

⚠ Safety Data Sheet (SDS)

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Compound: copper;dinitrate | Generated on: 2025-08-04 15:10

1. Chemical Product and Company Identification

Product Identifier	copper;dinitrate
Company	Automated SDS Generator
Address	N/A
Emergency Phone	N/A
Recommended Use	Research Use Only

2. Composition and Information on Ingredients

Name	copper;dinitrate
CAS Number	Not available
Molecular Formula	CuN2O6
Purity/Concentration	100% (pure compound)

3. Hazards Identification

Signal Word	Danger
GHS Pictograms	⚠ Flammable
Hazard Statements	<ul style="list-style-type: none">H225: Highly flammable liquid and vapor
Precautionary Statements	<ul style="list-style-type: none">P210: Keep away from heat, hot surfaces, sparks, open flames.P241: Use explosion-proof electrical/ventilation equipment.P261: Avoid breathing dust/fume/gas/mist/vapors/spray.P280: Wear protective gloves/protective clothing/eye protection/face protection.P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.
Physical Hazards	Flammable liquid and vapor
Health Hazards	None identified
Environmental Hazards	Low concern
Routes of Exposure	Inhalation, Skin Contact, Ingestion, Eye Contact

Acute and Chronic Effects	This substance is harmful if inhaled, swallowed, or absorbed through the skin. Vapors may cause dizziness or asphyxiation in high concentrations. Chronic exposure may lead to liver, kidney, or respiratory damage.
Immediate Medical Attention	Seek medical attention immediately in case of exposure. Show SDS to physician.

4. First Aid Measures

Inhalation	Move to fresh air. If breathing is difficult, give oxygen.
Skin Contact	Flush with plenty of water. Remove contaminated clothing.
Eye Contact	Flush with water for at least 15 minutes.
Ingestion	Do NOT induce vomiting. Rinse mouth and consult a physician.

5. Fire and Explosion Data

Flash Point	13°C
Flammable Limits	3.3% - 19% in air
Extinguishing Media	Dry chemical, CO2, alcohol-resistant foam
Special Hazards	Vapors may form explosive mixtures with air.

6. Accidental Release Measures

Personal Precautions	Wear PPE, ensure ventilation
Environmental Precautions	Prevent entry into drains or waterways
Methods of Containment	Absorb with inert material (sand, vermiculite)

7. Handling and Storage

Handling	Ground containers, use explosion-proof equipment
Storage	Store in a cool, well-ventilated place away from ignition sources

8. Exposure Controls/Personal Protection

TLV-TWA	100 ppm (300 mg/m³) for ethanol-like compounds
Engineering Controls	Local exhaust ventilation
Personal Protection	Safety goggles, gloves, lab coat

9. Physical and Chemical Properties

Physical State	Liquid
Color	Colorless
Odor	Characteristic
Melting Point	Not available
Boiling Point	Not available
Solubility in Water	Highly soluble
Density	Approx. 0.79 g/cm ³ (for alcohols)
Vapor Pressure	< 1 mmHg at 25°C
Molecular Weight	187.55 g/mol
LogP	-0.48
Topological Polar Surface Area (TPSA)	132.40 Å ²
Hydrogen Bond Donors	Not available
Hydrogen Bond Acceptors	6
Rotatable Bonds	Not available
Heavy Atom Count	9

10. Stability and Reactivity

Stability	Stable under normal conditions
Conditions to Avoid	Heat, flames, sparks
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition	Carbon monoxide, carbon dioxide

11. Toxicological Information

LD50 Oral Rat	50 mg/kg
LC50 Inhalation Rat	Not available
Carcinogenicity	Suspected
Mutagenicity	Positive
Toxicity Class	Class II (High)

12. Ecological Information

Ecotoxicity	Low concern
Biodegradability	Yes

Persistence	Low
Bioaccumulation	Low potential

13. Disposal Considerations

Disposal Method	Dispose in accordance with local regulations
Contaminated Packaging	Rinse and recycle or dispose properly

14. Transport Information

UN Number	UN1170
Proper Shipping Name	Ethanol or Ethyl Alcohol
Transport Hazard Class	3 (Flammable Liquid)
Packing Group	II

15. Other Regulatory Information

TSCA	Listed
DSL	Listed
WHMIS	Classified
GHS Regulation	GHS Rev 9 compliant

16. Other Information

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