

-1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER.....:

PREPARATION DATE.: 03/19/92
DATE MSDS PRINTED.: JUN 11, 1992

EM SCIENCE

A DIVISION OF EM INDUSTRIES
P.O. BOX 70
480 DEMOCRAT RD.
GIBBSTOWN, N.J. 08027

INFORMATION PHONE NUMBER.: 609-354-9200
HOURS: MON. TO FRI. 8:30-5
CHEMTREC EMERGENCY NUMBER: 800-424-9300
HOURS: 24 HRS A DAY

CATALOG NUMBER(S):

CX1920 CX1922 CX1935 CX1939 CX1940 CX1941 CX1930 2701

CHEMICAL NAME.....: COPPER - **EM**

TRADE NAME.....: N/A

CHEMICAL FAMILY...: METAL

FORMULA.....: CU

MOLECULAR WEIGHT.: 63.54

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS #	APPR %
COPPER	7440-50-8	100%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

MAY BE HARMFUL IF SWALLOWED.

APPEARANCE.....:

REDDISH LUSTERIOUS METAL

POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)

SYMPTOMS OF EXPOSURE:

MAY BE HARMFUL IF SWALLOWED.

MEDICAL COND. AGGRAVATED BY EXPOSURE:

DATA NOT AVAILABLE.

ROUTES OF ENTRY.....:

INHALATION, INGESTION

CARCINOGENICITY.....:

THE MATERIAL IS NOT LISTED (IARC, NTP, OSHA) AS CANCER CAUSING AGENT.

4. FIRST AID MEASURES

EMERGENCY FIRST AID:

INGESTION: GET IMMEDIATE MEDICAL ATTENTION.

SKIN: WASH THOROUGHLY WITH SOAP AND WATER.

EYES: IMMEDIATELY FLUSH THOROUGHLY WITH WATER FOR AT LEAST 15 MINUTES.

INHALATION: REMOVE TO FRESH AIR; GIVE ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED.

INGESTION: IF CONSCIOUS, DRINK WATER AND INDUCE VOMITING IMMEDIATELY AS DIRECTED BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

5. FIRE FIGHTING MEASURES

FLASH POINT (F).....: NONCOMBUSTIBLE

FLAMMABLE LIMITS LEL (%): N/A

FLAMMABLE LIMITS UEL (%): N/A

EXTINGUISHING MEDIA.....:

USE ANY SUITABLE FOR ADJACENT MATERIAL.

FIRE FIGHTING PROCEDURES.:

WEAR SELF-CONTAINED BREATHING APPARATUS.

FIRE & EXPLOSION HAZARDS.:

NONE

6. ACCIDENTAL RELEASE MEASURES

SPILL RESPONSE:

EVACUATE THE AREA OF ALL UNNECESSARY PERSONNEL.

WEAR SUITABLE PROTECTIVE EQUIPMENT LISTED UNDER EXPOSURE / PERSONAL PROTECTION.

ELIMINATE ANY IGNITION SOURCES UNTIL THE AREA IS DETERMINED TO BE FREE FROM EXPLOSION OR FIRE HAZARDS.

CONTAIN THE RELEASE AND ELIMINATE ITS SOURCE, IF THIS CAN BE DONE WITHOUT RISK.

TAKE UP AND CONTAINERIZE FOR PROPER DISPOSAL AS DESCRIBED UNDER DISPOSAL.

COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS ON REPORTING RELEASES. REFER TO REGULATORY INFORMATION FOR REPORTABLE QUANTITY AND OTHER REGULATORY DATA.

