

-1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER.....:

EM SCIENCE
A DIVISION OF EM INDUSTRIES
P.O. BOX 70
480 DEMOCRAT RD.
GIBBSTOWN, N.J. 08027

PREPARATION DATE.: 11/20/91
DATE MSDS PRINTED.: JUN 11, 1992

INFORMATION PHONE NUMBER.: 609-354-9200
HOURS: MON. TO FRI. 8:30-5
CHEMTREC EMERGENCY NUMBER: 800-424-9300
HOURS: 24 HRS A DAY

CATALOG NUMBER(S):

DX0831 DX0832 DX0835 DX0837 DX0838 DX0833 DX0835P DX0838P
DX0838RI DX0830

CHEMICAL NAME.....: DICHLOROMETHANE
TRADE NAME.....: METHYLENE CHLORIDE
CHEMICAL FAMILY...: CHLORINATED HYDROCARBON
FORMULA.....: CH2CL2

MOLECULAR WEIGHT.: 84.93

2. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT | CAS # | APPR % |
|-----------------|---------|--------|
| DICHLOROMETHANE | 75-09-2 | 100% |

MOST GRADES OF DICHLOROMETHANE CONTAIN A TRACE AMOUNT OF A STABILIZER.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

POSSIBLE CANCER HAZARD. MAY CAUSE CANCER BASED ON ANIMAL DATA.
HARMFUL IF INHALED OR SWALLOWED.

VAPOR IRRITATING.

MAY CAUSE EYE INJURY.

MAY CAUSE SKIN IRRITATION.

MAY CAUSE DAMAGE TO LIVER, KIDNEYS, BLOOD AND CENTRAL NERVOUS SYSTEM.

APPEARANCE.....:

COLORLESS LIQUID, ETHER-LIKE ODOR

POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)

SYMPTOMS OF EXPOSURE:

TOXIC BY INGESTION AND INHALATION.

IRRITATING ON CONTACT WITH SKIN, EYES OR MUCOUS MEMBRANES.

MAY CAUSE EYE INJURY.

INHALATION OF HIGH VAPOR CONCENTRATIONS CAUSES DIZZINESS, NAUSEA, HEADACHE, NARCOSIS, IRREGULAR HEARTBEATS, COMA AND DEATH.

INGESTION MAY CAUSE IRRITATION OF THE GASTROINTESTINAL TRACT WITH VOMITING. IF VOMITING OCCURS, METHYLENE CHLORIDE CAN BE ASPIRATED INTO THE LUNGS, WHICH CAN CAUSE CHEMICAL PNEUMONIA AND SYSTEMIC EFFECTS.

EXCESSIVE EXPOSURE MAY CAUSE BLOOD DEFECTS AND CAN AFFECT LIVER, KIDNEYS AND CENTRAL NERVOUS SYSTEM.

MEDICAL COND. AGGRAVATED BY EXPOSURE:

HEART, KIDNEY AND LIVER CONDITIONS

ROUTES OF ENTRY.....:

INHALATION, INGESTION

CARCINOGENICITY.....:

TESTS ON LABORATORY ANIMALS INDICATE MATERIAL MAY BE CARCINOGENIC.

4. FIRST AID MEASURES

EMERGENCY FIRST AID:

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.

SKIN: WASH THOROUGHLY WITH SOAP AND WATER.

EYES: IMMEDIATELY FLUSH THOROUGHLY WITH WATER FOR AT LEAST 15 MINUTES.

INHALATION: REMOVE TO FRESH AIR; GIVE ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED.

INGESTION: DO NOT INDUCE VOMITING; GET IMMEDIATE MEDICAL ATTENTION.

5. FIRE FIGHTING MEASURES

FLASH POINT (F).....: NONE

FLAMMABLE LIMITS LEL (%): 13.00

FLAMMABLE LIMITS UEL (%): 23.00

EXTINGUISHING MEDIA.....:

WATER SPRAY, CARBON DIOXIDE, DRY CHEMICAL

FIRE FIGHTING PROCEDURES.:

WEAR SELF-CONTAINED BREATHING APPARATUS.

FIRE & EXPLOSION HAZARDS.:

FORMS FLAMMABLE VAPOR-AIR MIXTURES ABOVE AMBIENT TEMPERATURE

6. ACCIDENTAL RELEASE MEASURES

SPILL RESPONSE:

EVACUATE THE AREA OF ALL UNNECESSARY PERSONNEL.
WEAR SUITABLE PROTECTIVE EQUIPMENT LISTED UNDER EXPOSURE /
PERSONAL PROTECTION.
ELIMINATE ANY IGNITION SOURCES UNTIL THE AREA IS DETERMINED TO BE
FREE FROM EXPLOSION OR FIRE HAZARDS.
CONTAIN THE RELEASE AND ELIMINATE ITS SOURCE, IF THIS CAN BE DONE
WITHOUT RISK.
TAKE UP AND CONTAINERIZE FOR PROPER DISPOSAL AS DESCRIBED UNDER
DISPOSAL.
COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS ON REPORTING
RELEASES. REFER TO REGULATORY INFORMATION FOR REPORTABLE
QUANTITY AND OTHER REGULATORY DATA.

