

SPECTRUM CHEMICAL MFG CORP -- FERROUS SULFATE HEPTAHYDRATE -- 6810-00-300-5157
===== Product Identification =====

Product ID:FERROUS SULFATE HEPTAHYDRATE
MSDS Date:10/13/1989
FSC:6810
NIIN:00-300-5157
MSDS Number: BMGPQ
=== Responsible Party ===
Company Name:SPECTRUM CHEMICAL MFG CORP
Address:14422 S SAN PEDRO ST
City:GARDENA
State:CA
ZIP:90248-2027
Country:US
Info Phone Num:213-516-8000
Emergency
Phone Num:213-516-8000
CAGE:63415

=== Contractor Identification ===
Company Name:SPECTRUM LABORATORY PRODUCTS INC
Address:14422 S SAN PEDRO ST
Box:City:GARDENA
State:CA
ZIP:90248-2027
Country:US
Phone:310-516-8000/FAX: 310-516-9843
CAGE:63415

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

Ingred Name:IRON (II) SULFATE (1:1), HEPTAHYDRATE; (FERROUS SULFATE,
HEPTAHYDRATE)
CAS:7782-63-0
RTECS #:NO8510000
Fraction by Wt: 100%
OSHA PEL:1MG/M3IRON SALTS(Fe)
ACGIH TLV:1MG/M

3IRON SALTS(Fe)
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Inged Name:SUPP DATA: HYPOTONIA & HYPERGLYCEMIA. IF POISONING IS NOT IMMEDIATE, PATIENT MAY BE ASYMPTOMATIC FOR 24 HOURS, (ING 3)
RTECS #:9999999ZZ

Inged Name:ING 2: AFTER WHICH SYMPTOMS MAY RETURN W/CYANOSIS, CONVULSIONS, CIRCULATORY COLLAPSE, MASSIVE HEPATIC FAILURE W/ (ING 4)
RTECS #:9999999ZZ

Inged Name:ING 3: JAUNDICE, SEVERE BLEEDING W/ALTERED CLOTTING & BLEEDING PARAMETERS, SEVERE RENAL IMPAIRMENT/FAILURE, DIFFUSE (ING 5)
RTECS #:9999999ZZ

Inged Name:ING 4: VASCULAR CONGESTION, PULMONARY EDEMA & PULMONARY HEMMORRHAGE, ACIDOSIS, ANURIA, HYPERTHERMIA, COMA & DEATH W/IN 24-48(ING 6)
RTECS #:9999999ZZ

Inged Name:ING 5: HOURS. DEATH IS ALWAYS PRECEDED BY SHOCK. IF VICTIM SURVIVES, LATE COMPLICATIONS DUE TO PYLORIC, ANTRAL/ (ING 7)
RTECS #:9999999ZZ

Inged Name:ING 6: INTESTINAL OBSTRUCTION, HEPATIC CIRRHOSIS W/FINE DIFFUSE FIBROTIC CHANGES W/FATTY DEGENERATION & CENTRAL (ING 8)
RTECS #:9999999ZZ

Inged Name:ING 7: NERVOUS DAMAGE MAY OCCUR 2-5 WEEKS AFTER INGESTION. DEGENERATIVE CHANGES OF PANCREAS, LYMPH NODES, & HEART ARE (ING 9)
RTECS #:9999999ZZ

Inged Name:ING 8: ALSO POSSIBLE. AVERAGE HUMAN LETHAL DOSE OF IRON IS ABOUT 200 TO 250 MG PER KG OF BODY WEIGHT.
RTECS #:9999999ZZ

Inged Name:FIRST AID PROC: UPPER & LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS (AT LEAST 15-20 MIN). CONTINUE IRRIGATING W/ (ING 11)
RTECS #:9999999ZZ

Inged Name:ING 10: NORMAL SALINE UNTIL PH HAS RETURNED TO NORMAL
(

30-60 MIN). COVER W/STERILE BANDAGES. GET MED ATTN IMMED.(ING 12)
RTECS #:9999999ZZ

Ingred Name:ING 11: INGEST: IN PATIENTS NOT IN SHOCK/COMA, INDUCE
EMESIS W/SYRUP OF IPECAC IF VOMIT HAS NOT OCCURED. FOLLOW (ING 13)
RTECS #:9999999ZZ

