



American International Chemical, Inc.

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MATERIAL SAFETY DATA SHEET

DICHLOROFLUOROETHANE 141B

SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

American International Chemical, Inc. 135 Newbury Street Framingham, MA 01701	Emergency Number: Chemtrec Information Number:	800-424-9300 703-527-3887 800-238-0001
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Revision Date: August 2007

Synonyms: 1,1, Dichloro- 1-Fluoroethane, HCFC-141b

CAS #: 1717-00-6

DOT Hazard Class: Not Regulated

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Dichlorofluoroethane 100%

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Colorless, volatile liquid with ethereal and faint sweetish odor. Non-flammable material. Overexposure may cause dizziness and loss of concentration. At higher levels, CNS depression and cardiac arrhythmia may result from exposure. Vapors displace air and can cause asphyxiation in confined spaces. At higher temperatures, (>250°C), decomposition products may include Hydrochloric Acid (HCl), Hydrofluoric Acid (HF), and carbonyl halides such as phosgene.

POTENTIAL HEALTH EFFECTS:

Skin: Prolonged and/or repeated contact with this solvent can cause irritation of the skin (defatting of skin).

Eyes: Contact with liquid or mist can cause irritation.

Inhalation: Overexposure to vapor may cause dizziness, loss of concentration and irritation. With high exposure levels, effects can include central nervous system (CNS) depression (intoxication) and cardiac arrhythmia. Product vapors displace air and can cause suffocation especially in confined space.

Ingestion: Discomfort due to volatility would be expected. Some of the inhalation effects could be expected.

CARCINOGENICITY: Not listed under OSHA, IARC, or NTP.

SECTION 4 - FIRST AID MEASURES

- Skin:** Promptly flush skin with water until all chemical is removed. Remove any clothing contaminated with the liquid and wash before reuse.
- Eye:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Get medical attention.
- Inhalation:** Remove patient to fresh air. Give artificial resuscitation if breathing has stopped. Give oxygen as necessary if a qualified operator is available. DO NOT give stimulants or adrenaline (epinephrine). Get medical attention immediately.
- Ingestion:** Ingestion is an unlikely route of exposure and is not expected to be hazardous. Do not induce vomiting unless instructed to do so by a physician.

ADVICE TO PHYSICIAN: Because of possible disturbances of cardiac rhythm, catecholamine drugs such as epinephrine, should be used with special caution only in situations of emergency life support. Treatment of overexposure should be directed at the control of symptoms and the clinical conditions.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: None detected

Flammable Limits: Upper 17.7 Lower 7.6

Extinguishing Media: Use media that is appropriate to treat surrounding fire.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus due to the toxicity of decomposition products.

Unusual Fire Explosion Hazard:

Product will decompose at temperatures above 250°C. Decomposition products include hydrochloric acid, hydrofluoric acid, and carbonyl halides such as phosgene. Contact with certain finely divided metals may cause an exothermic reaction and/or explosive combinations. Solvent vapors when present within the flammable range (listed above), especially in a confined or poorly ventilated space such as the air-vapor interface of a vapor degreaser can be ignited with a flame or high intensity source of heat.

Auto Ignition Temperature: 550°C (1022°F)

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Isolate hazard area and deny entry to unnecessary or unprotected personnel.

Contain spilled liquid with sand or earth. For small spills, place in a disposal container. For large spills, pump into appropriate containers. Avoid runoff into storm sewers and ditches which lead to waterways.

SECTION 7 - HANDLING AND STORAGE

Dichlorofluoroethane boils at 89.6°F, hence contents may be under pressure. Be sure drum is stored below 89.6°F and away from heat and sunlight. Use caution when opening drum. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Use good personal hygiene and housekeeping. Store in cool dry area away from heat, sunlight and other incompatible materials.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators in situations where air may be replaced by vapors.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate vapors from the work area.

SKIN AND EYE PROTECTION: Use Mylar, PVA or neoprene gloves, chemical goggles and clothing sufficient to protect skin from liquid.

WORK, HYGIENIC PRACTICES:

As required to protect skin and eyes from liquid. Safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE GUIDELINES: None established under ACGIH or OSHA.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 89.6°F (32°C)

Vapor Pressure (MM Hg): 10 PSIA @ 68°F (20°C)

Vapor Density (AIR=1): 4.1

Specific Gravity (H2O=1): 1.24

Percent Volatile by Volume (%): 100

Melting Point: Not applicable

Evaporation Rate (Butyl Acetate=1): >1

Solubility in Water: Slight

pH: Neutral

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal temperature of pressure.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Halogens, halogen acids and possibly carbonyl halides, such as phosgene. These are toxic and corrosive. Avoid sources of ignition such as sparks, hot spots, welding flames, and cigarettes. Ignition/flash may result if concentration of products is in the flammable range (**see section 5**).

KEEP AWAY FROM: Freshly abraded aluminum surfaces. chemically active metals, such as potassium, calcium, powdered aluminum, magnesium and zinc. Some desiccants may react with Dichlorofluoroethanes.

SECTION 11 - TOXICOLOGICAL INFORMATION

Immediate (Acute) Effects:

Acute Inhalation 4-HR LC₅₀.....62,000 ppm
Cardiac Sensitization Threshold.....10,000 ppm
Teratology, Rat Maternal & Fetal Toxicity --20,000 ppm
NOEL.....8,000 ppm
Teratology, Rabbit Slight body weight loss....4,200 ppm
NOEL.....1,400 ppm
Reproduction (2-Generation rat) Reduced Fertility....20,000 ppm
Reduced Body Weight.....20,000 ppm
Subchronic Inhalation Increase Cholesterol, Decrease Body Weight.....20,000 ppm
NOEL.....8,000 ppm

SECTION 12 - ECOLOGICAL INFORMATION

Desadability/Aquatic Toxicity:

Not considered biodegradable; 100% volatile

Aquatic Toxicity:

Daphina/Fish - Moderately Toxic - 31.2 - 126 mg/L

Alga - Not toxic up to 44 mg/L

Octanol Water Partition Coefficient:

Log Pow - 2.3

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: Not Listed

SECTION 14 - TRANSPORTATION INFORMATION

DOT HAZARD CLASS: Not Regulated

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE REQUIREMENTS: (RQ) None

SARA TITLE III INFORMATION:

Section 302 Extremely hazardous Substance: *(Listed or Unlisted)*

Section 313 Toxic Chemicals: Unlisted

Section 311/312 Hazard Category: Acute health hazard.

SECTION 16 - OTHER INFORMATION

HMIS CLASSIFICATION: 1-0-1

Reason for issue: Changed Date

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