SECTION I  NAME             24 HOUR EMERGENCY ASSISTANCE

PRODUCT: CUPRIC CHLORIDE, DIHYDRATE
CHEMICAL SYNONYMS: COPPER (II) CHLORIDE, DIHYDRATE
FORMULA: CUCl₂·2H₂O
UNIT(S) SIZE: UP TO 2.5 KG.
C.A.S. NO.: 10125-13-0

CHEMTREC 800-424-9300        HEALTH    2
DAY 716-226-6177             FIRE       0
NIGHT 716-334-4222           REACTIVITY 1
HMIS*

NFPA HAZARD RATING
LEAST   SLIGHT   MODERATE   HIGH    EXTREME
0       1         2        3         4

SECTION II  HAZARDOUS INGREDIENTS OF MIXTURES

PRINCIPAL HAZARDOUS COMPONENT(S)    %       TVL UNITS
CUPRIC CHLORIDE, DIHYDRATE     100%       SEE SECTION V.

WARNING! CORROSIVE! IRRITANT TO SKIN, EYES AND MUCOUS MEMBRANES. HARMFUL IF SWALLOWED OR INHALED.

SECTION III  PHYSICAL DATA

MELTING POINT(F): 498°C (928°F) (AS ANHYDROUS)
BOILING POINT(F): DECOMPOSES >314°C (570°F)
VAPOR PRESSURE (MM HG): NEGLIGIBLE AS SOLID
VAPOR DENSITY (AIR=1): DATA NOT LISTED.
SOLUBILITY IN WATER: FREELY SOLUBLE.
APPEARANCE AND ODOR: GREEN TO BLUE CRYSTALLINE POWDER; NO ODOR (NASAL IRRITANT).

SPECIFIC GRAVITY (H₂O=1): 2.51 AT 20°C
PERCENT VOLATILE BY VOLUME (%): NON-VOLATILE (NA)
EVAPORATION RATE (=1): NON-VOLATILE (NA)

SECTION IV  FIRE AND EXPLOSION HAZARD DATA
FLASH POINT (METHOD USED): NON-COMBUSTIBLE (NA).
FLAMMABLE LIMITS IN AIR % BY VOLUME: NA LOWER:------  UPPER:------

EXTINGUISHER MEDIA: WATER FOG; CARBON DIOXIDE (CO2); DRY CHEMICAL(ABC).

SPECIAL FIREFIGHTING PROCEDURES: IN FIRE CONDITIONS, WEAR A NIOSH-APPROVED
SELF-CONTAINED BREATHING APPARATUS. AVOID FLUSHING TO SEWER OF STREAM IF
POSSIBLE. TOXIC TO AQUATIC LIFE.
*LOSSES 2H2O AT 110C.

(1993 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5, GUIDE PAGE NO. 60)

UNUSUAL FIRE AND EXPLOSION HAZARDS: DECOMPOSES TO CUPROUS CHLORID (CUCL)
AND
CHLORINE AT TEMPERATURES ABOVE 300C (572C). FIRE OR EXCESSIVE HEAT MAY
PRODUCE
HAZARDOUS DECOMPOSITION PRODUCT; CAN REACT VIGOROUSLY WITH OXIDIZING
MATERIALS.

D.O.T.: COPPER CHLORIDE, 8, UN2802
APPROVED BY U.S. DEPARTMENT OF LABOR "ESSENTIALLY SIMILAR" TO FORM OSHA-20

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMITED VALUE: (AIR) AS COPPER METAL: 1.0 MG/M3 FOR 8HR. WORKING
DAY.
COPPER (FUME) TLV 0.2 MG/M3.

EFFECTS OF OVEREXPOSURE: INGESTION: CAN CAUSE COPPER POISONING AND/OR DEATH.
SYMPTOMS: NAUSEA, VOMITING, DIARRHEA, AND GASTRIC PAIN. EYES: CORROSIVE;
CAUSES CONJUNCTIVITIS. SKIN: MAY CAUSE ALLERGIC SKIN REACTION. INHALATION:
CAUSES UPPER RESPIRATORY IRRITATION AND CONGESTION OF THE NASAL AND MUCOUS
MEMBRANES.

