



MATERIAL SAFETY DATA SHEET

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SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Hydroxylamine Sulfate

Catalog Numbers:

_h029

Synonyms:

Hydroxylammonium Sulfate, Oxammonium Sulfate.

Company Identification:

LEONID CHEMICALS

62/A-2 2nd Stage, Industrial Suburb

Yeshwanthpur, Bangalore -22, INDIA

Ph- +91-80-23378354

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	10039-54-0
Chemical Name	:	HYDROXYLAMINE SULFATE (2:1)
%	:	
EINECS#	:	>99
Hazard Symbols	:	XN C
Risk Phrases	:	21/22 34

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Harmful in contact with skin and if swallowed. Causes burns.

Potential Health Effects

Eye:

Causes eye irritation.

Skin:

Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May be absorbed through the skin. May cause skin burns.

Ingestion:

May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death.

Inhalation:

May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, tachycardia, dyspnea (labored breathing), and death. Irritation may lead to chemical pneumonitis and pulmonary edema. May cause severe



irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema.

Chronic:

Absorption into the body leads to the formation of methemoglobin which in sufficient concentrations causes cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

SECTION 4 - FIRST AID MEASURES

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

SECTION 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Exposure to heat may promote violent decomposition.

Extinguishing Media:

Do NOT use water directly on fire. For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions.

SECTION 7 - HANDLING AND STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Do not ingest or inhale.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

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 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	: Solid
Color	: White crystals.
Odor	: None reported.
PH	: Not available.
Vapor Pressure	: Negligible.
Viscosity	: Not available.
Boiling Point	: Not available.
Freezing/Melting Point	: 338 deg F
Autoignition Temperature	: Not applicable.
Flash Point	: Not applicable.
Explosion Limits, lower	: Not available.
Explosion Limits, upper	: Not available.
Decomposition Temperature	: >170 C
Solubility in water	: 60% in water.
Specific Gravity/Density	: 1.9 (water=1)
Molecular Formula	: H8N2O6S

Molecular Weight : 164.1258

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Unstable at temperatures above 100C.

Conditions to Avoid:

Incompatible materials, combustible materials, temperatures above 100°C.

Incompatibilities with Other Materials:

Bases, oxidizing agents, combustibles, and organic compounds.

Hazardous Decomposition Products:

Nitrogen oxides, oxides of sulfur, ammonia and/or derivatives, nitrogen, sulfuric acid.

Hazardous Polymerization: Has not been reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 10039-54-0: NC5425000

LD50/LC50:

CAS# 10039-54-0: Oral, mouse: LD50 = 980 mg/kg; Oral, rat: LD50 = 842 mg/kg.

Carcinogenicity:

HYDROXYLAMINE SULFATE (2:1) -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Other:

See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Fathead minnow LC50 = 3.2-7.3mg/L/96H Water flea LC50 = 1.4mg/L/96H

Rainbow trout LC100 = 150mg/L/10min (as hydroxylamine)

SECTION 13 - DISPOSAL CONSIDERATIONS

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

SECTION 14 - TRANSPORT INFORMATION

IATA

Shipping Name: HYDROXYLAMINE SULPHATE

Hazard Class: 8

UN Number: 2865

Packing Group: III
IMO
Shipping Name: HYDROXYLAMINE SULPHATE
Hazard Class: 8
UN Number: 2865
Packing Group: III
RID/ADR
Shipping Name: HYDROXYLAMINE SULPHATE
Hazard Class: 8
UN Number: 2865
Packing group: III

SECTION 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN C

Risk Phrases:

R 21/22 Harmful in contact with skin and if
swallowed.

R 34 Causes burns.

Safety Phrases:

S 2 Keep out of reach of children.

S 13 Keep away from food, drink and animal feeding
stuffs.

S 45 In case of accident or if you feel unwell, seek
medical advice immediately (show the label where
possible).

WGK (Water Danger/Protection)

CAS# 10039-54-0: 2

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 10039-54-0 is listed on Canada's DSL List.

CAS# 10039-54-0 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 10039-54-0 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 4/03/1995 Revision #0 Date: Original.

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