

E M SCIENCE DIV OF E M INDUSTRIES -- 1,2-DICHLOROETHANE,DX0794,DX0796,DX0797,DX0800, -  
MATERIAL SAFETY DATA SHEET  
NSN: 6810008385932  
Manufacturer's CAGE: 63612  
Part No. Indicator: A  
Part Number/Trade Name: 1,2-DICHLOROETHANE,DX0794,DX0796,DX0797,DX0800,  
DX0805

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General Information

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Item Name: DICHLOROETHANE, REAGENT  
Company's Name: E M SCIENCE DIV OF E M INDUSTRIES INC  
Company's Street: 400 DEMOCRAT RDD  
Company's P. O. Box: 70  
Company's City: GIBBSTOWN  
Company's State: NJ  
Company's Country: US  
Company's Zip Code: 08027-0070  
Company's Emerg Ph #: 609-423-6300/800-424-9300 (CHEMTREC)  
Company's Info Ph #: 609-423-6300  
Distributor/Vendor # 1: VWR SCIENTIFIC - DIV OF UNIVAR  
Distributor/Vendor # 1 Cage: 2E624  
Record No. For Safety Entry: 008  
Tot Safety Entries This Stk#: 009  
Status: SE  
Date MSDS Prepared: 12FEB97  
Safety Data Review Date: 02APR98  
Supply Item Manager: CX  
MSDS Preparer's Name: UNKNOWN  
MSDS Serial Number: CGLSS  
Specification Number: O-C-265C  
Spec Type, Grade, Class: NONE  
Hazard Characteristic Code: F5  
Unit Of Issue: GL  
Unit Of Issue Container Qty: 1.0 GAL  
Type Of Container: BOTTLE  
Net Unit Weight: 10.5 LBS  
NRC/State License Number: NOT RELEVANT

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Ingredients/Identity Information

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Proprietary: NO  
Ingredient: 1,2-DICHLOROETHANE/ETHYLENE DICHLORIDE (SARA 313) (CERCLA)  
Ingredient Sequence Number: 01  
Percent: 100  
NIOSH (RTECS) Number: KI0525000  
CAS Number: 107-06-2  
OSHA PEL: 50 PPM; Z-2  
ACGIH TLV: 10 PPM; 9596  
Other Recommended Limit: NONE RECOMMENDED

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Physical/Chemical Characteristics

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Appearance And Odor: COLORLESS LIQUID - CHLOROFORM LIKE ODOR  
Boiling Point: 182F,84C  
Melting Point: -32F,-36C  
Vapor Pressure (MM Hg/70 F): 67 @ 68F  
Vapor Density (Air=1): 3.42  
Specific Gravity: 1.256  
Decomposition Temperature: UNKNOWN  
Evaporation Rate And Ref: 6.46 (N-BUTYL ACETATE=1)  
Solubility In Water: 0.81%  
Percent Volatiles By Volume: >99  
Viscosity: UNKNOWN  
Radioactivity: NOT RELEVANT

Corrosion Rate (IPY): UNKNOWN

Fire and Explosion Hazard Data

Flash Point: 56.0F, 13.3C  
Flash Point Method: TCC  
Lower Explosive Limit: 6.20  
Upper Explosive Limit: 15.90  
Extinguishing Media: USE DRY CHEMICAL, CARBON DIOXIDE, FOAM. USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS.  
Special Fire Fighting Proc: WEAR PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS. HAZARDOUS DECOMPOSITION PRODUCTS MAY BE FORMED.  
Unusual Fire And Expl Hazrds: VAPOR IS HEAVIER THAN AIR AND CAN TRAVEL CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. CONTAINERS MAY RUPTURE DUE TO VAPOR PRESSURE BUILDUP.

