

FISHER SCIENTIFIC -- C495, CUPRIC SULFATE -- 6810-00-596-6605

===== Product Identification =====

Product ID:C495, CUPRIC SULFATE

MSDS Date:12/04/1990

FSC:6810

NIIN:00-596-6605

MSDS Number: BNVYX

=== Responsible Party ===

Company Name:FISHER SCIENTIFIC

Address:1 REAGENT LANE

City:FAIR LAWN

State:NJ

ZIP:07410

Country:US

Info Phone Num:201-796-7100

Emergency Phone Num:201-796-7100;800-424-9300(CHEMT  
REC)

CAGE:1B464

=== Contractor Identification ===

Company Name:FISHER SCIENTIFIC CO. CHEMICAL MFG DIV

Address:1 REAGENT LANE

Box:City:FAIRLAWN

State:NJ

ZIP:07410-2802

Country:US

Phone:201-796-7100

CAGE:1B464

===== Composition/Information on Ingredients =====

Ingred Name:CUPRIC SULFATE (SARA III). EXPOSURE LIMITS LISTED FOR CU.

CAS:7758-98-7

RTECS #:GL8800000

Fraction by Wt: >97%

OSHA PEL:1MG/M3 DUST;0.1 FUME

ACGIH TLV:1MG/M3 DUST;0.2 FUME

EPA Rpt Qty:10 LBS

DOT Rpt Qty:10 L

BS

Ingred Name:SUPP DATA: HAS BEEN REPORTED. EYE: ACUTE - MAY CAUSE  
CONJUNCT, CORNEAL ULCERATION/TURBIDITY AND PALPEBRAL EDEMA. (ING 3)  
RTECS #:9999999ZZ

Ingred Name:ING 2: CHRONIC - RPTD/PRLNG USE OF SOLID COPPER SULFATE FOR  
TREATMENT OF TRACHOMA PRDCED INFLAMM & PURULENT RXN, (ING 4)  
RTECS #:9999999ZZ

Ingred Name:ING 3: AND DISCOLORATION OF CORNEA. WHEN A PARTICLE OF  
COPPER SULFATE WAS LEFT ACCIDENTALLY IN CONJUCTIVAL SAC, (ING 5)  
RTECS #:9999999ZZ

Ingred Name:ING 4: IT CAUSED  
MORE SEVERE LOCAL INFLAMM & NECROSIS,  
CORNEAL OPACITY & SYMBLEPHARON. INGEST: ACUTE - MAY CAUSE (ING 6)  
RTECS #:9999999ZZ

Ingred Name:ING 5: SALIVATION/NAUS/VOMIT/GASTRIC PAIN/LOC  
CORR/HEMORR/BLEU DISCOLORATION OF GUMS & TONGUE/HEMOLYTIC ANEMIA/  
(ING 7)  
RTECS #:9999999ZZ

Ingred Name:ING 6: HEMORRHAGIC GASTRITIS/COLIC & DIARR W/BLOODY STOOLS.  
LIVER/KIDNEY DMG W/SEV ANEMIA MAY OCCUR W/POSSIBLE (ING 8)  
RTECS #:9999999ZZ

Ingred Name:ING 7: SOMNOLENCE & COMA. DEATH MAY OCCUR FROM C  
IRCULATORY  
FAILURE. MINIMAL LETHAL ORAL DOSE FOR ADULT APPEARS (ING 9)  
RTECS #:9999999ZZ

Ingred Name:ING 8: TO BE 10 GRAMS. CHRONIC - CHRONIC HUMAN POISON HAS  
ONLY BEEN REPORTED IN INDIVIDUALS W/WILSON'S DISEASE. (ING 10)  
RTECS #:9999999ZZ

Ingred Name:ING 9: THIS DISEASE IS RARE GENETIC CNDTN IN WHICH THERE  
MAY BE ABNORMALLY HIGH ABSORPTION, RETENTION & STORAGE (ING 11)  
RTECS #:9999999ZZ

Ingred Name:ING 10: OF COPPER BY THE BODY. THIS ACCUM HAS BEEN NOTED TO  
PRECEDE THE DEVEL

OF LIVER PATHOLOGY, WHICH MAY (ING 12)  
RTECS #:9999999ZZ

Inged Name:ING 11: ULTIMATELY PROVE FATAL.  
RTECS #:9999999ZZ

Inged Name:FIRST AID PROC: AND LOWER LIDS, UNTIL NO EVIDENCE OF  
CHEMICAL REMAINS (APPROX 15-20 MIN). GET MED ATTN IMMED. (ING 14)  
RTECS #:9999999ZZ

