

GELEST, INC.
 11 East Steel Rd. Morrisville, PA 19067
 Phone: (215) 547-1015

MATERIAL SAFETY
 DATA SHEET

EMERGENCY TELEPHONE
 CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **COPPER II FORMATE, tetrahydrate - CXCU045**

CHEMICAL NAME: COPPER II FORMATE, tetrahydrate

SYNONYMS: CUPRIC FORMATE; FORMIC ACID, COPPER SALT

CHEMICAL FAMILY: COPPER COMPOUND

FORMULA: $C_2H_2O_4Cu$

HMIS CODES HEALTH: 3 FLAMMABILITY: 1 REACTIVITY: 0

INGREDIENTS

IDENTITY

COPPER II FORMATE, tetrahydrate

CAS NO.

544-19-4

%

>95

TLV

not established

(ACGIH TLV-TWA: 1mg/m³ as Cu)

PHYSICAL DATA

Boiling Point: NA

Melting Point: 130°C - decomposes

Specific Gravity: 1.81

Vapor Pressure, 25°: not determined

Vapor Density: NA

Solubility in water: soluble

% volatiles: <3

Evaporation rate: NA

Molecular Weight: 153.58/225.64

Other: NA

Appearance & Color: Blue-green solid

FIRE & EXPLOSION DATA

Flash Point, COC: NA

Autoignition Temp.: not determined

Flammability Limits- LEL: NA UEL: NA

Extinguishing Media: Water spray, foam, carbon dioxide, dry chemical.

Special Fire Fighting Procedures: Avoid eye and skin contact. Do not breathe fumes or inhale vapors.

Unusual Fire and Explosion Hazards: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

-1-(CXCU045)

ENVIRONMENTAL INFORMATION

Spill response: Sweep material and transfer to a suitable container for disposal.

Recommended Disposal: Dispose of as solid waste. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: May cause immediate or delayed severe eye irritation.

Skin contact: May produce irritation or contact dermatitis. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation of dust or particulates may irritate the respiratory tract.

Oral Toxicity: not determined

Chronic Toxicity: Chronic copper poisoning is typified by hepatic cirrhosis, brain damage and demyelination abd kidney defects.

SUGGESTED FIRST AID

EYES: In case of contact, immediately flush eyes with flowing water for at least 15 minutes. Get medical attention.

SKIN: Flush with water, then wash with soap and water.

INHALATION: Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Get medical attention.

REACTIVITY DATA

Stability: Stable at room temperature.

Conditions to avoid: Oxidizing agents, soluble carbonates and phosphates, sulfuric acid.

Hazardous decomposition products: Organic acid and organic vapors and copper oxide fumes.

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH approved dust and mist respirator.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available. Launder clothing before reuse.

OTHER PRECAUTIONS

For research and industrial use only.

Storage and Handling: Store in sealed containers.

TRANSPORTATION

DOT SHIPPING NAME: None required

DOT HAZARD CLASS: None required

DOT LABEL: None required

DOT ID No: None required

Prepared by safety and environmental affairs

ISSUE DATE CXCU045: 3/31/03

SUPERSEDES: 4/10/00

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-3-(CXCU045)