Reactivity Data

Stability: YES  
Cond To Avoid (Stability): HEAT, SPARKS, FLAMES, OTHER IGNITION SOURCES  
Materials To Avoid: OXIDIZING AGENTS, ALKALIES, ALUMINUM, NITROGEN TETROXIDE, AMINES  
Hazardous Decomp Products: CARBON MONOXIDE, CARBON DIOXIDE, OXIDES OF NITROGEN, OTHER UNKNOWN COMPOUNDS, TRACE AMOUNTS OF HYDROGEN CYANIDE  
Hazardous Poly Occur: NO  
Conditions To Avoid (Poly): NOT RELEVANT

Health Hazard Data

LD50-LC50 Mixture: LC50 (INHL, RAT) 1000 PPM/7 HRS  
Route Of Entry - Inhalation: YES  
Route Of Entry - Skin: YES  
Route Of Entry - Ingestion: NO  
Health Haz Acute And Chronic: TARGET ORGANS: EYES, SKIN, CNS, LIVER, KIDNEY, BLOOD. ACUTE & CHRONIC- MAY CAUSE SEVERE EYE IRRITATION & POSSIBLY BURNS. MAY CAUSE SKIN IRRITATION. MAY BE TOXIC IF INHALED/INGESTED/ABSORBED THROUGH SKIN. REPEATED/PROLONGED EXPOSURE MAY CAUSE DAMAGE TO LIVER, KIDNEYS, LUNGS & BLOOD. MAY CAUSE CNS DEPRESSION & COMA.  
Carcinogenicity - NTP: YES  
Carcinogenicity - IARC: YES  
Carcinogenicity - OSHA: NO  
Explanation Carcinogenicity: NONE  
Signs/Symptoms Of Overexp: SEVERE IRRITATION, HEADACHE, DIZZINESS, NAUSEA, VOMITING, DROWSINESS, FATIGUE, BLURRED VISION, DIARRHEA, CHEST PAIN, COUGHING, COMA  
Med Cond Aggravated By Exp: ALCOHOLICS, DIABETES AND INDIVIDUALS WITH PRE-EXISTING DISEASES OF THE EYE, SKIN, RESPIRATORY TRACT, CNS, HEART, BLOOD MAY HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURES.  
Emergency/First Aid Proc: GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. WASH WITH SOAP & WATER. INHALED: MOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NECESSARY. ORAL: DO NOT INDUCE VOMITING. IF CONSCIOUS, WASH OUT MOUTH WITH WATER. CALL PHYSICIAN AT ONCE.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: WEAR PROTECTIVE EQUIPMENT. ELIMINATE SOURCES OF IGNITION. VENTILATE AREA. CONTAIN AND PICK UP SPILL WITH NON-FLAMMABLE ABSORBENT SUCH AS SAND, EARTH, VERMICULITE. GROUND ALL HANDLING EQUIPMENTS. PREVENT LIQUID FROM ENTERING SEWERS OR WATERWAYS.  
Neutralizing Agent: NOT RELEVANT  
Waste Disposal Method: DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. RECOMMENDED PROCEDURE IS BY INCINERATION. EPA HAZARDOUS WASTE NUMBER: U077, D001, D028

Precautions-Handling/Storing: STORE IN COOL, DRY, VENTILATED AREA, AWAY FROM FLAMES, SPARKS & INCOMPATIBLES. CONTAINERS SHOULD BE GROUNDED WHEN CONTENTS ARE BEING TRANSFERRED.

Other Precautions: "EMPTY" CONTAINERS RETAIN RESIDUE AND CAN BE DANGEROUS. DO NOT WELD, SOLDER OR DRILL SUCH CONTAINERS. THEY MAY EXPLODE AND CAUSE INJURY/DEATH. KEEP OUT OF REACH OF CHILDREN. DO NOT INGEST. DO NOT GET IN EYES OR ON SKIN. DO NOT BREATHE VAPOR

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Control Measures  
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Respiratory Protection: IF TLV IS EXCEEDED OR FOR SYMPTOMS OF OVER EXPOSURE, WEAR NIOSH-APPROVED AIR-SUPPLIED RESPIRATOR. IN EMERGENCY, WEAR A NIOSH-APPROVED POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS. WORK UNDER THE HOOD.

