficient: n-octanol/water</b>	Not available.	<b>Evaporation Rate</b>	Not available.
<b>Flash Point</b>	Not applicable.	<b>Autoignition temperature</b>	Not available
<b>Flammability</b>	Non - flammable. Is a powerf	<b>Flammability or Explosive Limits:</b>	
		<b>Lower</b>	Not available.
		<b>Upper</b>	Not available.
<b>Solubility(ies)</b>	Miscible in water. Evolves heat when mixed with water. Soluble in Ethanol		
<b>Other</b>	Relative density 1.83		

**Section 10: Stability and Reactivity**

<b>Reactivity</b>	Not available.
<b>Chemical Stability</b>	Stable under normal conditions
<b>Hazardous Polymerization</b>	Not available
<b>Conditions to Avoid</b>	Exposure to air or moisture over prolonged periods. Excessive heat.
<b>Incompatible Materials</b>	Oxidizing agent. Acids. Bases.
<b>Hazardous Decomposition Products</b>	Not available

**Section 11: Toxicological Information**

<b>RTECS</b>	WS5600000
<b>Acute Toxicity</b>	
Oral LD50: = 2140 mg/kg ( Rat ) Dermal LD50: - Inhalation LC50: 85 - 103 mg/m3 ( Rat ) 1 h	
<b>Skin Corrosion/Irritation</b>	
Causes burns.	
<b>Serious Eye Damage/Irritation</b>	
Risk of serious damage to eyes. Causes burns.	
<b>Respiratory or Skin Sensitization</b>	
Not available.	
<b>Germ Cell Mutagenicity</b>	
Not available.	
<b>Carcinogenicity</b>	
Contains a known or suspected carcinogen. May cause cancer	
<b>Reproductive Toxicity</b>	
Not available.	
<b>Routes of Entry</b>	
Inhalation. Eye. Skin. Ingestion.	
<b>Symptoms Related to Exposure</b>	
Coughing and/ or wheezing. Difficulty in breathing. Redness. Burning. May cause blindness	

**Potential Health Effects**

Not available.

**Target Organ(s)** respiratory system, Eyes, Skin, Teeth.**Section 12: Ecological Information****Ecotoxicity**

Algae/aquatic plants: - Fish: LC50: &gt;500mg/L (96h, Brachydanio rerio) Toxicity to microorganisms: - Crustacea: EC50: 29mg/L (24h, Daphnia magna)

**Persistence and Degradability**

Not available.

**Bioaccumulative Potential**

Inherently biodegradable.

**Mobility in Soil**

Not available.

**Other Adverse Effects**

Not available.

**Section 13: Disposal Considerations****Waste Disposal**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Disposal of Container**

Do not reuse empty containers.

**Other Considerations**

Not available.

**Section 14: Transport Information****DOT Classification**

UN/ID no UN1830 Proper Shipping Name: Sulfuric acid Hazard class 8 Packing group: II Special Provisions A3, A7, B3, B83, B84, IB2, N34, T8, TP2 Description: UN1830, Sulfuric acid, 8, II Emergency Response Guide Number 137

**Section 15: Regulatory Information****Regulations**

Not available

**Other**

Not available.

**Section 16: Other Information**

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