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Q U I M I G A L, S. A.
MATERIAL SAFETY DATA SHEET
DATE PREPARED: JULY 31, 1990

SECTION I GENERAL INFORMATION

Product Name: Copper Precipitates
Product Description: Powder with a distinct reddish color
Ingredients: Copper (cu) 75%
Manufacturer: Quimigal, SA
Emergency Telephone Number: 351-1-3522271
Quimigal, SA Telephone: 351-1-3522275

SECTION II HAZARDOUS INGREDIENTS/HEALTH HAZARD DATA

COMPONENTS	EXPOSURE LIMITS
Copper fume (as copper)	ACGIH TLV-IWA and Ontario TWAEV 0.2 mg/m3 OSHA PEL - 0.1 mg/m3
Copper dusts and mist (as copper)	ACGIH TLV-TWA OSHA PEL and Ontario TWAEV-1 mg/m3

PLAINTIFF'S EXHIBIT

ASA-563

SECTION III PHYSICAL CHARACTERISTICS

Solubility (%): Insoluble
Melting Point: 1083 C
Specific Gravity: 8.92
Vapor Pressure: 1 mm @ 1628 C
Vapor Density: N.A.
Bulk Density: 8,290 Kg/m3
Solubility in Other
Solvents: Slowly soluble in ammonia water
Reactivity: May react with strong oxidizing agents, acids,
halogens, acid chlorides. Creates copper oxide
fumes.

SECTION IV FIRE AND EXPLOSION HAZARDS

Flash Point: N.A.
Auto Ignition Temperature: N.A.
Lower Explosive Limit: N.A.
Upper Explosive Limit: N.A.
Extinguishing Media: Do not use water on metal fires. Use a powdered
graphite, dolomite, sodium chloride or other material
suitable for a class "D" fire.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus
(SCBA).
Unusual Fire Hazards: N.A.

SECTION V HEALTH INFORMATION/FIRST AID

Eye Contact: May cause irritation and/or discoloration. Eyes should be flushed with distilled water.

Skin contact: N.A. Wash thoroughly with soap and water.

Inhalation: Exposure to high concentrations of copper fumes may lead to irritation of the upper respiratory tract, metallic or sweet taste nausea, metal fume fever and in some instances discoloration of the skin and hair. Remove from contaminated area. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: If copper salts in sufficient concentration reach the gastrointestinal tract, they act as irritants producing salivation, nausea, vomiting, gastric pain, hemorrhagic gastritis and diarrhea. Induce vomiting. Get medical attention.

SECTION VI PERSONAL PROTECTION

Eye Protection: Safety Glasses or goggles

Skin Protection: Rubber gloves

Respiratory Protection: Use NIOSH approved equipment when occupational exposure limits are exceeded.

Ventilation Requirements: Adequate ventilation to keep work area concentration below the occupational exposure limits.

SECTION VII SPILL OR LEAK PROCEDURES

Clearup: sweep up, place in a container and hold for disposal

Enviromental Effects: N.A.

Neutralizing Chemicals: N.A.

Disposal: Must comply with specific federal, state and local waste disposal legislation. elemental copper should be recovered for re-use or recycling.

SECTION VIII STORAGE AND HANDLING

No special precautions necessary when storing or handling copper precipitates.