



SAFETY DATA SHEET.
SULPHURIC ACID – 93 -94%

I. Product & Company Information

Product Identity: Sulphuric Acid (H₂SO₄)

Supplier's Name: Pan Chem Corporation
Kapur Mahal, Blk No. 18-B, 2nd Floor, 65, Marine Drive,
Mumbai – 400 020. India

Emergency Telephone No.: +91-22-22078362

II. Composition / Information on Ingredients

INGREDIENT	%	OSHA PEL	ACGIH TLV	CAS. NO.
SULFURIC ACID	93.00 (TWA)	1 mg/m ³ (TWA)	1 mg/m ³	7664-93-9

- Note - Sulfuric Acid is listed on the SARA Title III toxic 313 list

III. Hazard Information


Emergency Overview:

- Danger! Extremely corrosive
- Causes severe burns
- Reacts violently to water.
- Highly reactive and capable of igniting combustible material on contact.
- Not flammable.

	National Fire Protection Association (NFPA) Rating	Hazardous Materials Identification System (HMIS) Rating
Health	3	3
Fire	0	0
Reactivity	2	2
Special	W	

1 = Slight 4 = Extreme/ Severe 3 = High / Serious 2 = Moderate
 0 = Minimum W = Water Reactive

LABEL:

	
<p>Symbols:</p>	<p>Signal Word: DANGER</p>
<p>Hazard Statements DANGER! Causes severe skin burns and serious eye damage. May cause respiratory irritation. May cause damage to teeth through prolonged and repeated exposure to Sulphuric acid mists. Fatal if inhaled. May be corrosive to metals. Harmful to aquatic life.</p>	<p>Precautionary Statements: Wear protective gloves, protective clothing, and eye and face protection. Wash exposed skin thoroughly after handling. Store and use only in a well-ventilated area. Keep Containers tightly closed. In case of inadequate ventilation, wear respiratory protection. Do not breathe mist. Avoid release to the environment. Absorb spillage. IF IN EYES: Rinse continuously with water for several minutes. Continue rinsing and immediately call a poison Centre/doctor. Specific treatment is urgent. IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water or shower. For large area burns, immediately call a poison Centre/doctor. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Get medical attention if you feel unwell. Store in corrosion resistant container with a resistant inner liner.</p>

Potential Health Effects:

- In contact with the skin: Concentrated solution may cause pain and severe burns to the skin and brownish or yellow stains. Prolonged and repeated exposure to dilute solutions may cause irritation, redness, pain and yellow drying and cracking of the skin.
- In contact with the eyes: Immediate pain, severe burns and corneal damage which may result in blindness.
- Inhaled: Mists and vapors may cause irritation of the eyes, nose and respiratory tract. May cause increase pulmonary resistance, transient cough and bronchoconstriction. Severe overexposure may result in lung collapse and pulmonary edema, which can be fatal.
- Ingested: Severe burning and pain in the mouth, throat and abdomen. Vomiting, diarrhea and perforation of the esophagus and stomach lining may occur.
- Long Term Exposure : Repeated exposure may produce erosion and discoloration of teeth. Corrosive effects on the skin and eyes may be delayed, and damage may occur without the sensation or onset of pain. Repeated overexposure may lead to contact dermatitis, may cause bronchitis with cough, phlegm, shortness of breath and emphysema, can cause chronic runny nose, tearing of the eyes, nose bleeds and stomach upsets. Strict adherence to first aid measures following any exposure is essential.
- Carcinogenicity: This product is NOT classified by the NTP (National Toxicology Program). Not regulated as carcinogenic by OSHA (the Occupational Safety and Health administration), and has not been evaluated by IARC (International Agency for Research on Cancer), or ACGIH (American Conference of Governmental Industrial Hygienists).
- Existing Medical Conditions Possibly Aggravated by Exposure: Skin irritation may be aggravated in individuals with existing skin lesions. Breathing of vapors or sprays (mists) may aggravate acute or chronic asthma and chronic pulmonary disease such as emphysema and bronchitis.

