



Material Safety Data Sheet

Ferric Chloride 32% to 45% Photo Etch Grade

General Information

Company's Name: Borden & Remington
Company's Street: 63 Water St.
Company's City: Fall River
Company's State: MA
Company's Country: US
Company's Zip Code: 02722
Company's Emerg Ph #: 800-424-9300 (CHEMTREC)
Company's Info Ph #: 508-675-0096
Date MSDS Prepared: 24FEB93
Safety Data Review Date: January 2010

Ingredients/Identity Information

Proprietary: NO
Ingredient: FERRIC CHLORIDE
Ingredient Sequence Number: 01
Percent: 32-45
NIOSH (RTECS) Number: L19100000
CAS Number: 7705-08-0
ACGIH TLV: 1 MG/CUM

Proprietary: NO
Ingredient: HYDROCHLORIC ACID, HYDROGEN CHLORIDE, MURIATIC ACID
HYDROCHLORIDE
Ingredient Sequence Number: 02
Percent: <3
NIOSH (RTECS) Number: MW4025000
CAS Number: 7647-01-0
OSHA PEL: 5 PPM
ACGIH TLV: C 11 MG/CUM
Other Recommended Limit: 7 PPM

Proprietary: NO
Ingredient: FERROUS CHLORIDE
Ingredient Sequence Number: 03
Percent: <0.5
NIOSH (RTECS) Number: NO5400000
CAS Number: 7758-94-3
ACGIH TLV: 1 MG/CUM

Proprietary: NO
Ingredient: WATER
Ingredient Sequence Number: 04
Percent: BALANCE
NIOSH (RTECS) Number: ZC0110000
CAS Number: 7732-18-5

Physical/Chemical Characteristics

Appearance And Odor: REDDISH BROWN LIQUID W/SLIGHT ODOR OF IRON/ACID
Boiling Point: 230F
Melting Point: -58F
Vapor Pressure (MM Hg/70 F): NEGLIGIBLE
Specific Gravity: 1.432
Evaporation Rate And Ref. (BU AC=1): >1
Solubility In Water: COMPLETE
pH: <2

Fire and Explosion Hazard Data

Extinguishing Media: WATER SPRAY, FOG, FOAM, DRY CHEMICAL, CO2/OTHER AGENTS AS APPROPRIATE FOR SURROUNDING FIRE
Special Fire Fighting Proc: WEAR SELF CONTAINED BREATHING APPARATUS & FULL
PROTECTIVE CLOTHING AS APPROPRIATE FOR SURROUNDING FIRE. COOL EXTERIOR OF
STORAGE TANKS.
Unusual Fire And Expl Hazards: NONE

Reactivity Data

Stability: YES
Cond To Avoid (Stability): HEAT
Materials To Avoid: STRONG ALKALIS & ALKALI METALS
Hazardous Decomp Products: HYDROGEN CHLORIDE GAS
Hazardous Poly Occur: NO

Health Hazard Data

LD50-LC50 Mixture: ORAL LD50(RAT): 900 MG/KG(IRON TOXICITY)

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: NO although will cause serious chemical burns

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: INHALATION: RESPIRATORY TRACT IRRITANT. IMMEDIATE IRRITATION/CORROSIVE BURNS TO HUMAN TISSUE. EYES: IRRITANT, MAY RESULT IN PERMANENT VISUAL LOSS UNLESS REMOVED QUICKLY.

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO

Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: NONE

Signs/Symptoms Of Overexp: IRRITATION, BURNS, TEARING, TISSUE DISCOLORATION

Emergency/First Aid Proc: INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE CPR. INGESTION: DRINK COPIOUS AMOUNTS OF WATER. DONT INDUCE VOMITING. SKIN: FLUSH W/WATER FOR 15 MINS. EYES: FLUSH W/WATER FOR 15 MINS. FORCIBLY HOLD EYELIDS APART TO ENSURE COMPLETE IRRIGATION OF EYE/ LID TISSUE. OBTAIN MEDICAL ATTENTION IN ALL CASES.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: CONTAIN TO PREVENT CONTAMINATION OF WATER WAY. NEUTRALIZE W/LIME/SODA ASH. FLUSH W/WATER.

Waste Disposal Method: DISPOSE OF NEUTRALIZED/WASTE PRODUCT/CONTAMINATED SOIL & OTHER MATERIAL IN ACCORDANCE W/LOCAL, STATE & FEDERAL REGULATIONS.

Precautions-Handling/Storing: KEEP CONTAINERS CLOSED & DRY. STORE AWAY FROM IGNITION SOURCES & STRONG ALKALIES & ALKALI METALS. PROTECT CONTAINER FROM PHYSICAL DAMAGE.

Other Precautions: USE HANDLING EQUIPMENT COMPATIBLE W/PRODUCT. EMPTIED COANTAINER MAY RETAIN VAPOR & PRODUCT RESIDUE. AVOID BREATHING FUMES.

MINIMIZE SKIN CONTACT W/PROTECTIVE CLOTHING. AVOID CONTACT W/BARE METALS.

Control Measures

Respiratory Protection: USE NIOSH/MSHA APPROVED, FULL FACE RESPIRATOR AS APPROPRIATE.

Ventilation: GOOD GENERAL ROOM VENTILATION TO MINIMIZE EXPOSURE TO VAPORS & MIST.

Protective Gloves: IMPERVIOUS RUBBER

Eye Protection: SPLASHPROOF CHEMICAL SAFETY GOGGLES

Other Protective Equipment: EYEWASH FOUNTAINS, PROTECTIVE CLOTHING, FULL FACE SHIELD, RUBBER FOOTWEAR, RESISTANT HOOD, FULL BODY SUIT, SAFETY SHOWER

Work Hygienic Practices: REMOVE/LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. WASH THOROUGHLY AFTER HANDLING. DONT WEAR CONTACT LENSES.

Label Data

Label Required: YES

Label Status: G

Common Name: FERRIC CHLORIDE SOLUTION

Special Hazard Precautions: INHALATION: RESPIRATORY TRACT IRRITANT. IMMEDIATE IRRITATION/CORROSIVE BURNS TO HUMAN TISSUE. EYES: IRRITANT, MAY RESULT IN PERMANENT VISUAL LOSS UNLESS REMOVED QUICKLY. IRRITATION, BURNS, TEARING, TISSUE DISCOLORATION

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