

**GFS CHEMICALS, INC.**  
P.O. Box 245 Powell, OH 43065  
740-881-5501(Tel.) 740-881-5989(Fax)  
1-800-424-9300(Chemtrec 24Hr. Info.)

**MATERIAL SAFETY DATA SHEET**

543

**COPPER, STANDARD SOLUTION, 1000 PPM**

**CHEMICAL NAME & SYNONYMS**

Copper, Standard Solution, 1,000 ppm

**DOT CLASS**

8/III

**SARA TITLE 313**

Yes - HNO<sub>3</sub>, Cu

**TSCA listed** - Yes

**FORMULA**

Cu(NO<sub>3</sub>)<sub>2</sub>.2.5 H<sub>2</sub>O < 1%  
H<sub>2</sub>O >95%  
HNO<sub>3</sub> < 4%

**REPORTABLE QUANTITY**

45.4 kg  
N/A  
454 kg

**F.W.**

232.59  
18.02  
65.01

**CAS#**

3251-23-8  
7732-18-5  
7697-37-2

**PHYSICAL DATA**

Density 1.03; Boiling point 100°C; Completely miscible with water.

**APPEARANCE & ODOR**

Blue to nearly colorless liquid. May have slight odor.

**REACTIVITY & CONDITIONS TO AVOID**

Stable. Acidic solution.

**FIRE HAZARDS**

May evaporate in general fire yielding toxic fumes. Firefighters wear SCBA. NFPA # 2-0-1.

**EXTINGUISHER**

Fight surrounding fire.

**FLASHPOINT**

N/A

**LEL**

N/A

**UEL**

N/A

**HEALTH HAZARDS**

Irritating to skin and eyes. Toxic by all routes. OSHA PEL/ACGIH TLV 2 ppm (nitric acid). LD<sub>50</sub> (oral-rat) 940 mg Cu(NO<sub>3</sub>)<sub>2</sub>/kg. No evidence of carcinogenicity. Possible reproductive or mutagenic effects.

**SPECIAL PRECAUTIONS**

Wear goggles and rubber gloves while handling.

**FIRST AID**

Wash area thoroughly with water after contact. If eye irritation persists, see a physician. If swallowed, give water or milk. Get medical assistance. Do not induce vomiting.

**SPILLS & LEAKS**

Contain spill. Take up in absorbent with soda ash or bicarbonate. Disposal of neutralized waste to hazardous waste site.

**CATALOG #**

543

**PREPARED BY**

MDM

**DATE**

September 17, 2003