



Material Safety Data Sheet

Hydroxylamine Hydrochloride, 3% to 50%

Section 1 - Chemical Product and Company Identification

MSDS Name:

Hydroxylamine Hydrochloride, 3% to 50%

Catalog Numbers:

LC15520, LC15530, LC15540, LC15550

Synonyms:**Company Identification:**

LabChem Inc
 200 William Pitt Way
 Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
5470-11-1	Hydroxylamine hydrochloride	3-50

Section 3 - Hazards Identification

Emergency Overview

Appearance: *Clear, colorless solution***Danger!** Strong reducing agent. Causes eye, skin, and respiratory tract irritation. May cause allergic skin reaction, blood abnormalities, methemoglobinemia, and liver and kidney damage.**Target Organs:** *Eyes, skin, blood, respiratory system, cardiovascular system.***Potential Health Effects****Eye:**

May cause eye irritation or burns.

Skin:

May cause eye irritation or burns. May cause skin sensitization.

Ingestion:

May cause gastrointestinal tract irritation with nausea, vomiting, and possible burns. May cause methemoglobinemia, cyanosis, convulsions, and death.



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Inhalation:

May cause methemoglobinemia, cyanosis, convulsions, tachycardia, dyspnea, and death. May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath, and delayed lung edema.

Chronic:

Prolonged exposure may result in liver and kidney damage. Absorption into the body leads to the formation of methemoglobin, which, in sufficient concentrations, causes cyanosis.

Section 4 - First Aid Measures

Eyes:

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

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

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. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

Absorption of this product into the body may cause cyanosis. Moderate degrees of cyanosis need to be treated only by supportive measures: bed rest and oxygen inhalation. For methemoglobinemia, administer oxygen alone or with Methylene Blue, depending on the concentration in the blood. Cleansing of the entire contaminated area is of utmost importance.

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. Move container if possible, and avoid breathing vapors or dust. Avoid toxic fumes from burning or decomposing material. Fight fire from protected location or maximum possible distance.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0.

CAS# 5470-11-1: Health- 2, Flammability- 0, Instability- 3.

Explosion Limits:

Lower: n/a Upper: n/a



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Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth), and place in plastic bags for later disposal.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas. Do not use with metal spatula or other metal items.

Storage:

Store capped at room temperature. Protect from heat and incompatibles. Keep away from metals.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None listed	None listed	None listed
Hydroxylamine Hydrochloride	None listed	None listed	None listed

OSHA Vacated PELs:

None listed.

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 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.

Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: Colorless



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Odor:	Odorless
pH:	3.2 (0.2M aq. solution)
Vapor Pressure:	Not available
Vapor Density:	Not available
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	Not available
Decomposition Temperature:	Not available
Solubility in water:	Soluble
Specific Gravity/Density:	1.0 – 1.2
Molecular Formula:	Not applicable
Molecular Weight:	Not applicable

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures. Dry hydroxylamine hydrochloride reacts at temperatures above 115°C (239°F), decomposing violently.

Conditions to Avoid:

Incompatible materials, excess heat.

Incompatibilities with Other Materials:

Metals, strong oxidizing agents.

Hazardous Decomposition Products:

Oxides of nitrogen, hydroxylamine, ammonia, hydrochloric acid.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 5470-11-1: NC3675000.

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg

CAS# 5470-11-1:

Oral, mouse: LD50 = 408 mg/kg

Oral, rat: LD50 = 141 mg/kg

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 5470-11-1: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

This product is an eye, mucous membrane, and skin irritant. It is also a skin sensitizer.



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Teratogenicity:

An abstract from the EPA Office of Toxic Substances indicates that hydroxylamine hydrochloride is teratogenic in rabbits and chicks, but not in cows. Other studies have reported effects in rabbits, but not in rats.

Reproductive:

No information found

Mutagenicity:

Please refer to RTECS# NC3675000 for specific information.

Neurotoxicity:

No information found

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal**TSCA:**

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 5470-11-1 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

None of the components have an RQ.

CERCLA/SARA Section 313:

None of the components are on this list.

OSHA - Highly Hazardous:

None of the chemicals in this product are considered highly hazardous by OSHA.

US State**State Right to Know:**

CAS# 7732-18-5 is not present on state Right-to-Know lists from California, Pennsylvania, Minnesota, Massachusetts, Florida, or New Jersey.

CAS# 5470-11-1 is not present on state Right-to-Know lists from California, Pennsylvania, Minnesota, Massachusetts, Florida, or New Jersey.



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California Regulations:

None.

European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 5470-11-1 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 5470-11-1 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: May 31, 1998

Revision Date: September 16, 2008

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