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 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)

EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

ACGIH TLV:1MG/M3IRON SALTS(FE)

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

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

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

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

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

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

Ingred Name:ING 7: NERVOUS DMG MAY OCCUR 2-5 WEEKS AFTER INGEST. DEGENERAT IVE CHANGES OF PANCREAS, LYMPH NODES, & HEART ARE (ING 9) RTECS #:9999999ZZ

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

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

Ingred 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 #:99999992Z

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*20 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. MAINTAIN AIRWAY, BLOOD PRESS(ING 15) RTECS #:99999992Z

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 #:99999992Z

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 #:99999992Z

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 Identif

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 & CORR ACTION DUE TO ACIDITY OF SOLN. INGEST: SIDE EFTS OF INGEST OF IRON SALTS MAY INCL HEARTBURN, MET ALLIC TASTE IN MOUTH, NAUS, UPPER GASTRIC DISCOMFORT,& CONSTIP ATION/DIARRHEA. CHRONIC:SKIN: DERM. EYES:(EFTS OF OVEREXP) Explanation of Carcinogenicity:NOT RELEVANT. Effects of Overexposure: HLTH HAZ: CONJ. INGEST: REPROD EFTS IN LAB ANIMALS. SYMP 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, (SUPP DATA) Medical Cond Aggravated by

Exposure:NONE SPECIFIED BY MANUFACTURER.

First Aid:INHAL: REMOVE FROM EXPOS AREA TO FRESH AIR IMMED. IF BRTHG HAS STOPPED, PERFORM ARTF RESP. KEEP WARM & AT REST. TREAT SYMP & SUPPORTIVELY. GET MED ATTN IMMED. SKIN: REMOVE CONTAM CLTHG & SHOES IMMED. WASH AFFECTED AREA W/SOAP/MILD DETERGENT & LRG AMTS OF H*20 UNTIL NO EVIDENCE OF CHEM REMAINS (15-20 MIN). GET MED ATTN IMMED. EYE: WASH EYES IMMED W/LRG A

MTS OF H*20, OCCASIONALLY LIFTING (ING 10)
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Flash Point:NEGLIGIBLE Extinguishing Media:DRY CHEMICAL, CARBON DIOXIDE, HALON, WATER SPRAY OR STANDARD FOAM. FOR LRGR FIRES, USE H*20 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*20 STREAMS.DIKE (SUPP DATA) Unusual Fire/Explosion Hazard:USE AGENTS SUITABLE FOR TYPE OF SURROUNDING FIRE. AVOID BREATHING HAZARDOUS VAPORS, KEEP UPWIND.
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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.
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Handling and Storage Precautions:STORE AWAY FROM INCOMPATIBLE SUBSTANCES. PREVENT DISPERSION OF DUST IN AIR. Other Precautions:NONE SPECIFIED BY MANUFACTURER.
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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 CON CERN. 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% SOLN. FIRE FIGHT PROC: FIRE CNTRL H*20 FOR LATER DISP.
EFTS OF

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

Melt/Freeze Pt:M.P/F.P Text:DECOMPOSES Spec Gravity:1.898 pH:SUPDAT Solubility in Water:15.65@ @ 20C Appearance and Odor:ODORLESS, HYGROSCOPIC, BLUE-GREEN, MONOCLINIC

CRYSTALS.

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.

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.

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