Inged Name:ING 13: INGEST: DILUTE THE POISON IMMED W/LG AMTS OF  
WATER/MILK & REMOVE BY GASTRIC LAVAGE UNLESS THE VICTIM IS (ING 15)  
RTECS #:9999999ZZ

Inged Name:ING 14: ALREADY VOMIT. GET MED ATTN IMMED. ADMIN OF GASTR  
IC  
LAVAGE SHLD BE PERFORMED BY QUALIFIED MED PERS. (ING 16)  
RTECS #:9999999ZZ

Inged Name:ING 15: ANTIDOTE: THE DECISION AS TO WHETHER THE SEVERITY  
OF POISONING REQ ADMIN OF ANY ANTIDOTE & ACTUAL DOSE (ING 17)  
RTECS #:9999999ZZ

Inged Name:ING 16: SHLD BE MADE BY QUALIFIED MED PERS. GIVE CALCIUM  
DISODIUM EDETATE 15-25MG/KG (0.08-0.125 ML OF 20% SOLN (ING 18)  
RTECS #:9999999ZZ

Inged Name:ING 17: PER KG BODY WT) IN 250-500ML OF 5% DEXTROSE  
INTRAVENOUSLY OVER A 1-2 HR PERIOD TWI  
CE DAILY. THE MAX DOSE(ING  
19)  
RTECS #:9999999ZZ

Inged Name:ING 18: SHLD NOT EXCEED 50MG/KG/DAY. DRUG SHLD BE GIVEN IN  
5-DAY COURSES W/REST PERIOD OF AT LST 2 DAYS BETWEEN (ING 20)  
RTECS #:9999999ZZ

Inged Name:ING 19: AFTER FIRST COURSE, SUBSEQUENT COURSES SHLD NOT  
EXCEED 50MG/KG/DAY. DAILY URINALYSES SHLD NOT BE DONE (ING 21)  
RTECS #:9999999ZZ

Inged Name:ING 20: DURING TREATMENT PERIOD. DOSAGE SHLD BE REDUCED IF  
ANY UNUSUAL URINARY FINDING APPEAR. INTRAVENOUS ADMIN(ING 22)

RTECS #:9999999ZZ

Ingred Name:ING 21: IS CONTRAINDICATED IN PRESENCE OF ELEVATED CEREBROSPINAL FLUID PRESS. PENICILLAMINE IS ALSO EFTIVE IN (ING 23)  
RTECS #:9999999ZZ

Ingred Name:ING 22: COPPER POISONING. GIVE UP TO 100 MG/KG/DAY (MAX 1 G/DAY) DIVIDED INTO 4 DOSES FOR NO LONGER THAN 1 WK. (ING 24)  
RTECS #:9999999ZZ

Ingred Name:ING 23: IF LONGER ADMIN PERIOD IS WARRANTED, DOSAGE SHLD NOT EXCEED 40 MG/KG/DAY. GIVE THE DRUG ORALLY, HALF AN (ING 25)  
RTECS #:9999999ZZ

Ingred Name:ING  
24: HOUR BEFORE MEALS.  
RTECS #:9999999ZZ

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===== Hazards Identification =====

LD50 LC50 Mixture:LD50: (ORAL, RAT) 300 MG/KG  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:INHAL: ACUTE - MAY CAUSE IRRIT OF UPPER RESP TRACT. WORKERS EXPOS TO COPPER SALTS IN DUST FORM COMPLAINED OF METALLIC TASTE W/IRRIT OF NASAL/ORAL MUCOSA. CHRONIC - RPTD/PRLNG EXPOS MAY P  
RDCE SEV CONGE STION OF NASAL MUCOSA W/RHINITIS & POSSSLOUGHING/ULCERATION. SKIN CONT: ACUTE - MAY CAUSE ITCHING, (EFTS OF OVEREXP)  
Explanation of Carcinogenicity:NOT RELEVANT  
Effects of Overexposure:HLTH HAZ: PAPULOVESICULAR & ECZEMATOID LESION. CHRONIC - RPTD/PRLNG EXPOS MAY CAUSE SOME DEGREE OF NECROSIS. ALLERGIC CONT DERMAT HAS BEEN REPORTED. RPTD APPLICATIONS TO EXTENSIVE AREAS OF BURNED SKIN MAY CAUSE BLUE DISCOLORATION OF GUMS &TONGUE/HEMOLYTIC ANEMIA/HEMORRHAGIC  
GASTRITIS/ COLIC & DIARR W/BLOODY(SUPP DATA)  
Medical Cond Aggravated by Exposure:PERSONS WITH A HISTORY OF CHRONIC RESPIRATORY OR SKIN DISEASE OR WILSON'S DISEASE.

