

Safety Data Sheet
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Hydroxylamine Hydrochloride Solution	
NCL Catalog Number	H-50	
Product Description	Laboratory chemical, APHA for Iron	
Supplier	NCL of Wisconsin, Inc. Telephone: 1-800-648-7836 Email: nclabs@nclabs.com	PO Box 8, Birnamwood, WI 54414 Fax: 715-449-2454 Emergency Contact: 1-800-424-9300 (Chemtrec)

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Skin Irritation	Category 2
Eye Irritation	Category 2A
Skin Sensitization	Category 1
Carcinogenicity	Category 2
Specific Target Organ Toxicity	Repeated Exposure Category 2
Aquatic Acute	Category 2
Aquatic Chronic	Category 2



Signal Word Warning

Hazard Statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe mist/vapors/spray.
P264	Wash exposed skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents/container to comply with local, state and federal regulations.

Other Hazards Not Contributing to the Classification

None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity Not applicable
Common Name Not applicable

Mixture

Name	CAS #	Approximate %
Water	7732-18-5	90
Hydroxylamine Hydrochloride	5470-11-1	10

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General First Aid Measures Never give anything by mouth to an unconscious person. If exposed or concerned: Get medical advice/attention.

If Inhaled Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

In Case of Skin Contact Wash with plenty of soap and water. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

In Case of Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. If eye irritation persists: Get medical advice/attention.

If Swallowed Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

Most Important Symptoms/Effects Acute and Delayed

Symptoms/Injuries Causes skin and eye irritation. May cause an allergic skin reaction. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

After Inhalation May be harmful if inhaled.

After Skin Contact Causes skin irritation. May cause an allergic skin reaction.

After Eye Contact Causes serious eye irritation.

After Ingestion Extreme irritation of the mucous membranes.

Indication of Immediate Medical Attention and Special Treatment Needed

Seek medical advice if you feel unwell.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable Extinguishing Media Do not use a heavy water stream.

Special Hazards Arising from the Chemical

Thermal decomposition generates corrosive vapors.

Special Protective Actions for Fire-Fighters

Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray. Dilute toxic gases with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment (see section 8). Safety glasses, gloves, gas/dust mask. Avoid breathing vapors, mist or gas. Ensure adequate ventilation and evacuate personnel to safe areas.

Environmental Precautions Prevent entry to surface and ground waters.

Methods and Materials for Containment and Cleaning Up Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Ensure compliance with federal, state and local regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Conditions for Safe Storage Including any Incompatibilities Keep in original container, tightly closed and stored in a cool, dry, ventilated area. Store away from strong bases, strong reducing agents, metals, sources of ignition, direct sunlight, and combustible materials.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate Engineering Controls Material should be handled or transferred in a fume hood or with equivalent ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

Individual Protection Measures Avoid all unnecessary exposure.

Eye/Face Protection Use chemical safety goggles and /or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye-wash fountain and quick-drench facilities in work area.

Skin Protection Protective gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Respiratory Protection Wear appropriate mask.

Other Information Do not eat, drink, or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Clear
Odor	Odorless
Odor Threshold	Not determined
pH	Not determined
Melting Point/Freezing Point	Not determined
Initial Boiling Point and Boiling Range	Not determined
Flash Point	Not determined
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not determined
Upper/Lower Flammability/Explosive Limits	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	1.1 g/ml
Solubility	Soluble in water
Partition Coefficient: n-octanol/water	Not determined
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity Thermal decomposition generates toxic gases of ammonia and hydrogen chloride.

Chemical Stability Stable under ordinary conditions of use and storage.

Possibility of Hazardous Reactions May react with strong oxidizing agents.

Conditions to Avoid	Direct sunlight and extremely high or low temperatures.
Incompatible Materials	Bases and Oxidizers
Hazardous Decomposition Products	Thermal decomposition generates toxic gases of ammonia and hydrogen chloride.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Not classified
Hydroxylamine Hydrochloride (5470-11-1)	
LD50 oral rat	141 mg/kg
Water (7732-18-5)	
LD50 oral rat	≥90000 mg/kg

Skin Corrosion/Irritation	Causes skin irritation.
Serious Eye Damage/Irritation	Causes serious eye irritation.
Respiratory or Skin Sensitization	May cause an allergic skin reaction.
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Suspected of causing cancer.
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Target Organ Toxicity (Repeated Exposure)	May cause damage to organs through prolonged or repeated exposure.
Aspiration Hazard	Not classified
Potential Adverse Human Health Effects and Symptoms	Not classified.
Symptoms/Injuries After Inhalation	Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/Injuries After Skin Contact	Repeated exposure to this material can result in absorption through the skin causing significant health hazard.
Symptoms/Injuries After Eye Contact	Causes serious eye irritation.
Symptoms/Injuries After Ingestion	Extreme irritation of the mucous membranes.
Other Information	No data available

SECTION 12: ECOLOGICAL INFORMATION

Ecology – Water Toxicity	Toxic to aquatic life with long lasting results.
Persistence and Degradability	May cause long-term adverse effects to the environment.
Bioaccumulative Potential	Not established
Mobility in Soil	Not established
Other Adverse Effects	Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

Disposal Recommendations	Dispose of contents/containers in accordance with federal, state and local regulations.
Other Information	Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

UN Number	Not applicable
UN Shipping Name	Not applicable
Transport Hazard Class(es)	Not applicable

Packing Group	Not applicable
Environmental Hazards	Not applicable
Transport in Bulk	Not applicable
Other Precautions	Not applicable

SECTION 15: REGULATORY INFORMATION

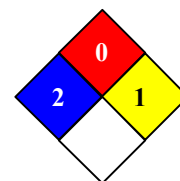
Hydroxylamine Hydrochloride (5470-11-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311 Hazard Class	Immediate (acute) health hazard

SECTION 16: OTHER INFORMATION

Revision Date: 02/25/2015

NFPA Hazards

Health Hazard	2: Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury.
Fire Hazard	0: Materials that will not burn under typical fire conditions.
Reactivity/Instability	1: Normally stable, but can become unstable at elevated temperatures and pressures.



HMIS III Rating

Health	2: Temporary or minor injury may occur.
Flammability	0: Materials that will not burn.
Physical Hazard	1: Materials that are normally stable but can become unstable at high temperatures and pressures with low risk for explosion.
Personal Protection	F

H-50	
Health	2
Flammability	0
Physical Hazard	1
Personal Protection	F

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END OF SAFETY DATA SHEET