1. Product and Company Identifaction

Product Name	Sulphuric (Sulfuric) Acid
Product Type	RXSOL-60-2432-002

Company Details:
RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Stock Point : Mumabi, Kandla, Kolkata, Chennai, Vizag, Fujairah, Barka

Phone	+91 22 65113333/ 5555 / 9999 / 27611360 / 27815540
Fax	+91 22 2781 1318 :::AOH :0091 9821214367
Email	mail@rxmarine.com

2. Composition / Information on ingredients

CAS #	Chemical Name	Percent	EINECS/ELINCS	TLV	Hazard
7664-93-9	Sulphuric Acid	98.99%	231-639-5	231-639-5	Corrosive
7732-18-5	Water	Balance	None	None	None

3. Hazards Identification

EMERGENCY OVERVIEW:
Clear, colourless to dark brown, odourless, dense, oily liquid. Will not burn. Can decompose at high temperatures forming toxic gases, such as sulfur oxides. Contact with combustible materials may cause fire. Highly reactive. Contact with many organic and inorganic chemicals may cause fire or explosion. Contact with metals liberates flammable hydrogen gas. Reacts violently with water. VERY TOXIC. May be fatal if inhaled or swallowed. CORROSIVE to the eyes, skin and respiratory tract. May cause blindness and permanent scarring. Causes lung injury--effects may be delayed. Strong inorganic acid mists containing sulfuric acid are CARCINOGENIC.

Target Organs:
Lungs, teeth, eyes, skin, mucous membranes.

Potential Health Effects :
Primary Route(s) of Entry:
Inhalation and ingestion. Skin contact. Eye contact.

Effects of Acute Exposure:
Corrosive, oxidizing and sulphonating properties on contact. May be fatal by ingestion, inhalation or skin absorption.

LD50/LC50:
CAS# 7664-93-3: Inhalation, mouse: LC50 = 320 mg/m3/2H, Inhalation, rat: LC50 = 510 mg/m3/2H Oral, rat: LD50 ? 2140 mg/kg.

Eyes:
Causes severe eye burns. May cause irreversible eye injury.

Skin:
Causes skin burns. Defatting dermatitis with prolonged use.

Ingestion:
May cause severe and permanent damage to the digestive tract. Causes burns in mouth, pharynx and gastrointestinal tract. Nausea, Vomiting, Abdominal pain. Corrosive and toxic.

Inhalation:
Harmful if inhaled. May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract. May cause respiratory inflammation. Destructive to tissues of mucous membranes. Headache, May cause delayed lung injury. Vomiting. Nausea. Pulmonary edema. Corrosive and toxic.

Effects of Chronic Exposure:
Prolonged or repeated inhalation may cause nosebleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, chest pain and bronchitis. Prolonged or repeated eye contact may cause conjunctivities. May cause death. CORROSIVE to body tissues. To the best of our knowledge the chronic toxicity of this substance has not been fully investigated.

4. First Aid Measures

Eyes:	Immediately flush eyes and skin with copious amounts of water for at least 15 minutes, holding lids apart to ensure flushing of the entire surface. Do NOT allow victim to rub eyes or keep eyes closed.Get medical aid immediately.
Skin:	Get medical aid immediately. Immediately flush skin with copious quantities of soap and water for at least 15 minutes while removing contaminated clothing and shoes. SPEEDY ACTION IS CRITICAL! Call a physician.
Ingestion:	Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Consult a physician immediately. Never give anything by mouth to an unconscious person.
Inhalation:	Get medical aid immediately Remove patient from exposure to fresh air immediately. Administer approved oxygen supply if breathing is difficult. Administer artificial respiration or CPR if breathing has ceased. Call a physician.Notes to Physician:Treat symptomatically and supportively.

5. Fire-fighting Measures

General Information:	Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Contact with water can cause violent liberation of heat and splattering of the material.
Extinguishing Media:	Use extinguishing media most appropriate for the surrounding fire. Carbon dioxide. Dry chemical power. Do not use water.
Auto ignition Temperature:	Not available.
Flash Point:	Not available.
NFPA Rating:	Health □ 3, Flammability □ 0, Instability □ 2, Water Reactive.
Explosion Limits:	Lower: Not available. Upper: Not available.
Special Fire and Explosion Hazards:	Oxidizing material □ contributes to combustion of other materials. Reacts violently with water and organic materials with evolution of heat. Emits toxic and corrosive fumes under fire conditions.

6. Accidental Release Measures

Personal precautions:
See section 8 for recommendations on the use of personal protective equipment.Environmental precautions: Cleanup personnel need personal protection from inhalation and skin/eye contact. Evacuate and ventilate the area. Prevent spillage from entering drains. Cautiously add water to spill, taking care to avoid splashing and spattering. Neutralize diluted spill with soda ash or lime. Absorb neutralized spill with vermiculite or other inert absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Any release to the environment may be subject to federal/national or local reporting requirements. Dispose of all waste or cleanup materials in accordance with local regulations. Containers, even when empty, will retain residue and vapors.General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Clean up spills immediately, observing precautions in the Protective Equipment section. Cover with sand, dry lime or soda ash, and place in a closed container for disposal.Steps to be taken in case material is released or spilled: Evacuate. Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Cover with soda ash or lime. Place in a suitable container and mark for disposal. Use non-sparking tools. Ventilate area and wash spill site after material pick-up is complete. Waste disposal method: According to all applicable regulations.

7. Handling and Storage

Handling:
Wash thoroughly after handling. Remove contaminated clothing and wash before re-use. Use with adequate ventilation. Do not get in eyes, on skin or on clothing.

Storage:
Do not store near combustible materials. Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from combustible substances. Do not store near alkaline substances.Store in a cool place away from heated areas, sparks and flame. Keep tightly closed. Do not add any other material to the container. Do not store in a damp atmosphere. Do not get in eyes, on skin or on clothing. Do not store near organic substances. Do not allow smoking and food consumption while handling. In accordance with good storage and handling practices. Do not store near flammable substances. Wash well after use.

Storage Code:
White.

8. Exposure controls and personal protection

Engineering Controls:
Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Exposure Limits: Chemical Name

ACGIH	NIOSH	OSHA
Sulphuric acid		
1 mg/m3 TWA; 3 mg/m3 STEL	1 mg/m3 TWA	1 mg/m3 TWA

OSHA Vacated PELs Sulphuric acid: 1 mg/m3 TWA.
Seastar Chemicals Inc MSDS □ SULPHURIC ACID

Personal Protective Equipment:

Eyes:	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA□s eye and face protection regulations in 29 CFR 1910.133.
Skin:	Wear appropriate protective neoprene or polyethylene gloves to prevent skin exposure.
Clothing:	Wear appropriate protective clothing to prevent skin exposure. Apron or clothing to protect skin. Rubber boots. Sufficient to protect skin.
Respiratory Protection:	Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH-approved respirator when necessary.
Ventilation:	Use only in a chemical fume hood.Other Protective Equipment: Make eye bath and emergency shower available.

9. Physical and chemical properties

Information on basic physical and chemical properties:

Physical State:	Liquid
Appearance:	Colorless
Odor	Odorless
pH:	0.3 (1N Solution)
Vapor Pressure:	