

HUDSON

MATERIAL SAFETY DATA SHEET

DATE PREPARED: 01/07/2003

MSDS No: S660-4LITER

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT DESCRIPTION: Sulfuric Acid, 4 Liter container**PRODUCT CODE:** S660-4LITER**MANUFACTURER**

Hudson Supply Company

4500 Lee Rd

Cleveland, OH 44128-2959

Customer Service: (800) 486-0480**24 HR. EMERGENCY TELEPHONE NUMBERS****CHEMTREC (U.S.):** (800) 424-9300**Emergency Phone:** (800) 424-9300

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Wt.%</u>	<u>CAS#</u>
Water	98 - 99	7732-16-5
Sulfuric Acid	0.25 - 2	7664-93-9

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

<u>Chemical Name</u>	<u>OSHA PEL</u>	<u>EXPOSURE LIMITS</u>	
		<u>ACGIH TLV</u>	<u>Supplier</u>
Water			
Sulfuric Acid	1 mg/m ³	N/E	

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS**EYES:** Dangerous**SKIN:** May cause significant irritation to the skin.**INGESTION:** Irritant to dangerous.**INHALATION:** Irritant**ACUTE EFFECTS:** Irritation of nose, eyes, skin, and respiratory system to damage. May cause nausea, vomiting of blood and eroded tissue, holes in the stomach and intestines, shock and kidney damage. Death may occur with as little as 1 oz.**SUBCHRONIC/CHRONIC TOXICITY****CHRONIC:** Exposure to amounts greater than 3.0 mg/m³ may cause all of the above symptoms in greater severity. (NYDH)

CARCINOGENICITY: Not Listed by NTP

Not listed by IARC

Not listed by OSHA

MEDICAL CONDITIONS AGGRAVATED: None Expected.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for two to three minutes. Remove any contact lenses and continue flushing for 15 minutes. Get medical attention.

SKIN: Wash thoroughly with soap and water.

INGESTION: Do not induce vomiting. dilute with water. Never give anything by mouth to anyone who is unconcious or convulsing. Get medical attention.

INHALATION: Remove individual to fresh air. Keep person calm. If breathing is difficult, administer oxygen and get proper medical attention.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Applicable

FLAMMABLE LIMITS: N/A to N/A

AUTOIGNITION TEMPERATURE: Not Applicable

FLAMMABLE CLASS: 0

EXTINGUISHING MEDIA: Any media for the surrounding fire.

HAZARDOUS COMBUSTION PRODUCTS: None known.

FIRE FIGHTING PROCEDURES: Keep people away. Isolate fire area and deny unnecessary entry. Contain fire water run-off if possible. Fire water runoff, if not contained may cause enviromental damage. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire.

FIRE FIGHTING EQUIPMENT: Fire fighters should wear goggles and self-contained breathing apparatus to avoid inhalation of smoke or vapors.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Cover with dry earth, dry sand, or non-combustible material followed by plastic sheet to minimize spreading.

LARGE SPILL: Dike far ahead of the spill. Cover with dry earth, sand, or non-combustible

material.

7. HANDLING AND STORAGE

HANDLING: Wear safety glasses, goggles, or face shield, safety gloves, personal protective clothing, or respirator as required in section 8 of this MSDS.

STORAGE: Store in unopened containers under cool and dry conditions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide sufficient local exhaust and general ventilation to maintain exposure below PEL(s), especially for spraying operations which produce mists.

PERSONAL PROTECTION

EYES AND FACE: Wear safety glasses with side shields or goggles when handling this material.

SKIN: To prevent any contact, wear impervious protective clothing such as neoprene or butyl rubber gloves, apron, boots or whole bodysuit, as appropriate.

RESPIRATORY: Use NIOSH/MSHA approved air supplied respirator in absence of proper environmental control.

WORK HYGIENIC PRACTICES: Good personal hygiene practices should always be followed.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Faint ethereal odor

APPEARANCE: Clear

COLOR: Colorless

pH: Not Applicable

PERCENT VOLATILE: Not Applicable

VAPOR PRESSURE: .001 ATM @ 20C

VAPOR DENSITY: Not Applicable

BOILING POINT: (554.09°F)

FREEZING POINT: Not Applicable

MELTING POINT: Not Applicable

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE: Not Applicable

DENSITY: 1.84 mg/m³

VISCOSITY: Not Applicable

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: Reacts exothermically with water.

POLYMERIZATION: Will not occur

HAZARDOUS DECOMPOSITION: Sulfur oxides can result from decomposition.

INCOMPATIBLE MATERIALS: A strong mineral acid reacting with bases and metals. The concentrated acid is an oxidizing agent and can cause ignition of combustible materials. It is also a dehydrating agent, picking up moisture readily from the air or other materials.

11. TOXICOLOGICAL INFORMATION

ACUTE

INHALATION LC₅₀: 12-35 mg/m³ 6 hour

EYE EFFECTS: This material may cause significant irritation to the eyes.

SKIN EFFECTS: This material may cause significant irritation to the skin.

CARCINOGENICITY:

IARC: Not listed by IARC

NTP: Not Listed by NTP

OSHA: Not listed by OSHA

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Applicable

ECOTOXICOLOGICAL INFORMATION: Not Applicable

CHEMICAL FATE INFORMATION: Not Applicable

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: In compliance with Federal, State and local regulations for landfills.

FOR LARGE SPILLS: Contain material and call local authorities for emergency assistance. In consultation with the appropriate authorities, determine the disposal method or contact the manufacturer.

14. TRANSPORT INFORMATION

COMMENTS: Not regulated as a hazardous material.

15. REGULATORY INFORMATION

GENERAL COMMENTS: EPA Regulation: listed

RCRA hazardous waste number:

RCRA hazardous waste classification (40 CFR 261.??): classified.

CERCLA hazardous substance: listed

CERCLA Reportable Quantity (RQ)

SARA 311/312 Codes: 114, 1156, 118, 119

SARA Toxic Chemical (40 CFR 372.65): 17

SARA EHS: listed

Threshold Planning Quantity (TPQ): listed

OSHA Regulations: listed

OSHA Specifically Regulated Substance (29 CFR 1910.1000): listed

State Regulations: STCC listed.

DOT (40 CFR 172.101 Append.): listed

ACGIH Threshold Limit Value: listed

MAK: listed

TSCA: listed

ANNEX I: listed

16. OTHER INFORMATION**APPROVED BY:** David C. Dillon **TITLE:** Systems Administrator**APPROVAL DATE:** 01/07/2003**REVISION SUMMARY** New MSDS**NFPA CODES****FIRE:** 0 **HEALTH:** 2 **REACTIVITY:** 0

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