

FISHER SCIENTIFIC -- FERRIC OXIDE RED, I-116 -- 6810-00-955-9249

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

Product ID:FERRIC OXIDE RED, I-116

MSDS Date:10/13/1989

FSC:6810

NIIN:00-955-9249

MSDS Number: BKSVN

=== Responsible Party ===

Company Name:FISHER SCIENTIFIC

Address:1 REAGENT LANE

City:FAIR LAWN

State:NJ

ZIP:07410

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:IRON OXIDE

CAS:1309-37-1

RTECS #:NO7400000

Fraction by Wt: 100%

OSHA PEL:10 MG/M3 (FE)

ACGIH TLV:5 MG/M3(FE),B2; 9293

Ingred Name:EFTS OF OVEREXP: MALAISE, FEVER, CHILLS, MUSCULAR PAIN,  
MILD TO SEV HDCH, NAUS

EA, OCCASIONAL VOMIT, (SEE INGRED 3)  
RTECS #:9999999ZZ

Ingred Name:INGRED 2: EXAGGERATED MENTAL ACTIVITY, PROFUSE SWEAT,  
EXCESSIVE URINATION, DIARRHEA & PROSTATION MAY (SEE INGRED 4)  
RTECS #:9999999ZZ

Ingred Name:INGRED 3: ALSO OCCUR. TOLERANCE TO FUMES DEVELOPS RAPIDLY,  
BUT IS QUICKLY LOST. ALL SYMP USUALLY SUBSIDE (SEE INGRED 5)  
RTECS #:9999999ZZ

Ingred Name:INGRED 4: W/IN 24-36 HOURS. CHRONIC EXP: RPTD/PRLNG EXP,  
USUALLY > 10 YEARS, TO IRON OXIDE DUST/FUME MAY (SEE INGRED 6)  
RT  
ECS #:9999999ZZ

Ingred Name:INGRED 5: CAUSE A BENIGN PNEUMOCONIOSIS CALLED SIDEROSIS.  
THE EXP PERSON DOES NOT BECOME ILL, BUT THE (SEE INGRED 7)  
RTECS #:9999999ZZ

Ingred Name:INGRED 6: BENIGN PNEUMOCONIOSIS MAY CAUSE X-RAY SHADOWS  
THAT CAN BE INDISTINGUISHABLE FROM FIBROTIC (SEE INGRED 8)  
RTECS #:9999999ZZ

Ingred Name:INGRED 9: PNEUMOCONIOSIS. SKIN CONTACT: MAY BE IRRIT.  
SKIN/EYE/INGEST CHRONIC: NO DATA AVAIL. EYE:(ACUTE) (SEE INGRED 9)  
RTECS #:9999999ZZ

Ingred Name:INGRED 8: NO  
SPECIFIC DATA AVAIL. PARTICLES OF IRON/IRON  
CMPDS WHICH BECOME IMBEDDED IN EYE MAY CAUSE (SEE INGRE 10)  
RTECS #:9999999ZZ

Ingred Name:INGRED 9: SIDEROSIS, W/VARIED EFTS, SOME PARTICLES MAY  
CAUSE NO SIGNIFICANT TOXIC EFTS, EVEN OVER MANY (SEE INGRED 11)  
RTECS #:9999999ZZ

Ingred Name:INGRED 12: YEARS. DISCOLORING OF IRIS TO YELLOWISH  
GREEN/BROWN IS EARLIEST & MOST COMMON SIGN OF (SEE INGRED 12)  
RTECS #:9999999ZZ

Ingred Name:INGRED 11: SIDEROSIS. THE ACTIVITY OF PUPIL IS COMMONLY

AFFECTED, & IF THE PARTICLE HAS ENTERED LENS, (SEE INGRED 13)  
RTECS #:9999999ZZ

Ingred Name:INGRED 12: IT GENERALLY BECOMES CATARACTOUS. IN SOME CASES  
THERE MAY BE SEV INJ TO RETINA & IT MAY (SEE INGRED 14)  
RTECS #:9999999ZZ