IV. First Aid Measures

Prompt removal of this material from contact with the body is of utmost importance. START FIRST AID AT ONCE.

In contact with the skin: Flush skin with running water for a minimum of 20 minutes. Start flushing while removing contaminated clothing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY.

In contact with the eyes: Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY.

Inhaled: Move victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Give Cardiopulmonary Resuscitation (CPR) if there is no breathing AND no pulse. Obtain medical attention IMMEDIATELY.

Ingested: If victim is alert and not convulsing, rinse mouth and give one glass of water to dilute material. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomits, rinse mouth and administer more water. IMMEDIATELY contact poison control center. Vomiting may need to be induced, but should be directed by a physician or poison control center. IMMEDIATELY transport victim to an emergency facility.

V. Fire Fighting Measures

Flash Point: Not applicable, product is non-flammable.

Autoignition Temperature: Not combustible.

Flammability Limits in air: UEL: not applicable LEL: not applicable.

Fire Extinguishing Media: For small fires use dry chemical or carbon dioxide. For large fires, flood fire area with water from distance. Expect violent reaction with water. Do not get solid stream of water on spilled material.

Special Fire Fighting Procedures: Wear a NIOSH/MSHA approved self-contained breathing apparatus if vapors or mists are present and full protective clothing. For fighting fires in close proximity to spill or vapors, use acid-resistant personal protective equipment. Evacuate residents downwind of fire. Dike area to contain runoff and prevent contamination of water sources. Neutralize runoff with lime, soda ash or other suitable neutralizing agents. Cool containers that are exposed to flame with streams of water.

Other Fire or Explosion Hazards: Not flammable, but highly reactive. Capable of igniting finely divided combustible materials on contact. Reacts violently with water and organic materials with evolution of heat. Extremely hazardous in contact with many materials, particularly carbides, chlorates, fulminates, nitrates and picrate's. Sulfuric acid reacts with most metals, especially when dilute to give flammable, potentially explosive hydrogen gas.

VI. Accidental Release Measures

Steps to be taken in the event of a spill or leak : Remove all ignition sources. Ventilate area. Use appropriate personal protection equipment. Dike with inert material (sand, earth, etc.) to prevent liquid from entering sewers or waterways. Consider insitu neutralization and disposal. Comply with Federal, State and local regulations on reporting releases.

Deactivating chemicals : Lime, limestone, sodium carbonate (soda ash), sodium bicarbonate, dilute sodium hydroxide, dilute aqua ammonia.

Waste Disposal Methods : Dispose of waste material at an approved waste treatment/disposal facility, in accordance with applicable regulations. Do not dispose of waste with normal garbage or to sewer systems.

Note - Clean-up material may be a RCRA Hazardous Waste on disposal.

-Spills are subject to CERCLA reporting requirements: RQ = 1000 lbs.

Eco toxic Effects: Harmful to aquatic life in very low concentrations.

Fish toxicity critical concentration = 10 mg/L;7.34 mg/L/48 hrs.-Lymnaea Palustris- 0-100% mortality.

VII. Handling & Storage

Minimum/Maximum Storage Temperatures: Not Available

Handling: Do not breathe vapors and mists. Do not get on skin or in eyes. This product reacts violently with bases liberating heat and causing spattering. When diluting an acid, ALWAYS add the acid slowly to water and stir well to avoid spattering. NEVER ADD WATER TO ACID.

Storage: Store in tightly closed containers. Store in an area that is dry, well ventilated, dike with impermeable material, Freezing point varies with concentration. Maximum recommended storage temperature = 104F (40C). Corrosion rates increase at elevated temperatures.

VIII. Exposure Controls / Personal Protection

Engineering Controls: Local exhaust ventilation required.

Respiratory Protection: A NIOSH/MSHA approved air-purifying respirator equipped with acid gas/fume, dust, and mist cartridges for concentrations up to 10 mg /m³. An air supplied respirator if concentrations are higher or unknown.