Ingred Name:ING 12: W/GASTRIC LAVAGE USING DEFEROXAMINE, 2 GRAMS IN 1
LITER OF H*2O CONTAINING SODIUM BICARBONATE, 20 GM/L. (ING 14)
RTECS #:9999999ZZ

Ingred Name:ING 13:LEAVE 10 GRAMS OF DEFEROXAMINE IN 50 ML OF 5% SODIUM
BICARBONATE IN STOMACH. MAI
NTAIN AIRWAY, BLOOD PRESS(ING 15)
RTECS #:9999999ZZ

Ingred Name:ING 14: & RESP. TREAT SYMP & SUPPORTIVELY. (DREISBACH,
HANDBOOK OF POISONING, 11TH ED.) GET MED ATTN IMMED. (ING 16)
RTECS #:9999999ZZ

Ingred Name:ING 15: TREATMENT SHD BE ADMIN BY QUALIFIED MED PERSONNEL.
ANTIDOTE: FOLLOWING ANTIDOTE HAS BEEN RECOM. HOWEVER,(ING 17)
RTECS #:9999999ZZ

Ingred Name:ING 16: DECISION AS TO WHETHER SEV OF POISONING REQS ADMIN
OF ANY ANTIDOTE & ACTUAL DOSE REQD SHD BE MADE BY (ING 18)
RTECS
#:9999999ZZ

Ingred Name:ING 17: QUALIFIED MED PERSONNEL. IRON SALT POISONING: GIVE
DEFEROXAMINE, 15 MG/KG/HOUR BY CONT IV INFUSION TO (ING 19)
RTECS #:9999999ZZ

Ingred Name:ING 18: MAX OF 80 MG/KG IN EACH 12-HOUR PERIOD. MONITOR
BLOOD PRESS DURING ADMIN OF DEFEROXAMINE & REDUCE RATE (ING 20)
RTECS #:9999999ZZ

Ingred Name:ING 19: OF ADMIN IF BLOOD PRESS FALLS. SINGLE DOSES SHD NOT
EXCEED 1 GRAM & MAX IN 24 HOURS SHD NOT EXCEED 6 (ING 21)
RTECS #:9999999ZZ

Ingred Name:ING 20:GRAMS

.DEFEROXAMINE IS HAZ IN PATIENTS W/SEV RENAL DISEASE/ANURIA, & DIALYSIS IS NEC. INJECTED DEFEROXAMINE(ING 22)
RTECS #:9999999ZZ

Ingred Name:ING 23: IS ASSOCIATED W/HIGH RISK & SHD BE RESERVED FOR SERIOUS POISONING. CONT DEFEROXAMINE THERAPY UNTIL (ING 23)
RTECS #:9999999ZZ

Ingred Name:ING 22: PATIENT IS FREE OF SYMP & SIGNS FOR 24 HOURS (DREISBACH, HANDBOOK OF POISONING, 11TH ED.). ANTIDOTE SHD (ING 24)
RTECS #:9999999ZZ

Ingred Name:ING 23: BE ADMINISTERED BY QUALIFIED MEDICAL PERSONNEL.
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:LD50: (ORAL,RAT) 319 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:ACUTE: MAY CAUSE IRRIT OF RESP TRACT.
SKIN: MAY CAUSE IRRIT. EYE: CONT W/EYE MAY CAUSE SEV IRRIT & CORRUPTION DUE TO ACIDITY OF SOLN. INGEST: SIDE EFTS OF INGEST OF IRON SALTS MAY INCL HEARTBURN, METAL
LIC TASTE IN MOUTH, NAUSEA, UPPER
GASTRIC DISCOMFORT,& CONSTIPATION/DIARRHEA. CHRONIC:SKIN: DERM.
EYES:(EFTS OF OVEREXPOSURE)
Explanation of Carcinogenicity:NOT RELEVANT.
Effects of Overexposure:HEALTH HAZ: CONJ. INGEST: REPROD EFTS IN LAB ANIMALS. SYMPTOMS OF SEV POIS MAY OCCUR W/IN 30 MIN/BE DELAYED FOR SEVERAL HOURS. SEV HEMORRHAGIC GASTRITIS W/ABDOMINAL PAIN, RETCHING, VIOLENT DIARR & VOMIT MAY OCCUR. VOMIT MAY BE BLOODY. DEHYDRATION MAY BECOME INTENSE. CIRCULATORY SYS MAY BE AFFECTED
W/SYMP OF SHOCK,(SUPPLEMENTARY DATA)
Medical Condition Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:INHALATION: REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. KEEP WARM & AT REST. TREAT SYMPTOMS & SUPPORTIVELY. GET MEDICAL ATTENTION IMMEDIATELY. SKIN: REMOVE CONTAMINATED CLOTHING & SHOES IMMEDIATELY. WASH AFFECTED AREA WITH SOAP/MILD DETERGENT & LARGE AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS (

15-20 MIN). GET MED ATTN IMMED.

EYE: WASH EYES IMMED W/LRG AMTS OF H*2O, OCCASIONALLY LIFTING (ING 10)

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

Flash Point:NEGLIGIBLE

Extinguishing Media:DRY CHEMICAL, CARBON DIOXIDE, HALON, WATER SPRAY OR STANDARD FOAM. FOR LRGR FIRES, USE H*2O SPRAY, FOG/STANDARD FOAM.

Fire Fighting Procedures:USE NIOSH/MSHA APPRVD SCBA & FULL PROT EQUIP.MOVE CNTNR FROM FIRE AREA IF POSS.DO NOT SCATTER SPILLED MATL W/HIGH PRESS

H*2O STREAMS.DIKE (SUPP DATA)

Unusual Fire/Explosion Hazard:USE AGENTS SUITABLE FOR TYPE OF SURROUNDING FIRE. AVOID BREATHING HAZARDOUS VAPORS, KEEP UPWIND.

===== 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. FOR FURTHER INFORMATION SEE ORIGINAL MSDS .

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE AWAY FROM INCOMPATIBLE SUBSTANCES. PREVENT DISPERSION OF DUST IN AIR.

Other Precautions:NONE SPECIFIED BY MANUFACTURER.

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

Respiratory Protection:SPECIFIC RESPIRATOR SELECTED MUST BE BASED ON CONTAMINATION LEVELS FOUND IN WORK PLACE, MUST NOT EXCEED WORKING LIMITS OF RESPIRATOR. USE NIOSH/MSHA APPROVED RESPIRATOR

APPROPRIATE FOR EXPOSURE OF CONCERN .

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

Protective Gloves:IMPERVIOUS GLOVES .

Eye Protection:CHEM WORK GOG & FULL LGTH FACESHLD

Other Protective Equipment:APPROP PROT (IMPERVIOUS) CLTHG & EQUIP. EYE WASH FOUNTAIN AND QUICK DRENCH SHOWER W/IN IMMED WORK AREA FOR EMER USE.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

PH:3.7 @ 10% SO

LN. FIRE FIGHT PROC: FIRE CNTRL H*2O FOR LATER DISP.

EFTS OF OVEREXP: PALLOR, CYANOSIS & COLDNESS, RAPID WEAK/IMPERCEPTIBLE PULSE, SEV HYPOTENSION & PULM CHANGES W/DYSPNEA, FOCAL ATELECTASIS & EMPHYSEMA MAY OCCUR. OTHER SYMP MAY INCL HEMOCONCENTRATION, TACHYCARDIA, LETHARGY, DROW, MENTAL CONFUSION, (ING 2)

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

Melt/Freeze Pt: M.P/F.P Text: DECOMPOSES

Spec Gravity: 1.898

pH: SUPDAT

Solubility in Water: 15.65 @ @ 20C

A

Appearance and Odor: ODORLESS, HYGROSCOPIC, BLUE-GREEN, MONOCLINIC CRYSTALS.

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

Stability Indicator/Materials to Avoid: YES

ALKALIES, ARSENIC TRIOXIDE, SODIUM NITRATE, METHYL ISOCYANOACETATE, OXIDIZERS.

Stability Condition to Avoid: NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products: TOXIC OXIDES OF SULFUR.

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

Waste Disposal Methods: OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS

WHEN STORING OR DISPOSING OF SUBSTANCE. FOR ASSISTANCE, CONTACT DISTRICT DIRECTOR OF 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 America 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.