



杭州大阳化工有限公司  
Hangzhou Dayangchem Co., Ltd.

## Safety Data Sheet

No :M-13559

### Section 1 - Product and Company Identification

**MSDS Name:** Hydroxylamine sulfate

**Synonyms:** Hydroxylammonium sulfate

**Company Identification:** Hangzhou Dayangchem Co., Ltd.

**For information, call:** 86-571-88938639

**For information, E-mail:** infores@chinadayangchem.com

**Emergency Number:** 86-571-88938639

**For CHEMTREC assistance, call:** 86-571-88938639; FAX:86-571-88938652

### Section 2 – Hazards Identification

**Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Corrosive to metals (Category 1), H290

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Dermal (Category 4), H312

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Skin sensitisation (Category 1), H317

Carcinogenicity (Category 2), H351

Specific target organ toxicity - repeated exposure (Category 2), H373

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### **Classification according to EU Directives 67/548/EEC or 1999/45/EC**

E Explosive R 2 R40

Xn Harmful R21/22, R48/22

Xi Irritant R36/38 R43

N Dangerous for the Environment R50

For the full text of the R-phrases mentioned in this Section, see Section 16.

### **Label elements**

#### **Labelling according Regulation (EC) No 1272/2008**

Pictogram



Signal word    Warning

#### **Hazard statement(s)**

H290 May be corrosive to metals.

H302 + H312 Harmful if swallowed or 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.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

#### **Precautionary statement(s)**

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards-none

### Section 3 – Composition/Information on Ingredients

CAS#	Chemical Name	%	EINECS#	Classification
10039-54-0	Hydroxylamine sulfate	99	233-118-8	Met. Corr. 1; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; Carc. 2; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 3; H290, H302 + H312, H315, H317, H319, H351, H373, H400, H412 E, Xn, N, Carc.Cat.3, R 2 - R21/22 - R36/38 - R40 - R43 - R48/22 - R50

For the full text of the H-Statements mentioned in this Section, see Section 16.

### Section 4 - First Aid Measures

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

**In case of skin contact:** Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

### Section 5 - Fire Fighting Measures

**Precautions for fire-fighters:** Wear self contained breathing apparatus for fire fighting if necessary.

**Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## Section 6 - Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Spills/Leaks:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## Section 7 - Handling and Storage

**Handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

**Storage:** Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

## Section 8 - Exposure Controls, Personal Protection

Contains no substances with occupational exposure limit values.

### Personal Protective Equipment

**Eyes:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Clothing:** Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respirators:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline

**Color:** white

**Odor:** Not available.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** 170 °C - dec.

**Autoignition Temperature:** Not available.

**Flash Point:** Not available.

**Explosion Limits:Lower:** Not available.

**Explosion Limits Upper:** Not available.

**Decomposition Temperature:** Not available.

**Solubility in water:** 587 g/l at 20 °C - soluble

**Specific Gravity/Density:** 1.88 g/cm<sup>3</sup> at 20 °C

**Molecular Formula:** H<sub>6</sub>N<sub>2</sub>O<sub>2</sub> · H<sub>2</sub>O<sub>4</sub>S

**Molecular Weight:** 164.14

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials.

**Incompatibilities with Other Materials:** oxidizing agents.

**Hazardous Decomposition Products:** nitrogen oxides (NO<sub>x</sub>), Sulphur oxides

## Section 11 - Toxicological Information

**RTECS#:** CAS# 10039-54-0: NC5425000

**LD50/LC50:** RTECS: LD50 Oral - rat - male and female - 642 mg/kg

LD50 Dermal - rabbit - male and female - > 1,500 - < 2,000 mg/kg

**Carcinogenicity:** Hydroxylamine sulfate- Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

## Section 12 - Ecological Information

### Toxicity

Toxicity to fish mortality LC50 - Pimephales promelas (fathead minnow) - 7.2 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - 1.62 mg/l - 48 h

Toxicity to algae static test EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - 0.72 mg/l - 72 h

Toxicity to bacteria Respiration inhibition EC50 - Sludge Treatment - 54 mg/l - 180 min

### Other adverse effects

Very toxic to aquatic life.

## Section 13 - Disposal Considerations

**Product:** Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging:** Dispose of as unused product.

## Section 14 - Transport Information

	<b>IMO</b>	<b>RID/ADR</b>	<b>IATA</b>
<b>Shipping Name:</b>	HYDROXYLAMINE SULPHATE	HYDROXYLAMINE SULPHATE	Hydroxylamine sulphate
<b>Hazard Class:</b>	8	8	8
<b>UN Number:</b>	2865	2865	2865
<b>Packing Group:</b>	III	III	III
<b>marine pollutant:</b> Yes			
<b>other applicable information:</b> Not available.			

## Section 15 - Regulatory Information

This safety data sheet complies with the requirements of Regulation (EC) No 1907/2006

## Section 16 - Other Information

**Full text of H-Statements referred to under sections 2 and 3.**

Acute Tox. Acute toxicity

Aquatic Acute Acute aquatic toxicity

Aquatic Chronic Chronic aquatic toxicity

Carc. Carcinogenicity

Eye Irrit. Eye irritation

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H302 + H312 Harmful if swallowed or in contact with skin

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.

H400 Very toxic to aquatic life.

**Full text of R-phrases referred to under sections 2 and 3**

E Explosive

N Dangerous for the environment

Xn Harmful

R 2 Risk of explosion by shock, friction, fire or other sources of ignition.

R21/22 Harmful in contact with skin and if swallowed.

R36/38 Irritating to eyes and skin.

R40 Limited evidence of a carcinogenic effect.

R43 May cause sensitisation by skin contact.

R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

R50 Very toxic to aquatic organisms.

**MSDS Creation Date:** 23/09/2014

**Revision #1 Date:** 20/07/2015

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