

# Safety Data Sheet

## Hydroxylamine Hydrochloride Crystal, ACS

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Hydroxylamine Hydrochloride Crystal, ACS

**Synonyms/Generic Names:** Hydroxylammonium chloride; Oxammonium chloride

**Product Number:** 2725

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer:** Columbus Chemical Industries, Inc.  
N4335 Temkin Rd.  
Columbus, WI. 53925

**For More Information Call:** 920-623-2140 (Monday-Friday 8:00-4:30)

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**OSHA Hazards:** Target organ effect, Toxic by ingestion, Harmful by skin absorption, Skin sensitizer, Corrosive, Carcinogen

**Target Organs:** Blood

**Signal Word:** Danger

**Pictograms:**



**GHS Classification:**

Corrosive to metals	Category 1
Acute toxicity, Oral	Category 3
Acute toxicity, Dermal	Category 4
Skin irritation	Category 2
Eye irritation	Category 2A
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity-repeated exposure	Category 2
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

**GHS Label Elements, including precautionary statements:**

**Hazard Statements:**

H290	May be corrosive to metals.
H301	Toxic if swallowed.

H312	Harmful in contact with skin.
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.
H410	Very 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.
P234	Keep only in original container.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
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.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/physician if you feel unwell.
P330	Rinse mouth.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P390	Absorb spillage to prevent material damage.
P405	Store locked up.
P406	Store in corrosive resistant container or a container with a resistant inner liner.
P501	Dispose of contents/container to an approved waste disposal plant.

#### Potential Health Effects

<b>Eyes</b>	Causes eye serious irritation.
<b>Inhalation</b>	May be harmful if inhaled. Causes respiratory tract irritation.
<b>Skin</b>	Causes skin irritation.
<b>Ingestion</b>	Toxic if swallowed.

#### NFPA Ratings

<b>Health</b>	3
<b>Flammability</b>	0
<b>Reactivity</b>	1
<b>Specific hazard</b>	Not Available

#### HMIS Ratings

<b>Health</b>	3
<b>Fire</b>	0
<b>Reactivity</b>	1
<b>Personal</b>	J

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Hydroxylamine Hydrochloride	>96	5740-11-1	226-798-2	H <sub>3</sub> NO·HCl	69.49 g/mol

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## 4. FIRST-AID MEASURES

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<b>Eyes</b>	Rinse with plenty of water for at least 15 minutes and seek medical attention.
<b>Inhalation</b>	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
<b>Skin</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention.
<b>Ingestion</b>	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

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## 5. FIRE-FIGHTING MEASURES

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<b>Suitable (and unsuitable) extinguishing media</b>	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.
<b>Special protective equipment and precautions for firefighters</b>	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
<b>Specific hazards arising from the chemical</b>	Emits toxic fumes (nitrogen oxides, hydrogen chloride gas) under fire conditions. (See also Stability and Reactivity section).

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## 6. ACCIDENTAL RELEASE MEASURES

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<b>Personal precautions, protective equipment and emergency procedures</b>	See section 8 for recommendations on the use of personal protective equipment.
<b>Environmental precautions</b>	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
<b>Methods and materials for containment and cleaning up</b>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

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## 7. HANDLING AND STORAGE

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### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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**Occupational exposure controls:** Contains no substances with occupational exposure limit values.

### Personal Protection

<b>Eyes</b>	Wear chemical safety glasses or goggles.
<b>Inhalation</b>	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
<b>Skin</b>	Wear nitrile or rubber gloves, apron or lab coat.
<b>Other</b>	Not Available

### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance (physical state, color, etc.)	White, crystalline solid.
Odor	Odorless.
Odor threshold	Not Available
pH	2.5 - 3.5 at 50 g/L at 20°C (68°F)
Melting point/freezing point	151°C (303.8°F)
Initial boiling point and boiling range	Not Available
Flash point	Not Available
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Upper/lower flammability or explosive limit	Not Available
Vapor pressure	Not Available
Vapor density	Not Available
Density	Not Available
Solubility (ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

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## 10. STABILITY AND REACTIVITY

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<b>Chemical Stability</b>	Stable
<b>Possibility of Hazardous Reactions</b>	Will not occur.
<b>Conditions to Avoid</b>	Excess heat, moisture.
<b>Incompatible Materials</b>	Oxidizing agents, combustible materials, organic materials, alkalis.
<b>Hazardous Decomposition Products</b>	Nitrogen oxides, hydrogen chloride gas.

