MATERIAL SAFETY DATA SHEET

LAMOTTE COMPANY --4450, IRON REAGENT #1 Solution

MSDS SAFETY INFORMATION

MSDS Date: 12/13/2000
MSDS Number: CLKNF
Product ID: 4450, IRON REAGENT #1 SOLUTION
MFN: 01
KIT Part: Y
Responsible Party:
Cage: 1NSJ1
Name: LAMOTTE COMPANY
Address: 802 Washington Ave.
        Box 329
        Chestertown MD 21620
Info Phone Number: 419-778-3100
Emergency Phone Number: 800-255-3924 CHEM-TEL
Review Ind: Y
Published: Y

CONTRACTOR SUMMARY

Cage: 5986
Name: Carolina Biological Supply CO.
Address: 2700 York RD
        Burlington NC 27215-3387
Phone: 800-227-1150 / 910-584-0381
Contract Number: MDA414-01-P-2039
Cage: 1NSJ1
Name: Lamotte Company
Address: 802 Washington Ave.
        Box 329
        Chestertown MD 21620
Phone: 419-778-3100

INGREDIENTS

Cas: 7664-93-9
RTECS #: WS5600000
Name: SULFURIC ACID
Percent by Wt: 4.8
OSHA PEL: 1 mg/m3
ACGIH TLV: 1 mg/m3
ACGIH STEL: 3 mg/m3
EPA Rpt. Qty.: 1000 lbs
DOT Rpt Qty.: 1000 lbs

Cas: 7732-18-5
RTECS #: ZC0110000
Name: WATER
% Wt: TO 100%

HEALTH HAZARDS DATA

LD50 LC50 Mixture: ORL RAT LD50: 2140 mg/kg
Skin: Yes
Ingestion: Yes
Carcinogenicity Inds - NTP: NO
IARC: NO
OSHA: NO

Effects of Exposure:
TARGET ORGANS: Corrosive to all body parts.
Explanation of Carcinogenicity: None
Signs and Symptoms of Overexposure: CORROSIVE. IRRITATING TO EYES, SKIN, NOSE, THROAT and RESPIRATORY SYSTEM. HARMFUL IF SWALLOWED.

First Aid:
EYE: Flush thoroughly with water for 15 minutes. Consult physician.
INGESTION: Do not induce vomiting. Rinse out mouth. Drink Plenty of water. Call a Doctor.
INHALATION: Remove to fresh air.
SKIN: Flush with water for 15 minutes while removing affected clothing. Wash skin with soap and water.

HANDLING AND DISPOSAL

Spill Release Procedures: Cover spill with sodium bicarbonate. Scoop up slurry and was down drain with excess water.
Neutralizing Agent: SODIUM BICARBONATE
Waste Disposal Methods: Add slowly to a solution of sodium carbonate and calcium hydroxide. Pour neutralized solution down drain with excess water. DISPOSE ACCORDING TO FEDERAL, STATE and LOCAL REGULATIONS.
Handling and Storage Precautions: WEAR EYE PROTECTION and LAB COAT.
Other Precautions: AVOID CONTACT WITH SKIN AND CLOTHING.

FIRE AND EXPLOSION HAZARD INFORMATION

Extinguishing Media: NOT A FIRE HAZARD
Unusual Fire/Explosion Hazard: Can react with metals to form hydrogen gas.

CONTROL MEASURES

Ventilation: NORMAL VENTILATION
Work Hygienic Practices: AVOID CONTACT WITH SKIN AND CLOTHING.
Supplemental Safety and Health:
HAZARD: HEALTH-2, FLAMMABILITY-0, REACTIVITY-1.
SCALE: 4=EXTREME, 3=HIGH, 2=Moderate, 1=SLIGHT, 0=LEAST
“SEE OTHER INFORMATION”

PHYSICAL/CHEMICAL PROPERTIES

HCC: F2
Boiling Point: >100.C, 212.F
Vapor Pres.: <17@20C
PH: <1
Solubility in Water: SOLUBLE
Appearance and Odor: Clear Odorless Liquid; No Odor
REACTIVITY DATA

Stability Indicator: YES
Materials to Avoid: Metals, Strong Bases.
Hazardous Decomposition Products: SOX.