Ingred Name:INGRED 13: EVENTUALLY BE DETACHED/DESTROYED. THERE MAY BE A  
GRADUALLY DECREASING CENTRAL VISUAL ACUITY, (SEE INGRED 15)  
RTECS #:9999999ZZ

Ingred Name:INGRED 14: ENDING ULTIMATELY IN BLINDNESS, GLAUCOMA MAY  
RARELY BE A COMPLICATION.  
RTECS #:9999999  
ZZ

Ingred Name:FIRST AID PROC: LRG AMOUNTS OF H2\*O/NORMAL SALINE,  
OCCASIONALLY LIFTING UPPER & LOWER LIDS, UNTIL NO (SEE INGRED 17)  
RTECS #:9999999ZZ

Ingred Name:INGRED 16: EVIDENCE OF CHEM REMAINS ( 15-20 MIN). GET MED  
ATTN IMMED. INGEST: TREAT SYMPTOMATICALLY & (SEE INGRED 18)  
RTECS #:9999999ZZ

Ingred Name:INGRED 17: SUPPORTIVELY. GET MED ATTN IMMED. IF VOMIT  
OCCURS, KEEP HEAD LOWER THAN HIPS TO PREVENT ASPIRATION.  
RTECS #:9999999ZZ

Ingred Name:RESP PROT: OPERATED IN CONTINUOUS  
-FLOW MODE. SCBA W/FULL  
FACEPIECE OPERATED IN PRESS-DEMAND/OTHER POS (SEE INGRED 20)  
RTECS #:9999999ZZ

Ingred Name:INGRED 19: PRESS MODE. FOR FIREFIGHTING & OTHER IMMED  
DANGEROUS TO LIFE/HLTH CONDITIONS: SCBA W/FULL (SEE INGRED 21)  
RTECS #:9999999ZZ

Ingred Name:INGRED 20: FACEPIECE OPERATED IN PRESS DEMAND/OTHER POS  
PRESS MODE. SUPPLIED-AIR RESP W/FULL FACEPIECE (SEE INGRED 22)  
RTECS #:9999999ZZ

Ingred Name:INGRED 21: & OPERATED IN PRESS-DEMAND OR OTHER POS PRESS  
MODE IN COMBI

NATION W/AUXILIARY SCBA OPERATED (SEE INGRED 23)  
RTECS #:9999999ZZ

Ingred Name:INGRED 22: IN PRESS-DEMAND OR OTHER POSITIVE PRESSURE MODE.  
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:LD50:(ORAL,RAT) 5400 MG/KG

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:UNDERGROUND MINERS EXP TO FERRIC OXIDE  
RED & HEMATITE HAVE A HIGH INCIDENCE OF LUNG  
CANCER. THE RISK IS

MANIFEST IN UNDERGROUND WORKERS, BUT NOT SURFACE WORKERS, & IT'S  
NOT KNOWN WHETHER EXCESS RISK IS DUE TO RADIOACTIVITY IN AIR OF  
MINES,INHAL OF FERRIC OXIDE/SILICA, OR TO COMBINATION OF THESE (SEE  
EFFECTS OF OVEREXP)

Explanation of Carcinogenicity:NONE SPECIFIED BY MANUFACTURER.

Effects of Overexposure:HLTH HAZ: OR OTHER FACTORS. THERE IS NO  
EVIDENCE THAT IRON ORE DUST OR FERRIC OXIDE INFLUENCES INCIDENCE OF  
CANCERS AT SITES OTHER THAN LUNGS. INHAL: A

CUTE: METAL FUME FEVER,

AN INFLUENZA-LIKE ILLNESS , MAY OCCUR DUE TO INHAL OF FRESHLY  
FORMED IRON OXIDE FUME WHICH IS COMPOSED OF PARTICLES SIZED BELOW  
(SEE SUPP DATA)

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:INHAL: REMOVE FROM EXP AREA TO FRESH AIR IMMED. IF BRTHG HAS  
STOPPED, PERFORM ARTF RESP. KEEP PERSON WARM & AT REST. TREAT  
SYMPTOMATICALLY & SUPPORTIVELY. GET MED

ATTN IMMED. SKIN: REMOVE

CONTAMINATED CLOTHING & SHOES IMMED. WASH AFFECTED AREA W/SOAP OR  
MILD DETERGENT & LRG AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEM  
REMAINS ( 15-20 MIN). GET MED ATTN IMMED. EYES: WASH EYES IMMED W/  
(SEE ING 16)

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

Extinguishing Media:DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR FOAM.  
FOR LARGER FIRES, USE WATER SPRAY, FOG OR ALCOHOL FOAM.