Skin Protection: Impervious (i.e. neoprene, PVC) gloves, coveralls, boots and/or other acid resistant protective clothing.

Eye Protection: Tight fitting chemical goggles.

IX. Physical & Chemical Characteristics

Boiling Point: 276°C. (529°F.)

Specific Gravity: 1.835 at 16°C

Vapor Pressure: 0.0016 mmHG @40°C

Melting/Freezing Point: -29.5°C.(-21.1°F.)

Vapor Density: 3.4

Solubility in Water: 100%

Evaporation Rate: N/A

Odor and Appearance: Sulfuric acid is a heavy, oily liquid that may have a sharp, penetrating odor.

pH: 1 at 1 wt/wt%.

Molecular Weight: 98.08

X. Stability & Reactivity

Stability:

- Under normal conditions: This material is stable under normal handling and storage conditions described in Section 7.
- Under fire conditions: Decomposes to form sulfur oxides (SO_x).

Materials to avoid: Contact with organic materials (such as chlorates, carbides, fulminates and picrates) may cause fire and explosions. Contact with metals may produce flammable hydrogen gas. When diluting, add acid to water. DO NOT add water to acid.

Hazardous Decomposition or Combustion Products: Toxic gases and vapors (e.g. sulfur dioxide, sulfuric acid vapor/mists and sulfur trioxide) may be released when sulfuric acid decomposes.

Hazardous Polymerization: Will not occur

XI. Toxicological Information

Toxicological Data: LD₅₀(oral, rat)=2140 mg/kg LD₅₀(inhalation, rat)=510 mg/m³ for 2 hrs. Skin effects (rabbit): severe irritation Eye effects (rabbit): severe irritation

Carcinogenicity Data: No information is available.

Reproductive Effects: No information is available.

Mutagen city Effects: No information is available.

Teratogenicity Effects: No information is available.

XII. Ecological Information

Eco toxicity: Eco toxicity in water (LC50): 49 mg/l 48 hours [bluegill/sunfish].

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short-term degradation products are not likely. However, long-term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

XIII. Disposal Considerations

Waste Disposal:

- Sulfuric acid, may be placed in sealed container or absorbed in vermiculite, dry sand, earth, or a similar material. It may also be diluted and neutralized. Be sure to consult with local or regional authorities (waste regulators) prior to any disposal. Waste must be disposed of in accordance with federal, state and local environmental control regulations.

XIV. Transport Information

Transportation Status: IMPORTANT! Statements below provide additional data on listed DOT classification.

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

US Department of Transportation

Hazard Class: 8 - Corrosive material

Shipping Name: SULFURIC ACID – Drain Cleaner

ID Number: UN1830

Packing Group: II

XV. Regulatory Information

Inventory

Status

UNITED STATES (TSCA)	Y
CANADA (DSL)	Y
EUROPE (EINECS/ELINCS)	Y
AUSTRALIA (AICS)	Y
JAPAN (MITI)	Y
SOUTH KOREA (KECL)	Y

Y = All ingredients are on the inventory.

E = All ingredients are on the inventory or exempt from listing.

P = One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

FEDERAL REGULATIONS

Inventory Issues:

All functional components of this product are listed on the TSCA Inventory.

SARA Title III Hazard Classes:

Fire Hazard - NO
 Reactive Hazard - YES
 Release of Pressure - NO
 Acute Health Hazard - YES
 Chronic Health Hazard - NO

SARA 313 Chemicals

SULFURIC ACID (93%)

XVI. Other Information

National Fire Protection Association Hazard Ratings--NFPA(R):

3 Health Hazard Rating--Serious
0 Flammability Rating--Minimal
2 Instability Rating--Moderate
0 * NO WATER

Key Legend Information:

ACGIH - American Conference of Governmental Industrial Hygienists
 OSHA - Occupational Safety and Health Administration
 TLV - Threshold Limit Value
 PEL - Permissible Exposure Limit
 TWA - Time Weighted Average
 STEL - Short Term Exposure Limit

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

ND - Not determined

Disclaimer:

The information herein is given in good faith but no warranty, expressed or implied, is made Pan Chem Corporation shall not be responsible for the use of any information, Product, Method, or apparatus herein presented and you must make your own determination as to its suitability and completeness for your own use, for the protection of the environment, and for health and safety purposes.