7. HANDLING AND STORAGE

HANDLING & STORAGE:

KEEP CONTAINER TIGHTLY CLOSED.
STORE IN A COOL, WELL-VENTILATED AREA AWAY FROM OPEN FLAMES.
DO NOT BREATHE VAPOR OR MIST.
DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.
EMPTY CONTAINERS MAY BE HAZARDOUS DUE TO RETAINED RESIDUE; USE CAUTION

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:

VENTILATION, RESPIRATORY PROTECTION, PROTECTIVE CLOTHING, EYE PROTECTION
RESPIRATORY PROTECTION: IF WORKPLACE EXPOSURE LIMIT(S) OF PRODUCT
OR ANY COMPONENT IS EXCEEDED (SEE TLV/PEL), A NIOSH/MSHA APPROVED
AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER
ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER
NIOSH/MSHA RESPIRATORS (NEGATIVE PRESSURE TYPE) UNDER SPECIFIED
CONDITIONS (SEE YOUR SAFETY EQUIPMENT SUPPLIER). ENGINEERING
AND/OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE
EXPOSURE.
MATERIAL MUST BE HANDLED OR TRANSFERRED IN AN APPROVED FUME HOOD
OR WITH EQUIVALENT VENTILATION.
PROTECTIVE GLOVES (VITON, PVA OR EQUIVALENT) MUST BE WORN
TO PREVENT SKIN CONTACT
SAFETY GLASSES WITH SIDE SHIELDS MUST BE WORN AT ALL TIMES.

WORK / HYGENIC PRACTICES:

WASH THOROUGHLY AFTER HANDLING.

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DO NOT TAKE INTERNALLY.
EYE WASH AND SAFETY EQUIPMENT SHOULD BE READILY AVAILABLE.

EXPOSURE GUIDELINES

OSHA - PEL:

| COMPONENT | PPM | TWA MG/M3 | PPM | STEL MG/M3 | PPM | CL MG/M3 | SKIN |
|-----------------|-----|--------------|-----|---------------|------|-------------|------|
| DICHLOROMETHANE | | 500 | | | 1000 | | |

ACGIH - TLV:

| COMPONENT | PPM | TWA MG/M3 | PPM | STEL MG/M3 | PPM | CL MG/M3 | SKIN |
|-----------------|-----|--------------|-----|---------------|-----|-------------|------|
| DICHLOROMETHANE | 50 | 174 | | | | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (C 760 MMHG): 39.8C
MELTING POINT (C): -95C
SPECIFIC GRAVITY (H2O = 1): 1.326
VAPOR PRESSURE (MM HG): 340 20C
PERCENT VOLATILE BY VOL (%): 100
VAPOR DENSITY (AIR = 1): 2.93
EVAPORATION RATE (BUAC = 1): 27.5
SOLUBILITY IN WATER (%): 2
APPEARANCE:
COLORLESS LIQUID, ETHER-LIKE ODOR

10. STABILITY AND REACTIVITY

STABILITY: YES
HAZARDOUS POLYMERIZATION:
DOES NOT OCCUR

HAZARDOUS DECOMPOSITION.:
HCL, PHOSGENE, CHLORINE

CONDITIONS TO AVOID.....:

CONTACT WITH OPEN FLAME, WELDING ARCS, HOT SURFACES.

MATERIALS TO AVOID.....:

- () WATER
- () ACIDS
- (X) BASES
- () CORROSIVES
- (X) OXIDIZERS
- (X) OTHER :

ALKALI METALS, ALUMINUM AND MAGNESIUM POWDER, SODIUM, POTASSIUM, AND LITHIUM

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

ORL-HMN LDLO: 357 MG/KG ORL-RAT LD50: 2136 MG/KG
IHL-HMN TCLO: 500 PPM/8H IHL-MUS LC50: 14400 PPM/7H

TOXICOLOGICAL FINDINGS:

TESTS ON LABORATORY ANIMALS INDICATE MATERIAL MAY CAUSE TUMORS AND MAY PRODUCE ADVERSE MUTAGENIC AND REPRODUCTIVE EFFECTS CITED IN REGISTRY OF TOXIC EFFECTS OF SUBSTANCES (RTECS)

12. DISPOSAL CONSIDERATIONS

EPA WASTE NUMBERS: U080

TREATMENT:

SPECIFIED TECHNOLOGY - INCINERATION TO A LEVEL BELOW TCA (TOTAL CONSTITUENT ANALYSES) LEVELS. CONTACT YOUR LOCAL PERMITTED WASTE DISPOSAL COMPANY (TSD) FOR PERMISSIBLE TREATMENT SITE. ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

13. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME....:

DICHLOROMETHANE

DOT ID NUMBER.....: UN1593

14. REGULATORY INFORMATION

TSCA INVENTORY.....:

THIS PRODUCT IS A "MIXTURE". THE CAS NUMBERS OF ALL COMPONENTS ARE LISTED ON THE TSCA INVENTORY.

| COMPONENT | SARA EHS (302) | SARA EHS TPQ (LBS) | CERCLA RQ (LBS) |
|-----------------|----------------------|--------------------------|-----------------------|
| DICHLOROMETHANE | | | 1000 |

| COMPONENT | OSHA FLOOR LIST | SARA 313 | DEMINIMIS FOR SARA 313 (%) |
|-----------------|--------------------|-------------|----------------------------------|
| DICHLOROMETHANE | Y | Y | 0.1 |

15. OTHER INFORMATION

COMMENTS:

CATALOG NUMBER DX0832 DOES NOT CONTAIN A STABILIZER AND WOULD NOT BE CONSIDERED A MIXTURE UNDER THE TSCA INVENTORY.

NFPA HAZARD RATINGS:

HEALTH : 2
 FLAMMABILITY : 1
 REACTIVITY : 0
 SPECIAL HAZARDS:

REVISION HISTORY:

08/01/81 09/01/83 09/26/86 05/01/87 08/28/87 10/27/87 01/14/88
 10/06/89 05/11/90 03/01/91 07/16/91

- = REVISED SECTION
 N/A = NOT AVAILABLE
 N/E = NONE ESTABLISHED

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