

FISHER SCIENTIFIC -- C-575, COPPER -- 6810-00-974-3626

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

Product ID:C-575, COPPER

MSDS Date:06/27/1989

FSC:6810

NIIN:00-974-3626

MSDS Number: BPKPC

=== 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(CHEMTREC)

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:COPPER

CAS:7440-50-8

RTECS #:GL5325000

Fraction by Wt: 100%

OSHA PEL:0.1MG/M3FUME, 1 DUST

ACGIH TLV:0.2MG/M3FUME, 1 DUST

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:SUPP DATA: DEGENERATION &/OR DETACHMENT OF RETI

NA & ATROPHY

OF GLOBE. CHRONIC:RPTD/PRLNG EXPOS TO IRRITANT MAY (ING 3)

RTECS #:9999999ZZ

Ingred Name:ING 02:CAUSE CONJ. INGEST(ACUTE): 120 UG/KG INGESTED BY HUMAN CAUSED GI DISORDER W/NAUS & VOMIT. (CHRONIC): PRLNG(ING 4)

RTECS #:9999999ZZ

Ingred Name:ING 3:INGEST THRU DIET IS NOT KNOWN TO CAUSE TOX EFTS EXCEPT IN PEOPLE W/RECESSIVE GENE DISORDER TERMED WILSON'S (ING 5)

RTECS #:9999999ZZ

Ingred Name:ING 4:DISEASE WHICH CAUSE AN ABNORMALLY HIGH ABSORP, RETENTION & STOR OF COPP

ER BY BODY. DISEASE MAY CAUSE DYSFUNC(ING6)

RTECS #:9999999ZZ

Ingred Name:ING 5:& STRUCTURAL DAM TO LIVER/CNS, KIDNEY, BONES & EYES. DISEASE IS USUALLY PROGRESSIVE & MAY BE FATAL IF LEFT (ING 7)

RTECS #:9999999ZZ

Ingred Name:ING 6:UNTREATED. FOR MORE EXACTING INFO CONCERNING HEALTH HAZARDS, CONTACT NEHC .

RTECS #:9999999ZZ

Ingred Name:FIRST AID PROC:OCCAS LIFT LIDS, UNTIL NO EVIDENCE OF CHEM REMAINS FOR @ LST 15 MIN. GET MED ATTN IMMED. INGEST: (ING 9)

RTECS #:9999999ZZ

Ingred Na

me:ING 8: VOMIT/DRINK ANYTHING BY MOUTH. GIVE ACTIVATED

CHARCOAL. GIVE O\*2 IF RESP IS DEPRESSED. MAINTAIN AIRWAY (ING 10)

RTECS #:9999999ZZ

Ingred Name:ING 9:& BLOOD PRESS. GET MED ATTN. LAVAGE/O\*2 MUST BE ADMIN BY QUALIFIED MED PERS. COPPER POISONING: GIVE (ING 11)

RTECS #:9999999ZZ

Ingred Name:ING 10: CALCIUM DISODIUM EDETATE 15-25 MG/KG (0.08-0.125 ML OF 20% SOLN PER KILOGRAM BODY WT). IN 250-500 ML (ING 12)

RTECS #:9999999ZZ

Ingred Name:ING 11:OF 5% DEXTROSE INTRAVENOUSLY OVER

A 1-2 HR PERIOD

TWICE DAILY. MAX DOSE SHOULD NOT EXCEED 50 MG/KG/DAY. (ING 13)

RTECS #:9999999ZZ

Ingred Name:ING 12:DRUG SHOULD BE GIVEN IN 5 DAY COURSES W/REST PERIOD  
OF @ LST 2 DAYS BETWEEN COURSES. AFTER FIRST (ING 14)

RTECS #:9999999ZZ

Ingred Name:ING 13:COURSE, SUBSEQUENT COURSES SHOULD NOT EXCEED 50  
MG/KG/DAY. DAILY URINALYSIS SHOULD NOT BE DONE DURING (ING 15)

RTECS #:9999999ZZ

Ingred Name:ING 14:TRTMT PERIOD. DOSAGE SHOULD BE REDUCED IF ANY  
UNUSUAL URINE FINDINGS APPE

AR. INTRAVENOUS ADMIN IS (ING 16)

RTECS #:9999999ZZ

Ingred Name:ING 15:CONTRAINDICATED IN PRESENCE OF ELEVATED  
CEREBROSPINAL FLUID PRESS. PENICILLAMINE IS ALSO EFTIVE IN  
COPPER(ING 17)

RTECS #:9999999ZZ

Ingred Name:ING 16:POISONING. GIVE UP TO 100 MG/KG/DAY MAX (MAX 1  
G/DAY) DIVIDED INTO 4 DOSES FOR NO LONGER THAN 2 WK. IF (ING 18)

RTECS #:9999999ZZ

Ingred Name:ING 17:LONGER ADMIN PERIOD IS WARRANTED, DOSAGE SHOULD NOT  
EXCEED 40 MG/KG/DAY. GIVE DRUG ORALLY, HALF AN HR (ING 19)

RTECS #:9999999ZZ

Ingred Name:ING 18:BEFORE MEALS. ANTIDOTE SHOULD BE ADMINISTERED BY  
QUALIFIED MEDICAL PERSONNEL.

RTECS #:9999999ZZ

Ingred Name:SPILL PROC: AREA! KEEP UNNEC PEOPLE AWAY. ISOLATE HAZ AREA  
& DENY ENTRY. RESIDUE SHOULD BE CLEANED UP USING (ING 21)

RTECS #:9999999ZZ

Ingred Name:ING 20:HIGH-EFFICIENCY PARTICULATE FILTER VACUUM.

RTECS #:9999999ZZ

Ingred Name:WASTE DISP METH: FOR ASSISTANCE, CONTACT DISTRICT DIRECTOR  
OF THE ENVIRONMENTAL PROTECTION AGENCY.

RTECS #:9999

999ZZ

Ingred Name:RESP PROT: SELECTIONS, CONTACT NEHC .  
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:COPPER IS AN EYE & MUC MEMB IRRITANT.  
POISON MAY AFFECT LIVER & KIDNEYS. INHAL:(ACUTE): POWDERED DUST MAY  
CAUSE IRRIT OF UPPER RESP TRACT & ULCERATION & P  
ERFORATION OF NASAL  
SEPTUM. COPPER FUMES MAY CAUSE METAL FUME FEVER. CHRONIC: PRLNG  
INDUST EXPOS MAY CAUSE A GREEN DISCOLORATION SKIN, HAIR, TEETH.  
(EFTS OF OVEREXP)  
Explanation of Carcinogenicity:NOT RELEVANT  
Effects of Overexposure:HLTH HAZ:WELDERS EXPOS TO COPPER FUME EXPER  
ATROPHIC RHINITIS, METALLIC TASTE, RUNNY NOSE, & MUCOSAL IRRIT OF  
MOUTH & EYES. SKIN: (ACUTE):MAY BE IRRITATING & CAUSE  
KERATINIZATION. ALLERGIC DERM HAS BE EN RPTD. CHRONIC: RPTD/PRLNG  
CONT MA  
Y CAUSE IRRIT & DISCOLORATION OF SKIN. EYE: (ACUTE): DUST  
CAN CAUSE IRRIT(SUPP DATA)  
Medical Cond Aggravated by Exposure:PERSONS W/PRE-EXISTING RESPIRATORY,  
LIVER, KIDNEY, SKIN & BLOOD DISORDERS/WILSON'S DISEASE MAY BE @  
INCREASED RISK FROM EXPOSURE.

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

First Aid:INHAL: REMOVE FROM EXPOS TO FRESH AIR IMMED. IF BRTHG HAS  
STOPPED, PERFORM ARTF RESP. KEEP WARM & @ REST. TREAT  
SYMPTOMATICALLY & SUPPORTIVELY. GET  
MED ATTN IMMED. SKIN: REMOVE  
CONTAMD CLTHG & SHOES I MMED. WASH AFFECTED AREA W/SOAP/MILD  
DETERGENT & LG AMTS OF H\*2O UNTIL NO EVIDENCE OF CHEM REMAINS  
(APPROX 15-20 MIN). GET MED ATTN IMMED. EYE: WASH IMMED W/LG AMTS  
OF H\*2O/NORM SALINE, (ING 8)

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===== Fire Fighting Measures =====

Flash Point:FLAMMABLE(DUST)  
Extinguishing Media:USE DRY SAND/DOLOMITE, GRAPHITE, SODIUM CHLORIDE,  
SODA ASH/APPROP METAL-EXTING POWDER. DO NOT APPLY H\*2O TO (SUPP

DATA)

Fire Fighting Procedures:NIOSH/MSHA APPRVD SCBA & FULL PROT EQUIP. MOVE CONTR FROM FIRE AREA IF POSS. COOL CONTR EXPOS TO FLAME W/H\*20 FROM SIDE UNTIL FIRE IS OUT. (SUPP DATA)

Unusual Fire/Explosion Hazard:NEGLIGIBLE FIRE HAZARD IN METALLIC FORM; HOWEVER, DUST, POWDER, OR FUMES ARE FLAMMABLE OR EXPLOSIVE WHEN EXPOSED TO HEAT OR FLAMES.