7. HANDLING AND STORAGE

HANDLING & STORAGE:

- KEEP CONTAINER CLOSED.
- STORE AT CONTROLLED ROOM TEMPERATURE.
- DO NOT BREATHE FUMES.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:

- VENTILATION, RESPIRATORY PROTECTION, PROTECTIVE CLOTHING, EYE PROTECTION MATERIAL SHOULD BE HANDLED OR TRANSFERRED IN AN APPROVED FUME HOOD OR WITH ADEQUATE VENTILATION.
- PROTECTIVE GLOVES (NEOPRENE, PVC OR EQUIVALENT) SHOULD BE WORN TO PREVENT SKIN CONTACT.
- SAFETY GLASSES WITH SIDE SHIELDS SHOULD BE WORN AT ALL TIMES.

WORK / HYGENIC PRACTICES:

- WASH THOROUGHLY AFTER HANDLING.
- DO NOT TAKE INTERNALLY.
- EYE WASH AND SAFETY EQUIPMENT SHOULD BE READILY AVAILABLE.

EXPOSURE GUIDELINES

OSHA - PEL:

COMPONENT	TWA		STEL		PPM	CL		SKIN
	PPM	MG/M3	PPM	MG/M3		MG/M3		

COPPER

0.1

ACGIH - TLV:

COMPONENT	TWA		STEL		PPM	CL		SKIN
	PPM	MG/M3	PPM	MG/M3		MG/M3		

COPPER

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (C 760 MMHG):: 2595C
MELTING POINT (C):: 1083C
SPECIFIC GRAVITY (H2O = 1):: 8.94
VAPOR PRESSURE (MM HG):: N/A
PERCENT VOLATILE BY VOL (%): NONE
VAPOR DENSITY (AIR = 1):: N/A
EVAPORATION RATE (BUAC = 1): N/A
SOLUBILITY IN WATER (%): INSOLUBLE
APPEARANCE::
REDDISH LUSTEROUS METAL

10. STABILITY AND REACTIVITY

STABILITY:: YES
HAZARDOUS POLYMERIZATION:
DOES NOT OCCUR

HAZARDOUS DECOMPOSITION::
CU FUMES

CONDITIONS TO AVOID::

NONE

MATERIALS TO AVOID::

() WATER
() ACIDS
() BASES
() CORROSIVES
(X) OXIDIZERS
(X) OTHER :

ACETYLENE, 1-BROMO-2-PROPENE

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

ORL-HMN TDLO: 120 UG/KG

TOXICOLOGICAL FINDINGS:

TESTS ON LABORATORY ANIMALS INDICATE MATERIAL MAY CAUSE TUMORS
AND ADVERSE REPRODUCTIVE EFFECTS

CITED IN REGISTRY OF TOXIC EFFECTS OF SUBSTANCES (RTECS)

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12. DISPOSAL CONSIDERATIONS

EPA WASTE NUMBERS:

TREATMENT:

MATERIAL DOES NOT HAVE AN EPA WASTE NUMBER AND IS NOT A LISTED WASTE, HOWEVER CONSULTATION WITH A PERMITTED WASTE DISPOSAL SITE (TSD) SHOULD BE ACCOMPLISHED.

ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

13. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME...:

(NON-REGULATED)

DOT ID NUMBER.....: (NONE)

-14. REGULATORY INFORMATION

TSCA INVENTORY.....:

THE CAS NUMBER OF THIS PRODUCT IS LISTED ON THE TSCA INVENTORY.

COMPONENT	SARA EHS (302)	SARA EHS TPQ (LBS)	CERCLA RQ (LBS)
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COPPER

COMPONENT	OSHA FLOOR LIST	SARA 313	DEMINIMIS FOR SARA 313 (%)
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COPPER

Y

Y

1.0

15. OTHER INFORMATION

COMMENTS:

NONE

NFPA HAZARD RATINGS:

HEALTH : 2

FLAMMABILITY : 0

REACTIVITY : 0

SPECIAL HAZARDS:

REVISION HISTORY:

12/01/81 06/02/86 06/16/87 10/27/87 01/06/89 03/01/91

- = REVISED SECTION

N/A = NOT AVAILABLE

N/E = NONE ESTABLISHED

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