Fire Fighting Procedures:WEAR NIOSH/MSHA APPRO

VED SCBA & FULL

PROTECTIVE EQUIPMENT . MOVE CONTAINER FROM FIRE AREA IF POSSIBLE.

AVOID BREATHING VAPORS OR DUST; KEEP UPWIND.

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

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

Spill Release Procedures:SWEEP UP AND PLACE IN SUITABLE CLEAN, DRY CONTAINERS FOR RECLAMATION OR LATER DISPOSAL. DO NOT FLUSH WITH WATER. KEEP UNNECESSARY PEOPLE AWAY.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:OBSERVE ALL FED, STATE AND LOCAL REGS WHEN STORING THIS SUBSTANCE. FOR ASSISTANCE, CONTACT THE DISTRICT DIRECTOR OF THE ENVIRONMENTAL PROT AGENCY.

Other Precautions:NONE SPECIFIED BY MANUFACTURER.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:THE FOLLOWING NIOSH/MSHA APPRVD RESP MUST BE BASED ON CONTAM LEVS FOUND IN

WORK PLACE: NIOSH/MSHA APPRVD TYPE

'C' SUPP-AIR RESP W/FULL FACEPIECE OPERATED IN PRESS DEMAND/OTHER POSITIVE MODE OR W/FULL FACEPIECE, HELMET/HOOD (SEE INGRED 19)

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:EMPLOYEE MUST WEAR NIOSH/MSHA APPRVD PROT (IMPERVIOUS) CLOTHING & EQUIP TO PREVENT RPTD/PRLNG SKIN CONTACT

W/SUBSTANCE.

Work Hygienic Practices:EYEWASH FOUNTAIN SHOULD BE PROVIDED IN IMMEDIATE WORK AREA FOR EMERG USE,IF EMPLOYEE'S EYES MAY BE EXPOSED TO SUBSTANCE.

Supplemental Safety and Health

EFTS OF OVEREXP: 1.5 MICRONS & USUALLY BETWEEN 0.02-0.5 MICRONS. SYMP MAY BE DELAYED 4-12 HOURS & BEGIN W/SUDDEN ONSET OF THIRST, & SWEET METALLIC/FOUL TASTE IN MOUTH. OTHER SYMP MAY INCLUDE UPPER RES P TRACT IRRIT ACCOMPANIED BY COUGHING, & DRYNESS OF MUC MEMB, LASSITUDE & GENERALIZED

FEELING OF (SEE INGRED 2)

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

Melt/Freeze Pt:M.P/F.P Text:2849F,1565C

Vapor Pres:1MMHG @20C

Spec Gravity:5.24

Solubility in Water:INSOLUBLE

Appearance and Odor:RED-BROWN TO BLACK CRYSTALLINE POWDER.

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

Stability Indicator/Materials to Avoid:YES

REFER TO ORIGINAL MSDS.

Stability Condition to Avoid:HEAT OR FLAME

Hazardous Decomposition Products:THERMAL DECOMPOSITIO

N MAY RELEASE

TOXIC AND/OR HAZARDOUS GASES.

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

Waste Disposal Methods:OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS  
WHEN DISPOSING OF THIS SUBSTANCE. FOR ASSISTANCE, CONTACT THE  
DISTRICT DIRECTOR OF THE ENVIRONMENTAL PROTECTION AGENCY.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department  
of Defense. The United States of Amer

ica in no manner whatsoever,

expressly or implied, warrants this information to be accurate and  
disclaims all liability for its use. Any person utilizing this  
document should seek competent professional advice to verify and  
assume responsibility for the suitability of this information to their  
particular situation.