SELLERS NOTICE (Please Read Carefully)

TO ALL SELLERS OF POWER CLEAN DRAIN CLEANER:

This product is a powerful chemical compound to be used by PROFESSIONALS ONLY for emergency use in clearing clogged drains. The professional is a person(s) whose business includes the maintenance and cleaning of clogged drain lines, and who possess the knowledge and skill required to do so. Due to the products effectiveness, some sellers may be tempted to recommend it for use by non professionals or to place it for customer self-service sales area where it is easily accessible to unqualified users, the manufacturer does NOT recommend or approve any sale to non-professionals.

The principle ingredient in Power Clean Drain Cleaner is sulfuric acid which burns and destroys human tissue on contact and also dissolves organic matter. Inexperienced, unsuspecting users may sustain personal injuries if proper precautions which appearing on every container are not followed while using this product.

This notice is intended to advise the seller that Power Clean and its affiliates prohibit the sale of this product to anyone who is not regularly engaged in the maintenance of drain lines as a function of his/her occupation; and Power Clean and its affiliates also warns that Power Clean Drain Cleaner should not be stored or displayed at a place within easy access to persons not qualified to use the product; and that Power Clean should never be advertised for sale without the written permission of Power Clean.

Power Clean is sold on the express agreement of the purchaser to resell it only to professionals, as that term is defined above. Anyone breaking this agreement will be liable for any damages suffered by us.



ATTENTION: STOCK HANDLERS AND STORE PERSONNEL

Please handle this product carefully. Do not remove bottles from carton by holding cap.

The contents of this package are highly corrosive. In case of accidental spillage, avoid contact. If cartons or product show any signs of leakage, do not handle. Contact supplier for disposal instructions.

If product comes in contact with you, remove any contaminated clothing then follow the below:



FIRST AID

External:

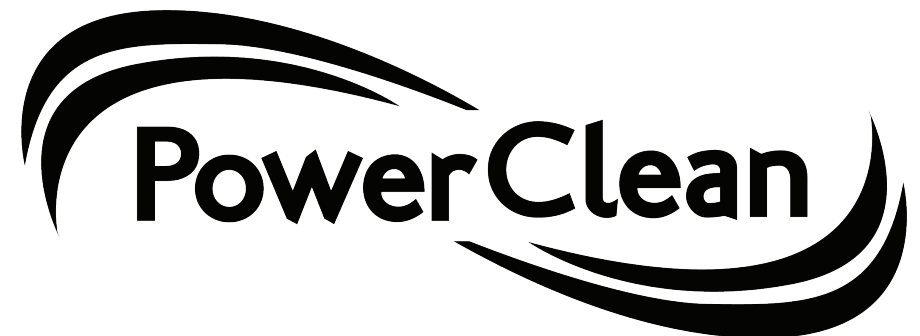
- In the event of contact with eyes or skin, immediately flush with water for 15 minutes.
- Contact Physician.

Internal:

- Drink large quantities of water or milk. DO NOT induce vomiting. Follow with milk of magnesia, beaten eggs or vegetable oil.
- Contact Physician.

If Bottle is damaged and/or leaking:

1. Do not display for sale.
2. Avoid contact with acid contents. Provide protection by using rubber gloves, face shield or safety goggles.
3. Dispose of contents by slowly pouring down a free flowing drain and flushing with cold water.
4. Drain must be free of other chemicals.
5. Rinse out bottle with **COLD WATER ONLY** and dispose.



**CONTAINS CONCENTRATED SULFURIC ACID
KEEP OUT OF REACH OF CHILDREN!**