TOXICOLOGICAL INFORMATION

Toxicological Information: TOXICITY: ORL RAT LD50: 2140 mg/kg for Sulfuric Acid, concentrated.

ECOLOGICAL INFORMATION

MSDS TRANSPORT INFORMATION

REGULATORY INFORMATION

OTHER INFORMATION

Other Information: Item is part of a 20 pc. Kit for Iron High Range Refill Kit #65-2877 From CAROLINA BIOLOGICAL. 4450, 4451, 2210, 2246, 4253, 4100, 4167, 4169, 4170, 6286, 7166, 7424, 4410, 6405, 7460, 7461, 4259, 4483, 4484, 5250. Part of 20 pc. Freshwater Refill Kit #65-2926. See MSDS Serial # CLKNM, CLKNQ, CLKNS, CLKNT, CLKRH, CLKRM, CLKRS, CLKRV, CLKZT, CLKZW, CLKZX, CLKZY, CLKZZ, CLLBB, CLLBD, CLLBW, CLLCC, CLLCF, AND CLLFC.

TRANSPORTATION INFORMATION

Responsible Party Cage: 1NSJ1
Trans ID NO: 158641
Product ID: 4450, Iron Reagent 1 Solution.
MSDS Prepared Date: 12/13/2000
Review Date: 08/31/2001
MFN: 1
Multiple Kit Number: 0
Kit Part IND: Y
Review IND: Y
Unit of Issue: CY
Type of Container: CYLINDER

DOT PSN Code: NUE
DOT Proper Shipping Name: SULFURIC ACID
DOT PSN Modifier: WITH NOT MORE THAN 51 % Acid.
Hazard Class: 8
UN ID Number: UN2796
DOT Packaging Group: II
Label: Corrosive
Special Provision: A3, A7, B2, B15, N6, N34, T9, T27
Packaging Exception: 154
Non Bulk Pack: 202
Bulk Pack: 242
Max QTY Pass: 1 L
Mass QTY Cargo: 30 L
Vessel Stow Req.: B

DETAIL IMO INFORMATION
IMO PSN Code: OFF
IMO Proper Shipping Name: SULPHURIC ACID
IMO PSN Modifier: WITH NOT MORE THAN 51% ACID
IMDG Page Number: 8230
UN Number: 2796
UN Hazard Class: 8
IMO Packaging Group: II
Subsidiary Risk Label: -
EMS Number: 8-06
MED First Aid Guide Number: 700

DETAIL IATA INFORMATION

IATA PSN Code: XIY
IATA UN ID NUM: 2796
IATA Proper Shipping Name: SULPHURIC ACID
IATA PSN Modifier: With not more than 51% Acid.
IATA UN CLASS: 8
IATA Label: CORROSIVE
UN Packing Group: II
Packing Note Passenger: 809
Max QTY Pass: 1L
Max QTY. Cargo: 30L
Packaging Note Cargo: 813

DETAIL AFI INFORMATION

AFI PSN Code: XJA
AFI Proper Shipping Name: SULPHURIC ACID
AFI PSN Modifier: Not more than 51% Acid
AFI Hazard Class: 8
AFI UN ID NUM: UN2796
AFI Packing Group: II
Back Pack Reference: A12.3

HAZCOM LABEL

Product ID: 4450, Iron Reagent 1 Solution
Cage: 1NSJ1
Company Name: Lamotte Company
Address: 802 Washington Ave.
          Box 329
          Chestertown MD 21620
Health Emergency Phone: 800-255-3924 CHEM-TEL
Label Required IND: Y
Date of Label Review: 08/31/2001
Status Code: A
Origination Code: F
Eye Protection IND: Yes
Skin Protection IND: Yes
Signal Word: WARNING
Respiratory Protection IND: No
Health Hazard: Moderate
Contact Hazard: Moderate
Fire Hazard: None
Reactivity Hazard: Slight
Hazard and Precautions: Target Organs: Corrosive to all body parts. Corrosive.
Irritating to Eyes, Skin, Nose, Throat and Respiratory System.

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