According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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SECTION 1: Identification

Product identifier

Product name: Copper Reagent #2 Product code: CU4002SS

Recommended use of the product and restriction on use

Relevant identified uses: Laboratory Chemicals Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: United States AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

Emergency telephone number: Canada ChemTel: (24-hour) +1(800)255-3924 +1(813)248-0585 (International)

SECTION 2: Hazard(s) identification

GHS classification:

Flammable liquids, category 2 Eye irritation, category 2A Specific target organ toxicity - single exposure, category 3, central nervous system

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P271 Use only outdoors or in a well-ventilated area.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/light/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

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P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash skin thoroughly after handling.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P303+P361+P353 If on skin (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower.

P370+P378 In case of fire: Use agents recommended in section 5 for extinction.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P304+P340+P312 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

P405 Store locked up.

P403+P233 Store in a well ventilated place. Keep container tightly closed.

P501 Dispose of contents and container as instructed in Section 13.

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 370-81-0	Cuprizone	0.4
CAS number: 67-63-0	Isopropanol	50
CAS number: 7732-18-5	Water	>49

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway

After skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes Remove contact lens(es) if able to do so during rinsing Seek medical attention if irritation persists or if concerned

After swallowing:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

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Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors Vapors can flow to distant ignition sources and flashback Liquid is volatile and may generate an explosive atmosphere

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing Refer to Section 8

Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols Avoid contact with skin, eyes and clothing

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Beware of vapors accumulating to form explosive concentrations Vapors can accumulate in low areas

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing Use spark-proof tools and explosion-proof equipment

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor. Use only non-sparking tools.

Take precautionary measures against electrostatic discharges.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

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Keep container tightly sealed.

Keep away from all ignition sources: open flames, hot surfaces, direct sunlight, spark sources. Store locked up.

Use appropriate containment to avoid environmental contamination.

Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values: Country (Legal Basis) Identifier Permissible concentration Substance 67-63-0 ACGIH Isopropanol ACGIH TLV STEL 400 ppm Isopropanol 67-63-0 ACGIH TLV TWA 200 ppm NIOSH 67-63-0 NIOSH IDLH 2,000 ppm Isopropanol Isopropanol 67-63-0 NIOSH STEL 500 ppm, 1,225 mg/m³ NIOSH TWA 400 ppm, 980 mg/m³ Isopropanol 67-63-0 67-63-0 United States (OSHA) OSHA PEL TWA 400 ppm, 980 Isopropanol mg/m³

Biological limit values:

Substance	Identifier	Determinant	Sampling time	Permissible limits
Isopropanol	67-63-0		End of shift at end of workweek.	40 mg/L

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Use explosion-proof ventilation equipment.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear, colorless liquid
Odor	Alcohol

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	i
Odor threshold	Not available
рН	Not available
Melting point/freezing point	Approx88°C
Initial boiling point/range	Approx. 82°C
Flash point (closed cup)	13°C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper flammability/explosive limit	Not available
Lower flammability/explosive limit	Not available
Vapor pressure	Approx. 33 at 20°C
Vapor density	Not available
Density	Not available
Relative density	Not available
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not available
Auto/Self-ignition temperature	Not available
Decomposition temperature	Not available
Dynamic viscosity	Not available
Kinematic viscosity	Not available
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Excess heat, ignition source or flames.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

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Substance data:

Name	Result
Cuprizone	Irritating to the skin.

Serious eye damage/irritation

Assessment: Causes serious eye irritation

Product data: No data available.

Substance data:

Name	Result
Cuprizone	Causes serious eye irritation.
Isopropanol	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
Isopropanol	Group 3 - Not classifiable as to its carcinogenicity to humans

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: May cause drowsiness or dizziness

Product data: No data available.

Substance data:

Name	Result
Isopropanol	Specific Target Organ Toxicity, Single Exposure - May cause drowsiness or dizziness.
Cuprizone	May cause dizziness and drowsiness through single exposure.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

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Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available. **Other information:** No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met. **Product data:** No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available. **Substance data:** No data available.

Bioaccumulative potential

Product data: No data available. **Substance data:** No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN1993		
UN proper shipping name	Flammable Liquids, N.O.S., (Isopropanol Solution)		
UN transport hazard class(es) 3		rammete custo	
Packing group	II		
Environmental hazards	None		
Special precautions for user	None		

International Maritime Dangerous Goods (IMDG)

UN number	UN1993	
UN proper shipping name	Flammable Liquids, N.O.S., (Isopropanol Solution)	
UN transport hazard class(es)	3	TIMENET CUCIO 3

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Packing group	II
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1993		
UN proper shipping name	Flammable Liquids, N.O.S., (Isopropanol Solution)		
UN transport hazard class(es) 3		PLANMALE LIQUD	
Packing group	II		
Environmental hazards	None		
Special precautions for user	None		

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code		
Bulk Name None		
Ship type	None	
Pollution category	None	

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

67-63-0	Isopropanol	Listed
370-81-0	Cuprizone	Listed
7732-18-5	Water	Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

67-63-0 Isopropanol	Listed
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CERCLA: Not determined.

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

370-81-0	Cuprizone	Not Listed
67-63-0	Isopropanol	Listed
7732-18-5	Water	Not Listed

New Jersey Right to Know:

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370-81-0	Cuprizone	Not
		Listed
67-63-0	Isopropanol	Listed
7732-18-5	Water	Not
		Listed

New York Right to Know:

370-81-0	Cuprizone	Not Listed
67-63-0	Isopropanol	Listed
7732-18-5	Water	Not Listed

Pennsylvania Right to Know:

370-81-0	Cuprizone	Not Listed
67-63-0	Isopropanol	Listed
7732-18-5	Water	Not Listed

California Proposition 65: Not determined.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

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End of Safety Data Sheet