

M A T E R I A L S A F E T Y D A T A S H E E T

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

PREPARATION DATE .....: OCT 6, '89  
DATE SENT TO CUSTOMER.....: DEC 20, '89  
INFORMATION PHONE NUMBER :  
(609) 354-9200  
CHEMTREC EMERGENCY NUMBER:  
1-800-424-9300

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- NFPA HAZARD RATINGS  
-  
- HEALTH .....: 2 FLAMMABILITY ....: 0  
- REACTIVITY : 0 SPECIAL HAZARDS.:

SECTION I - GENERAL INFORMATION

CATALOG NUMBER(S): CX1051 CX1053 CX1054 CX1055 CX1055P  
CX1057 CX1059 CX1060 CX1050  
CHEMICAL NAME.....: ~~CHLOROFORM~~ CHLOROFORM  
TRADE NAME.....: TRICHLOROMETHANE  
C.A.S. NUMBER.....: 67-66-3  
CHEMICAL FAMILY...: CHLORINATED HYDROCARBON  
FORMULA.....: CHCL<sub>3</sub>.  
MOLECULAR WEIGHT.: 119.38  
DOT SHIPPING NAME: CHLOROFORM  
DOT NUMBER.....: UN1888

SECTION II - HAZARDOUS INGREDIENTS

NONE OTHER THAN SPECIFIED PRODUCT

SECTION III- PHYSICAL DATA

BOILING POINT (C 760 MM HG).: 61.2C  
MELTING POINT (C).....: -63.5C  
SPECIFIC GRAVITY(H<sub>2</sub>O = 1).....: 1.49  
VAPOR PRESSURE..(MM HG).....: 167 20C  
PERCENT VOLATILE BY VOL (%): 100  
VAPOR DENSITY (AIR=1).....: 4.12  
EVAPORATION RATE (BUAC=1).....: 0.56  
SOLUBILITY IN WATER (%): SLIGHT  
APPEARANCE AND ODOR.....: CLEAR, COLORLESS LIQUID, SWEET,  
ETHEREAL ODOR

SECTION IV - FIRE & EXPLOSION HAZARD DATA

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FLASH POINT (F).....: NONE (TCC)  
FLAMMABLE LIMITS LEL %: N/A  
FLAMMABLE LIMITS UEL %: N/A  
EXTINGUISHING MEDIA.....: USE ANY SUITABLE FOR ADJACENT MATERIALS  
FIRE FIGHTING PROC.....: WEAR SELF-CONTAINED BREATHING APPARATUS  
FIRE & EXPL. HAZARDS....: PRODUCES HIGHLY TOXIC FUMES ON THERMAL  
DECOMPOSITION

SECTION V - HEALTH HAZARD DATA (ACUTE AND CHRONIC)

ACGIH TLV/OSHA PEL (TWA).....: (TLV) 10 PPM  
(OSHA) 2 PPM

TOXICITY DATA.....:

ORL-HMN LDLO: 140 MG/KG  
ORL-RAT LD50: 908 MG/KG  
IHL-RAT LC50: 47702 UG/CU.M./4H

SYMPTOMS OF EXPOSURE .....

-HARMFUL IF INHALED OR SWALLOWED.

REPEATED EXPOSURE TO LOW CONCENTRATIONS MAY DAMAGE LIVER, KIDNEYS AND  
HEART.

ALSO CAUSES HEADACHE, DROWSINESS, MENTAL CONFUSION, NAUSEA AND  
UNCONSCIOUSNESS.

HIGHLY SUSPECTED CARCINOGEN PER NTP AND IARC.

MEDICAL COND. AGGRAVATED BY EXP: PREGNANCY, ALCOHOLISM, LIVER, HEART AND  
KIDNEY CONDITIONS

ROUTES OF ENTRY.....: INHALATION, INGESTION OR SKIN CONTACT.

CARCINOGENICITY.....:

PROVEN ANIMAL CARCINOGENIC SUBSTANCE. POSSIBLE CANCER HAZARD.

EMERGENCY FIRST AID.....:

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.

SKIN: IMMEDIATELY FLUSH THOROUGHLY WITH LARGE AMOUNTS OF 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: IF CONSCIOUS, INDUCE VOMITING.

GET IMMEDIATE MEDICAL ATTENTION.

SECTION VI - REACTIVITY DATA

STABILITY.....: YES

CONDITIONS TO AVOID .....

CONTACT WITH OPEN FLAME, ELECTRIC ARCS, OTHER HOT SURFACES

MATERIALS TO AVOID.....: ( ) WATER ( ) ACIDS

(X) BASES ( ) CORROSIVES (X) OXIDIZERS

(X) OTHER: ALKALI METALS, ACETONE, DINITROGEN TETRAOXIDE, FLUORINE,  
TRIISOPROPYLPHOSPHINE, DISILANE, MAGNESIUM

HAZARDOUS POLYMERIZATION.: DOES NOT OCCUR  
HAZARDOUS DECOMPOSITION.: CO.X., PHOSGENE, OTHER CHLORINE COMPOUNDS

SECTION VII - ENVIRONMENTAL PROTECTION PROCEDURES

SPILL RESPONSE:

-VENTILATE AREA; DIKE SPILL

TAKE UP WITH ABSORBENT AND CONTAINERIZE FOR PROPER DISPOSAL

WASTE DISPOSAL: TO BE PERFORMED IN COMPLIANCE WITH ALL CURRENT LOCAL,  
STATE AND FEDERAL REGULATIONS.

SECTION VIII - SPECIAL PROTECTION INFORMATION

VENTILATION, RESPIRATORY PROTECTION, PROTECTIVE CLOTHING, EYE PROTECTION:

-MATERIAL MUST BE HANDLED OR TRANSFERRED IN AN APPROVED FUME HOOD  
OR WITH EQUIVALENT VENTILATION

PROTECTIVE GLOVES (VITON, PVA OR EQUIVALENT) SHOULD BE WORN  
TO PREVENT SKIN CONTACT

SAFETY GLASSES WITH SIDE SHIELDS SHOULD BE WORN AT ALL TIMES

NIOSH/MSHA-APPROVED RESPIRATOR SHOULD BE WORN IN THE ABSENCE OF  
ADEQUATE VENTILATION.

SECTION IX - SPECIAL PRECAUTIONS

HANDLING & STORAGE .....

-KEEP CONTAINER TIGHTLY CLOSED

DO NOT BREATHE VAPOR

DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING

STORE IN A COOL, WELL-VENTILATED AREA, OUT OF DIRECT SUNLIGHT

WORK/HYGIENIC PRACTICES: WASH THOROUGHLY AFTER HANDLING. DO NOT TAKE  
INTERNALLY. EYE WASH AND SAFETY EQUIPMENT SHOULD BE READILY AVAILABLE.

SECTION X - OTHER INFORMATION

COMMENTS.....:

TESTS ON LABORATORY ANIMALS INDICATE MATERIAL MAY CAUSE TUMORS  
AND MAY PRODUCE ADVERSE MUTAGENIC AND REPRODUCTIVE EFFECTS

REVISION HISTORY.....: 08/01/81, 9/83, 12/85, 6/4/86, 9/20/86,  
2/23/87, 10/27/87

N/A = NOT AVAILABLE: