



# SAFETY DATA SHEET

**VWR ANALYTICAL**

**Issuing Date** 20-Jul-2012

**Revision Date** 10-Feb-2015

**Revision Number** 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Name** HYDROXYLAMINE HCL

**Other means of identification**

**Product Code(s)** BDH9236-1KG : BDH9236-500G

**UN-No** 2923

**Synonyms** No information available.

**Recommended use of the chemical and restrictions on use**

**Recommended Use** For Laboratory Use Only. Not for Drug, Food, or Household use.

**Uses advised against** Not for Human or Animal Drug Use

**Details of the supplier of the safety data sheet**

**Company Address**

VWR International, LLC  
Radnor Corporate Center  
100 Matsonford Road  
Radnor, PA 19087-8660

**Company Phone Number** 610-386-1700

**E-mail Address** www.vwr.com

**Emergency Telephone Number**

**Emergency Telephone Number** CHEMTREC 800.424.9300  
CANUTEC 613.996.6666

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral	Category 4
Acute Toxicity - Dermal	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Skin Sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2

**Label elements**

**Emergency Overview**

**Warning**

**Hazard Statements**

- H302 - Harmful 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



**Appearance** White

**Physical State** Powder

**Odor** No information available

**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 dust/fume/gas/mist/vapors/spray
- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 - Wash face, hands and any exposed skin 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
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P281 - Use personal protective equipment as required
- P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P308 + P313 - IF exposed or concerned: Get medical advice/attention
- P312 - Call a POISON CENTER or doctor if you feel unwell
- P314 - Get medical advice/attention if you feel unwell
- P321 - Specific treatment (see supplemental first aid instructions on this label)
- P322 - Specific measures (see supplemental first aid instructions on this label)
- P330 - Rinse mouth
- P332 + P313 - If skin irritation occurs: Get medical advice/attention
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
- P337 + P313 - If eye irritation persists: Get medical advice/attention
- P362 - Take off contaminated clothing and wash before reuse
- P363 - Wash contaminated clothing before reuse
- P405 - Store locked up
- P501 - Dispose of contents/ container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

- Very toxic to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Hydroxylamine hcl	5470-11-1	226-798-2	95-100	Not applicable

#### 4. FIRST AID MEASURES

##### First Aid Measures

<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Consult a physician if necessary.
<b>Inhalation</b>	Move to fresh air. If not breathing, give artificial respiration.
<b>Ingestion</b>	Clean mouth with water and afterwards drink plenty of water. Consult a physician.

##### Most important symptoms and effects, both acute and delayed

**Most Important Symptoms/Effects** No information available.

##### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** No information available.

##### Specific Hazards Arising from the Chemical

Fine powder is capable of creating a dust explosion. Containers may explode when heated.

**Hazardous Combustion Products** Nitrogen oxides (NOx). Hydrogen Chloride gas.

##### Explosion Data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Ensure adequate ventilation, especially in confined areas.

##### Environmental Precautions

**Environmental Precautions** See Section 12 for additional Ecological information.

##### Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

**Handling** Handle in accordance with good industrial hygiene and safety practice. Air sensitive. Hygroscopic.

### Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Air and moisture sensitive.

**Incompatible Products** Strong oxidizing agents. Heavy Metals.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydroxylamine hcl 5470-11-1	-	-	

### Appropriate engineering controls

**Engineering Measures** Showers  
 Eyewash stations  
 Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Avoid contact with eyes. Safety glasses with side-shields.

**Skin and Body Protection** Wear protective gloves/clothing.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Powder	<b>Odor</b>	No information available
<b>Appearance</b>	White	<b>Odor Threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	2.5 - 3.5 (50 g/l @ 20 C)	
<b>Melting point/freezing point</b>	152 - 157 °C	
<b>Boiling Point/Range</b>	No information available.	
<b>Flash Point (High in °C)</b>	No information available.	
<b>Evaporation Rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available.	
<b>Lower flammability limit:</b>	No information available.	