Ventilation: MECHANICAL (GENERAL AND/OR LOCAL EXHAUST, EXPLOSION-PROOF) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves: NEOPRENE, BUTYL

Eye Protection: SAFETY GLASSES/CHEMICAL SPLASH GOGGLES

Other Protective Equipment: WEAR PROTECTIVE CLOTHING IN CASE OF REPEATED OR PROLONGED CONTACT. PROVIDE EYE WASH & SAFETY SHOWER.

Work Hygienic Practices: OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. WASH AFTER HANDLING AND BEFORE EATING OR DRINKING.  
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Transportation Data  
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Trans Data Review Date: 98092  
DOT PSN Code: GAP  
DOT Proper Shipping Name: ETHYLENE DICHLORIDE  
DOT Class: 3  
DOT ID Number: UN1184  
DOT Pack Group: II  
DOT Label: FLAMMABLE LIQUID, POISON  
DOT/DoD Exemption Number: NOT RELEVANT  
IMO PSN Code: GVF  
IMO Proper Shipping Name: ETHYLENE DICHLORIDE  
IMO Regulations Page Number: 3224  
IMO UN Number: 1184  
IMO UN Class: 3.2  
IMO Subsidiary Risk Label: TOXIC  
IATA PSN Code: LIA  
IATA UN ID Number: 1184  
IATA Proper Shipping Name: ETHYLENE DICHLORIDE  
IATA UN Class: 3  
IATA Subsidiary Risk Class: 6.1  
IATA Label: FLAMMABLE LIQUID & TOXIC  
AFI PSN Code: LIA  
AFI Prop. Shipping Name: ETHYLENE DICHLORIDE  
AFI Class: 3  
AFI ID Number: UN1184  
AFI Pack Group: II  
AFI Label: 6.1  
AFI Special Prov: P4  
AFI Basic Pac Ref: A7.3  
Additional Trans Data: DOT PROPER SHIPPING NAME, UN ID NUMBER PER MSDS.  
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Disposal Data  
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Label Data  
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Label Required: YES  
Technical Review Date: 02APR98  
MFR Label Number: UNKNOWN  
Label Status: F  
Common Name: 1,2-DICHLOROETHANE,DX0794,DX0796,DX0797,DX0800,

DX0805

Signal Word: DANGER!

Acute Health Hazard-Severe: X

Contact Hazard-Severe: X

Fire Hazard-Severe: X

Reactivity Hazard-None: X

Special Hazard Precautions: TARGET ORGANS:EYE, SKIN, CNS, LIVER, KIDNEY, BLOOD. ACUTE & CHRONIC- MAY CAUSE SEVERE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. MAY BE TOXIC IF INHALED/INGESTED/ABSORBED THROUGH SKIN. MAY CAUSE CNS DEPRESSION. STORE IN VENTILATED AREA, AWAY FROM IGNITION SOURCES & INCOMPATIBLES. PICK UP SPILL WITH NON-FLAMMABLE ABSORBENT SUCH AS SAND. PREVENT LIQUID FROM ENTERING SEWERS. FIRST AID- GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. EYES:IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. HOLD EYELIDS OPEN. SKIN:WASH WITH SOAP & WATER. INHALED:MOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NECESSARY. ORAL:DO NOT INDUCE VOMITING. CALL PHYSICIAN AT ONCE.

Protect Eye: Y

Protect Skin: Y

Label Name: E M SCIENCE DIV OF E M INDUSTRIES INC

Label Street: 400 DEMOCRAT RDD

Label P.O. Box: 70

Label City: GIBBSTOWN

Label State: NJ

Label Zip Code: 08027-0070

Label Country: US

Label Emergency Number: 609-423-6300/800-424-9300 (CHEMTREC)

Year Procured: 1998