



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

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**Product Name** Copper Sulfate-Sulfamic Acid Inhibitor  
**NCL Catalog Number** C-40  
**Product Description** Laboratory chemical  
**Supplier** NCL of Wisconsin, Inc. PO Box 8, Birnamwood, WI 54414  
Telephone: 1-800-648-7836 Fax: 715-449-2454  
Email: [nclabs@nclabs.com](mailto:nclabs@nclabs.com) Emergency Contact: 1-800-424-9300 (Chemtrec)

**SECTION 2: HAZARDS IDENTIFICATION**

**GHS Classification**

Skin Irritation Category 2  
Serious Eye Damage Category 1  
Aquatic Acute Category 2  
Aquatic Chronic Category 2



**Signal Word** Danger

**Hazard Statements**

H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary Statements**

P264 Wash exposed skin thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P332+P313 If skin irritation 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.  
P310 Immediately call a POISON CENTER or doctor.  
P391 Collect spillage.  
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	90.2
Cupric Sulfate Pentahydrate	7758-99-8	4.6
Sulfamic Acid	5329-14-6	3.0
Glacial Acetic Acid	64-19-7	2.2

## 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**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experience respiratory symptoms: Call a POISON CENTER or doctor/physician.

#### **In Case of Skin Contact**

Remove/take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Rinse skin with water/shower. 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. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

#### **If Swallowed**

Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician.

### Most Important Symptoms/Effects Acute and Delayed

#### **After Skin Contact**

Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.

#### **After Eye Contact**

Causes serious eye damage.

### 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 dust formation. Avoid breathing dust, 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 local, state and federal 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.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Control Parameters**

<b>Acetic Acid (64-19-7)</b>		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	15 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm

**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**

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

**SECTION 10: STABILITY AND REACTIVITY**

<b>Reactivity</b>	No data available
<b>Chemical Stability</b>	Stable under ordinary conditions of use and storage.
<b>Possibility of Hazardous Reactions</b>	No data available
<b>Conditions to Avoid</b>	No data available
<b>Incompatible Materials</b>	No data available
<b>Hazardous Decomposition Products</b>	When heated to decomposition, can emit toxic gases.

**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>Acute Toxicity</b>	Not classified
<b>Water (7732-18-5)</b>	
<b>LD50 oral rat</b>	>90000 mg/kg
<b>Skin Corrosion/Irritation</b>	Causes skin irritation.
<b>Serious Eye Damage/Irritation</b>	Causes serious eye damage.
<b>Respiratory or Skin Sensitization</b>	Not classified
<b>Germ Cell Mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive Toxicity</b>	Not classified
<b>Specific Target Organ Toxicity (Single Exposure)</b>	Not classified
<b>Specific Target Organ Toxicity (Repeated Exposure)</b>	Not classified
<b>Aspiration Hazard</b>	Not classified
<b>Potential Adverse Human Health Effects and Symptoms</b>	Not classified
<b>Symptoms/Injuries After Skin Contact</b>	Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.
<b>Symptoms/Injuries After Eye Contact</b>	Causes serious eye damage.
<b>Other Information</b>	No additional information.

## SECTION 12: ECOLOGICAL INFORMATION

**Ecology – Water Toxicity** Toxic to aquatic life with long lasting results.

<b>Copper (II) Sulfate, Pentahydrate (7758-99-8)</b>	
LC50 fishes 1	1.5 mg/l
EC50 Daphnia 1	0.17 mg/l
TLM fish 1	3.8 ppm

**Persistence and Degradability** Not established

**Bioaccumulative Potential** Not established

**Mobility in Soil** Toxic to flora.

**Other Adverse Effects** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### Methods of Disposal

**Disposal Recommendations** Dispose of contents/containers in accordance with local, state and federal regulations.

**Other Information** Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

**UN Number** Not regulated

**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

<b>Cupric Sulfate Pentahydrate (7758-99-8)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific Toxic Chemical Listings)	
Reportable Quantity	10 lb
<b>Sulfamic Acid (5329-14-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Glacial Acetic Acid (64-19-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

**SECTION 16: OTHER INFORMATION**

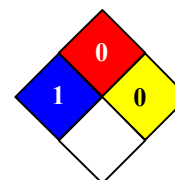
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**NFPA Hazards**

**Health Hazard** 1: Exposure would cause irritation with only minor residual injury.

**Fire Hazard** 0: Materials that will not burn under typical fire conditions.

**Reactivity** 0: Normally stable, even under fire exposure conditions, and are not reactive with water.



**HMIS III Rating**

**Health** 1: Irritation or minor reversible injury possible.

**Flammability** 0: Materials that will not burn.

**Physical Hazard** 0: Materials that are normally stable, even under fire conditions, and will not react with water.

**Personal Protection**

<b>C-40</b>	
<b>Health</b>	<b>1</b>
<b>Flammability</b>	<b>0</b>
<b>Physical Hazard</b>	<b>0</b>
<b>Personal Protection</b>	

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**END OF SAFETY DATA SHEET**