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## 11. TOXICOLOGICAL INFORMATION

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### Acute Toxicity

#### *Hydroxylamine Hydrochloride*

<b>Skin</b>	Not Available
<b>Eyes</b>	Not Available
<b>Respiratory</b>	Not Available
<b>Ingestion</b>	LD50 Oral - rat - 141 mg/kg

### Carcinogenicity

<b>IARC</b>	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>ACGIH</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>NTP</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
<b>OSHA</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Signs & Symptoms of Exposure

<b>Skin</b>	Irritation, redness, itchiness. Depends on duration of skin exposure.
<b>Eyes</b>	Irritation, pain, reddening, watering, and possibly burns, corneal damage and blindness.
<b>Respiratory</b>	Irritation, coughing, wheezing, spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema.
<b>Ingestion</b>	Severe irritation and burns of the mouth, throat, esophagus, and other tissues of the digestive tract, nausea, vomiting, diarrhea.

<b>Chronic Toxicity</b>	Not Available
<b>Teratogenicity</b>	Not Available
<b>Mutagenicity</b>	May affect genetic material. Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
<b>Embryotoxicity</b>	Not Available
<b>Specific Target Organ Toxicity</b>	May cause damage to organs through prolonged or repeated exposure.
<b>Reproductive Toxicity</b>	Not Available
<b>Respiratory/Skin Sensitization</b>	Not Available

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## 12. ECOLOGICAL INFORMATION

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### Ecotoxicity

*Hydroxylamine Hydrochloride*

<b>Aquatic Vertebrate</b>	LC50 - <i>Leuciscus idus</i> (Golden orfe) - 1 - 10 mg/l - 48.0 h
<b>Aquatic Invertebrate</b>	Not Available
<b>Terrestrial</b>	Not Available

<b>Persistence and Degradability</b>	Not Available
<b>Bioaccumulative Potential</b>	Not Available
<b>Mobility in Soil</b>	Not Available
<b>PBT and vPvB Assessment</b>	Not Available
<b>Other Adverse Effects</b>	Very toxic to aquatic life.

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## 13. DISPOSAL CONSIDERATIONS

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<b>Waste Residues</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
<b>Product Containers</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

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## 14. TRANSPORTATION INFORMATION

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US DOT	UN2933, Corrosive solids, toxic, n.o.s. (Hydroxylamine hydrochloride), 8, (6.1), pg III
TDG	UN2933, CORROSIVE SOLIDS, TOXIC, N.O.S. (HYDROXYLAMINE HYDROCHLORIDE), 8, (6.1), pg III
IMDG	UN2933, CORROSIVE SOLIDS, TOXIC, N.O.S. (HYDROXYLAMINE HYDROCHLORIDE), 8, (6.1), PG III
Marine Pollutant	No
IATA/ICAO	UN2933, Corrosive solids, toxic, n.o.s. (Hydroxylamine hydrochloride), 8, (6.1), pg III

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## 15. REGULATORY INFORMATION

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TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	No SARA Hazard
SARA 304	No SARA Hazard
SARA 311	Acute Health Hazard, Chronic Health Hazard
SARA 312	Acute Health Hazard, Chronic Health Hazard
SARA 313	No SARA Hazard
WHMIS Canada	CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2B: Material causing other toxic effects (TOXIC). CLASS E: Corrosive solid.

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## 16. OTHER INFORMATION

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Revision	Date
Revision 1	03/25/2013
Revision 2	09/18/2014

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