

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFICATION

PRODUCT NAME: HCFC-141b
CHEMICAL NAME: 1,1-dichloro-1-fluoroethane
DESCRIPTION: Blowing agent used in the manufacture of rigid urethane products (for industrial use only)
OSHA HAZARD CLASSIFICATION: This product is not considered to be Hazardous under 29 CFR 1910.1200

PRODUCT INFORMATION

HAZARDOUS PER 29 CFR 1910.1200: No
CAS NUMBER: 1717-00-6
CHEMICAL FAMILY: Hydro Chloro Fluoro Carbon

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, colorless liquid with slight ether odor
SOLUBILITY IN WATER: Slightly
SPECIFIC GRAVITY @ 25O C: 1.227
MELTING POINT: - 103.5O C
BOILING POINT: 32O C
EVAPORATION RATE (ETHER=1): 1.2
VAPOR PRESSURE @ 25O C, MPa: 0.079
VAPOR DENSITY (AIR=1): 4.1
PERCENT VOLATILE BY VOLUME: 100%

STORAGE, SPILL AND DISPOSAL INFORMATION

STORAGE: Store in cool, dry area in closed containers. Keep away from source of heat, sparks and open flame.

STEPS TO BE TAKEN IN CASE OF SPILLAGE OR LEAKAGE: Evacuate area and absorb spilled liquid with commercial, non-flammable absorbent, i.e. sand, vermiculite. Remove unprotected personnel. Protected personnel should remove ignition sources and shut off fire sources. Provide ventilation, shove (spark proof) absorbed materials into drums and closed. Do not flush to sewer.

WASTE DISPOSAL METHOD: Comply with local regulations. Consult appropriate regulatory agency prior to disposal or discharge of waste materials.

PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS

PERSONAL PROTECTION FOR ROUTINE USE OF PRODUCT:
RESPIRATORY PROTECTION: Not normally required

VENTILATION: Local exhaust ventilation is recommended if vapors, mists or aerosols are generated. Otherwise, use general exhaust ventilation.

SKIN AND EYE PROTECTION EQUIPMENT: Use chemical goggles and impermeable gloves.

EQUIPMENT SPECIFICATIONS (WHEN APPLICABLE):

RESPIRATOR TYPE: Not normally required

PROTECTIVE CLOTHING TYPE (This includes: boots, apron, protective suit): Impervious

OTHER: It is generally recognized that contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury

FIRE AND EXPLOSION HAZARD INFORMATION

FLAMMABLE: This chemical is non-flammable liquid but in some close condition e.g. vapor concentration from 5.6% to 17%, the hot source of high energy, the mixture of vapor and air will flame on liquid surface.

FLASH POINT: None

FLAMMABLE LIMITS (VOL, %): 5.6~17.0%

TEST METHOD: None

AUTOIGNITION TEMPERATURE: 532 O C

LOWER EXPLOSION LIMIT: 5.6%

UPPER EXPLOSION LIMIT: 17.0%

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical or water spray

FIRE FIGHTING TECHNIQUES: Keep containers cool with water spray. Wear self-contained NIOSH approved breathing apparatus, also proper eye and skin protection.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Container generate pressure when heated causing violent bursting and dangerous propelling of the container. This product forms toxic decomposition products above 2500 C.

REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY: Strong acids and alkalis, reactive metals e.g. powdered aluminum, sodium potassium, calcium, magnesium, zinc, molten aluminum, barium and lithium shavings. Strong oxidizing agents.

HAZARDOUS DECOMPOSITION: Hydrochloric and hydrofluoric acids, and carbonyl halides.

HAZARDOUS DECOMPOSITION: Will not occur

CON=DITIONS TO AVOID: Heat will decompose above 2500 C

SPECIAL PROTECTION INFORMATION

ENGINEERING CONTROLS: Local exhaust ventilation is strongly recommended. Avoid vapor accumulation in confined space.

RESPIRATORY: Non required in ventilated work areas

VENTILATION: Adequate

PROTECTIVE GLOVES: For long repeated contact, Neoprene preferred.

PERSONAL PROTECTION

EQUIPMENT:

Avoid all personal contact. Impervious gloves and goggles should be worn when handling. If ventilation is inadequate, a NIOSH-certified respirator protection for vapor should be worn as appropriate.

OTHER PROTECTIVE EQUIPMENT:

None

THE INFORMATION IN THIS MATERIAL SAFETY DATA SHEET SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. WE BELIEVE THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION, BUT MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MATERIAL SAFETY DATA SHEET IS MORE THAN THEIRR YEARS OLD, YOU SHOULD CONTACT US AT THE PHONE NUMBER LISTED ABOVE TO MAKE CERTAIN THAT SHEET IS CURRENT.