13:17 No.003

M.S.D.S. HC-85-200

736-013/459155

DATE: 3/26/85

REV. DATE: 4/21/86

REVISION NO.: 2

MATERIAL SAFETY DATA SHEET

SECTION 1

MANUFACTURER'S NAME:

HUSSEY COPPER LTD.

ADDRESS:

Washington Street LEETSDALE, PA. 15056

EMERGENCY PHONE NO .:

412-857-4200

CHEMICAL NAME AND SYNONYMS:

COPPER/ZINC

TRADE NAME AND SYNONYMS:

Gilding, commercial bronze, red bross, low bross, cartridge bross (vellow bross) CDA Alloy 210, 220,

vellow Brush

226, 230, 240, 260, 268

CHEMICAL FAMILY:

COPPER AND ZINC

SECTION 11 - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	CAS NO.	OSHA-PEL/ACGIH-TLY
Copper Zinc	96.0 to 65.0 4.0 to 35.0	7440-50-8	Exposure Levels See Section V
		7440-66-6	

HAZARDOUS MIXTURES OF OTHERS LIQUIDS, SOLIDS, OR GASES:

If exposure to copper and zinc dust/fume are kept below Permissible Exposure Limits (PEL) / Threshold Limit Value (TLV) all trace elements should not pose any health risk.

	SECTION	111 -	PHYSICAL	DATA
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MELTING ALLOY

210 220 226 230 240 260 268 1920 1870 1840 1810 1770 1680 1660

Vapor Pressure (mm Hg.)

Not applicable

Solubility in Water

negligible

Specific Gravity (H2 O = 1)

8.86 8.80 8.78 8.75 8.67 8.53 8.47

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

Not applicable

Extinguishing Media

Not Applicable

Special Fire Fighting Procedures

Not applicable

Unusual Fire and Explosion Hazards

Not applicable

Under normal conditions. Heavy concentrations of fine copper dust may cause flosh fire if exposed to ignition source

SECTION V - HEALTH HAZARD DATA

EXPOSURE LEVELS:

Copper dusts and mists - OSHA (PEL): TWA- 1MG/M³. ACGIH (TLV): TWA- 1 MG/M³. Copper fume - OSHA (PEL): TWA- 0.1 MG/M³, ACGIH (TLV): TWA- 0.2 MG/M³. Zinc oxide fume - OSHA (PEL): TWA- 5 MG/M³. ACGIH (TLV): TWA- 5 MG/M³. STEL - 10 MG/M³. Zinc oxide dust - ACGIH (TLV) TWA- 10 MG/M³ of total dust.

CARCINOGENICITY:

Not listed as a carcinogenic in NTP or IARC managraphs.

EFFECT OF OVERDOSE:

Fume and dust - sneezing, cough, congestion, nausea, metallic tostes,

chills, fever, muscular poin, marked thirst.

EMERGENCY AND FIRST AID PROCEDURES:

Skin: Flush thoroughly with water. Eyes - flush with water, call Physician. ingestion - drink water induce vomiting, call Physician. Inhalation - remove

victim to fresh air, call Physician.

Copper and Zinc Fume, dusts and mists are listed by OSHA as air contaminants.

PRIMARY ROUTE(S) OF ENTRY: Inhalation

SECTION VI - REACTIVITY DATA

STABILITY - Stoble

INCOMPATABILITY (material to avoid): (Dust & Fume) acetylene, chloring

HAZARDOUS DECOMPOSITION PRODUCTS: Copper Fume & dust/Zinc Fume & dust

HAZARDOUS POLYMERIZATION - WILL Not Occur

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Dust or Fume - wear respirator follow OSHA use instructions, shovel up, or vacuum and place In approved DOT container and seal. Wash contaminated clothing.

WASTE DISPOSAL METHOD:

Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Follow federal, state and local regulations for disposal.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify Type) : dust or fume - NIOSH/MSHA approved

dust/fume respirator

VENTILATION - Local Exhaust: dust/fume - if exposure levels exceeded.

EYE PROTECTION: (dust) goggles

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Avoid breathing dust or

Preclude from exposure to fume and dust those

fumes. Do not take

individuals with pulmonary and cardiac diseases.

internally.