===== Accidental Release Measures =====

Spill Release Procedures:SHUT OFF IGNIT SOURCES. DO NOT TOUCH SPILLED

MATL. FOR SM SPILLS, W/CLEAN SHOVEL, PLACE MATL INTO CLEAN, DRY CONTR & COVER; MOVE CONTR FROM SPILL AREA. FOR LGR SPILLS, WET DOWN W/H\*20 & DIKE FOR LATER DISP. NO SMOKING, FLAMES/FLARES IN HAZ(ING 20)

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

===== Handling and Storage =====

Handling and Storage Precautions:STORE AWAY FROM INCOMPATIBLE SUBSTANCES.

Other Precautions:KEEP AWAY FROM SPARKS OR IGNITION SOURCES.

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Exposure Controls/Personal Protection =====

Respiratory Protection:SPEC RESP SELECTED MUST BE BASED ON CONTAM LEVELS FOUND IN WORKPLACE, MUST NOT EXCEED WORKING LIM OF RESP & BE JOINTLY APPRVD BY NATL INSTITUTE FOR OCCUP SFTY & HLTH & MINE SFTY & HLTH ADMIN NIOSH-MSH A. FOR INFO CONCERNING RESP (ING 23)

Ventilation:PROVIDE LOCAL EXHAUST VENTILATION SYSTEM TO MEET PUBLISHED EXPOSURE LIMITS.

Protective Gloves:IMPERVIOUS GLOVES .

Eye Protection:CHEMICAL WORKERS GOGGLES .

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Other Protective Equipment:APPROP PROT (IMPERVIOUS) CLTHG & EQUIP TO PREVENT REPEATED OR PROLONGED SKIN CONTACT WITH THIS SUBSTANCE.

Work Hygienic Practices:CONTACT LENSES SHOULD NOT BE WORN.

Supplemental Safety and Health

EXTING MEDIA: BURNING MATL. FIRE FIGHT PROC: STAY AWAY FROM STOR TANK ENDS. FOR MASSIVE FIRE IN CARGO AREA, USE UNMANNED HOSE HOLDER/MONITOR NOZZ, ELSE W/DRAW & LET FIRE BURN. EFTS OF OVEREXP: W/RED & PAIN. COPPER PARTICLES IN EYE MAY RSLTIN FOREIGN BODY RE

SPONSE W/CHARACT DISCOLORATION OF OCULAR TISSUE, (ING 2)

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

Boiling Pt:B.P. Text:4653F,2567C

Melt/Freeze Pt:M.P/F.P Text:1946F,1063C

Vapor Pres:1 @1628C

Spec Gravity:8.92

Solubility in Water:INSOLUBLE

Appearance and Odor:REDDISH, DUCTILE, MALLEABLE, LUSTROUS METAL OR CUBIC CRYSTALS.

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

Stability Indicator/Materials to Avoid:YES

ACETYLENE, CHLORINE, FLUORINE, L

EAD AZIDE, SULFURIC ACID. FOR MORE

EXACTING LIST OF MATL TO AVOID, CONT NEHC .

Stability Condition to Avoid:AVOID DISPERSION OF DUST IN AIR. FINELY

DIVIDED PARTICLES, DUST/FUMES MAY BE FLAMM/EXPLOS.

Hazardous Decomposition Products:THERMAL DECOMPOSITION MAY RELEASE TOXIC &/OR HAZARDOUS GASES.

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

Waste Disposal Methods:REPORATABLE QTY:5000 PDS. IF REL OF SUBSTANCE IS REPORTABLE UNDER CERCLA SEC 103, NATL RESPONSE C

TR MUST BE NOTIFIED

IMMED @ (800)424-9300/(202) 426-2675 IN METROPOLITAN WASHINGTON, D.C. AREA (40 CFR 302.6) OBSERVE ALL FED/ST/LOC REGS. (ING22)

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