

MATERIAL SAFETY DATA SHEET  
EM SCIENCE

| 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer.....: Preparation Date.: 10/6/00  
EM SCIENCE  
A Division of EM Industries Information Phone Number.: 856-423-  
6300  
P.O. Box 70 Hours: Mon. to Fri. 8:30-5  
480 Democrat Road Chemtrec Emergency Number: 800-424-  
9300  
Gibbstown, N.J. 08027 Hours: 24 hrs a day

Catalog Number(s):  
DX0831 DX0832 DX0835 DX0837 DX0838 DX0833 DX0835P DX0838P DX0830  
DX0835T DX0834 DX0839 DX0831P 1.59274 DX0831GF

Product Name:  
Dichloromethane  
Synonyms:  
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.

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

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:

LABORATORY TESTS INDICATE MATERIAL MAY BE CARCINOGENIC.

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

#### 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 breath vapor or mist.

Do not get in eyes, on skin, or on clothing.  
Retained residue may make empty containers hazardous; 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 must be worn to prevent skin contact (Viton or equivalent)

Safety glasses with side shields must be worn at all times.

##### Work/Hygenic Practices:

Wash thoroughly after handling.

Do not take internally.

Eye wash and safety equipment should be readily available.

---

#### EXPOSURE GUIDELINES

##### OSHA - PEL:

Component	TWA		STEL		CL		Skin
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
Dichloromethane	25		125				

##### ACGIH - TLV

Component	TWA		STEL		CL		Skin
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
Dichloromethane	50	174					

If there are no exposure limit numbers listed in the Exposure Guidelines chart, this indicates that no OSHA or ACGIH exposure limits have been established.

#### 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 produce adverse mutagenic and reproductive effects.  
Cited in Registry of Toxic Effects of Chemical 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 Statement:

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

If there is no information listed on the regulatory information chart, this indicates that the chemical is not covered by the specific regulation listed.

#### 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: 5/15/00 6/12/00 8/1/81 9/1/83 9/26/86 5/1/87  
8/28/87 10/27/87 1/14/88 10/6/89 5/11/90 3/1/91 7/16/91 11/20/91  
4/5/95  
10/29/96 2/3/97 1/13/98 1/22/98 6/7/99

| = Revised Section

N/A = Not Available

N/E = None Established

The statements contained herein are offered for informational purposes only and

are based upon technical data that EM SCIENCE believes to be accurate.

It is

intended for use only by persons having the necessary technical skill and at

their own descretion and risk. Since conditions and manner of use are outside

our control, we make NO WARRENTY, EXPRESS OR IMPLIED, OR MERCHANTABILITY,

FITNESS OR OTHERWISE.