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===== First Aid Measures =====

First Aid:INHAL: MOVE TO FRESH AIR IMMED. IF BRTHG STOPPED, PERFORM ARTF RESP. KEEP WARM/AT REST. TREAT SYMPTOMATICALLY/SUPPORTIVELY. GET MED ATTN IMMED. SKIN: REMOVE CONTAMD CLTHG/SHOES IMMED. WASH AFFECTED AR EA W/SOAP OR MILD DETERGENT & LG A

MTS OF WATER UNTIL NO

EVIDENCE OF CHEM REMAINS (APPROX 15-20 MIN). GET MED ATTN IMMED.

EYES: WASH IMMED W/LG AMTS OF WATER OR NORM SALINE, OCCAS LIFTING  
UPPER(ING 13)

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Fire Fighting Measures  
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Extinguishing Media: DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR  
REGULAR FOAM. FOR LARGER FIRES, USE WATER SPRAY, FOG OR REGULAR  
FOAM.

Fire Fighting Procedures: USE NIOSH/MSHA APPRVD SCBA & FULL PROT EQUIP .  
MOVE CONTR FROM FIRE AREA IF YO  
U CAN DO IT W/O RISK. DO NOT SCATTER  
SPILLED MATL W/HIGH-PRESS (SUPP DATA)

Unusual Fire/Explosion Hazard: NEGLIGIBLE FIRE HAZARD WHEN EXPOSED TO  
HEAT OR FLAME.

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Accidental Release Measures  
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Spill Release Procedures: SWEEP UP AND PLACE IN SUITABLE CLEAN, DRY  
CONTAINERS FOR RECLAMATION OR LATER DISPOSAL. DO NOT FLUSH MATERIAL  
INTO SEWER. KEEP UNNECESSARY PEOPLE AWAY.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER

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Hand  
ling and Storage  
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Handling and Storage Precautions: NONE SPECIFIED BY MANUFACTURER

Other Precautions: AVOID BREATHING VAPORS OR DUSTS.

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Exposure Controls/Personal Protection  
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Respiratory Protection: THE SPECIFIC RESPIRATOR SELECTED MUST BE BASED  
ON CONTAMINATION LEVELS FOUND IN WORK PLACE, MUST NOT EXCEED  
WORKING LIMITS OF RESPIRATOR & BE JOINTLY APPROVED BY NIOSH/MSHA.  
FOR ADDITIONAL INFORMATION , CONTACT NEHC .

Ventilation: PROVIDE  
LOCAL EXHAUST OR PROCESS ENCLOSURE VENTILATION TO  
MEET PUBLISHED EXPOSURE LIMITS.

Protective Gloves: IMPERVIOUS GLOVES .

Eye Protection: CHEMICAL WORKERS GOGGLES .

Other Protective Equipment: APPROP PROT CLTHG/EQUIP TO PVNT RPTD/PRLNG  
SKIN CONT. EYE WASH FOUNTAIN WITHIN IMMEDIATE WORK AREA FOR  
EMERGENCY USE.

Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER

Supplemental Safety and Health

BP: 1202F(650C) DECOMPOSES. MP: 392F(200C) SLIGHT DECOMPOSITION. FIRE  
FIGHT PROC: WATER STR

EAM. DIKE FIRE-CTL WATER FOR LATER DISPOS.

EFFECTS OF OVEREXPOSURE: STUNNING. IN SEVERE CASES, LIVER/KIDNEY DAMAGE W/SEVERE ANEMIA MAY OCCUR W/SOMNOLENCE & COMA. DEATH MAY OCCUR FROM CIRCULATORY FAILURE. GREENISH DISCOLORATION OF SKIN/HAIR (INGESTION)

===== Physical/Chemical Properties =====

Boiling Pt: B.P. Text: SUPP DATA

Melt/Freeze Pt: M.P/F.P Text: SUPP DATA

Spec Gravity: 3.6

Solubility in Water: 14.3% @ 0C

Appearance and Odor: GRAYISH-WHITE TO GREENISH-WHITE RHOMBIC CRYSTALS.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

AVOID CONTACT W/STRONG OXIDIZERS. INCOMPATIBLE WITH HYDROXYLAMINE, MAGNESIUM, SODIUM HYPOBROMITE.

Stability Condition to Avoid: MAY BURN BUT DOES NOT IGNITE READILY.

AVOID EXCESSIVE HEAT, SPARKS, OR OPEN FLAME.

Hazardous Decomposition Products: THERMAL DECOMPOSITION MAY RELEASE TOXIC SO<sub>2</sub>.

===== Disposal Considerations =====

Waste Disposal Methods:

DISPOSAL MUST BE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. REPORTABLE QTY: 10 POUNDS.

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