<b>Vapor pressure</b>	No information available.
<b>Vapor Density</b>	No information available.
<b>Specific Gravity</b>	No information available
<b>Water Solubility</b>	No information available
<b>Solubility in other solvents</b>	No information available.
<b>Partition coefficient</b>	No information available
<b>Autoignition Temperature</b>	
<b>Decomposition Temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available.
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available

**Other Information**

<b>Softening Point</b>	No information available.
<b>Molecular Weight</b>	No information available
<b>VOC Content</b>	No information available.
<b>Density</b>	No information available
<b>Bulk Density</b>	No information available

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

Corrosive to metals.

**Conditions to Avoid**

Extremes of temperature and direct sunlight.

**Incompatible Materials**

Strong oxidizing agents. Heavy Metals.

**Hazardous Decomposition Products**

Nitrogen oxides (NOx). Hydrogen chloride gas.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

<b>Product Information</b>	Toxic if swallowed Product is harmful by skin contact Irritating to eye, skin and respiratory system Sensitizer
<b>Inhalation</b>	There is no data available for this product.
<b>Eye Contact</b>	There is no data available for this product.
<b>Skin Contact</b>	There is no data available for this product.
<b>Ingestion</b>	There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydroxylamine hcl 5470-11-1	= 141 mg/kg ( Rat )	-	-

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.

**Mutagenic Effects** No information available.

**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydroxylamine hcl 5470-11-1	-	-	-	-

**Reproductive Toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Chronic Toxicity** Causes damage to organs through prolonged or repeated exposure. Suspected carcinogen.

**Target Organ Effects** Blood, Central nervous system (CNS).

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document . 600

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Hydroxylamine hcl 5470-11-1	-	-	-

**Persistence and Degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical Name	Log Pow
Hydroxylamine hcl 5470-11-1	-

**Other Adverse Effects** No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste Disposal Method** Dispose of material in accordance with all federal, state, and local regulations.

**Contaminated Packaging** Do not re-use empty containers.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Hydroxylamine hcl 5470-11-1	-	-	-	-

Chemical Name	California Hazardous Waste Status
Hydroxylamine hcl 5470-11-1	-

**14. TRANSPORT INFORMATION**

**DOT**

UN-No 2923  
 Proper Shipping Name CORROSIVE SOLID, TOXIC, N.O.S. (CONTAINS HYDROXYLAMINE HYDROCHLORIDE)  
 Hazard Class 8  
 Subsidiary Class 6.1  
 Packing Group III

**IATA**

UN-No 2923  
 Proper Shipping Name CORROSIVE SOLID, TOXIC, N.O.S. (CONTAINS HYDROXYLAMINE HYDROCHLORIDE)  
 Hazard Class 8  
 Subsidiary Class 6.1  
 Packing Group III

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA Complies  
 DSL/NDSL Complies  
 EINECS/ELINCS Complies  
 ENCS Complies  
 IECSC Complies  
 KECL Complies  
 PICCS Complies  
 AICS Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
Hydroxylamine hcl 5470-11-1 ( 95-100 )	-

**SARA 311/312 Hazard Categories**

Acute Health Hazard Yes  
 Chronic Health Hazard Yes  
 Fire Hazard No  
 Sudden Release of Pressure Hazard No  
 Reactive Hazard No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydroxylamine hcl 5470-11-1	-	-	-	-

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Hydroxylamine hcl 5470-11-1	-	-	-

**U.S. State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Hydroxylamine hcl - 5470-11-1	-

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Hydroxylamine hcl 5470-11-1	-	-	-

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

Canada

**WHMIS Hazard Class**

E Corrosive material D1B Toxic materials D2B Toxic materials



**16. OTHER INFORMATION**

Issuing Date 20-Jul-2012

Revision Date 10-Feb-2015

Revision Note  
 No information available

**Disclaimer**

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

**End of Safety Data Sheet**