EMERGENCY AND FIRST AID PROCEDURES: INGESTION: IF SWALLOWED, DO NOT INDUCE
VOMITING. IF CONSCIOUS, GIVE TWO GLASSES OF MILK OR WATER TO DRINK. CALL
PHYSICIAN IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
SKIN:
FLUSH WITH WATER, THEN WASH WITH MILD SOAP AND WATER. EYES: FLUSH THOROUGHLY
WITH WATER, LIFTING UPPER AND LOWER EYELIDS OCCASIONALLY. GET IMMEDIATE
MEDICAL ATTENTION. INHALATION: REMOVE TO FRESH AIR. IF ILLNESS OR DISCOMFORT
DEVELOPS, GET MEDICAL ATTENTION.

SECTION VI REACTIVITY DATA

STABILITY: STABLE
CONDITIONS TO AVOID: DECOMPOSES AT 300C, YIELDS CHLORINE GAS. LOSS OF WATER ABOVE 70C.
INCOMPATIBILITY (MATERIAL TO AVOID): SODIUM OR POTASSIUM METALS, STRONG ACIDS.

HAZARDOUS DECOMPOSITION PRODUCTS: IF INVOLVED IN FIRE, OXIDES OF COPPER, HYDROGEN CHLORIDE GAS AND CUPROUS CHLORIDE MAY BE PRODUCED.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.
CONDITIONS TO AVOID: NOT APPLICABLE.

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: SPRINKLE LIME OR SODA ASH ON SPILL TO FORM INSOLUBLE COPPER SALT. SWEEP UP AND PLACE IN SUITABLE CONTAINER. AVOID CONTAMINATING PUBLIC WATER.

WASTE DISPOSAL METHOD: DISCHARGE, TREATMENT, OR DISPOSAL MAY BE SUBJECT TO FEDERAL, STATE OR LOCAL LAWS. THESE DISPOSAL GUIDELINES ARE INTENDED FOR THE DISPOSAL GUIDELINES ARE INTENDED FOR THE DISPOSAL OF CATALOG-SIZE QUANTITIES ONLY.

DISPOSE OF IN AN APPROVED CHEMICAL LANDFILL OR CONTRACT WITH A LICENSED WASTE DISPOSAL AGENCY.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATION PROTECTION (SPECIFY TYPE): NONE SHOULD BE NEEDED IN NORMAL LABORATORY HANDLING. IF DUSTY CONDITIONS PREVAIL, WORK IN A VENTILATION HOOD OR WEAR A NIOSH-APPROVED DUST MASK.

VENTILATION: LOCAL EXHAUST: RECOMMENDED SPECIAL: NO MECHANICAL (GENERAL): RECOMMENDED OTHER: NO

PROTECTIVE GLOVES: RUBBER EYE PROTECTION: CHEMICAL SAFETY GLASSES. OTHER PROTECTIVE EQUIPMENT: SAFETY GLASSES, SMOCK, APRON, VENTED HOOD, PROPER GLOVES, AND EYE WASH STATION.

SECTION IX SPECIAL PRECAUTIONS
PRECAUTIONS TO BE TAKEN IN HANDLING & STORING: STORE BELOW 50°C, IN A COOL, DRY PLACE AWAY FROM ACIDS. THIS MATERIAL IS VERY HYGROSCOPIC. AVOID CONTACT WITH SKIN, EYES AND CLOTHING. WASH THOROUGHLY AFTER HANDLING. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.

OTHER PRECAUTIONS: EFFLORESCENT IN DRY AIR. DELIQUESCENT IN MOIST AIR. AVOID BREATHING DUST. USE WITH ADEQUATE VENTILATION. WASH CONTAMINATED CLOTHING BEFORE REUSE.

READ LABEL ON CONTAINER BEFORE USING. DO NOT WEAR CONTACT LENSES WHEN WORKING WITH CHEMICALS.

FOR LABORATORY USE ONLY. NOT FOR DRUG, FOOD OR HOUSEHOLD USE. KEEP OUT OF REACH OF CHILDREN.

REV. NO.: NO. 5 DATE: 12/27/94 APPROVED: MICHAEL RASZEJA CHEMICAL SAFETY COORDINATOR: AP

THE INFORMATION CONTAINED HEREIN IS FURNISHED WITHOUT WARRANTY OF ANY KIND. EMPLOYEES SHOULD USE THIS INFORMATION ONLY AS A SUPPLEMENT TO OTHER INFORMATION GATHERED BY THEM AND MUST MAKE INDEPENDENT DETERMINATIONS OF SUITABILITY AND COMPLETENESS OF INFORMATION FROM ALL SOURCES TO ASSURE PROPER USE OF THESE MATERIALS AND THE SAFETY AND HEALTH OF EMPLOYEES.

* HAZARDOUS MATERIALS INDUSTRIAL STANDARDS