

MATERIAL SAFETY DATA SHEET

DUST-OFF® XL

HMIS: 1-0-1-1

SECTION I - CHEMICAL INFORMATION

Trade Name: "Dymel" 134a

Chemical Name: 1,1,1,2-Tetrafluoroethane

Manufacturer: DuPont

Address & Phone #: 1007 Market Street, Wilmington, DE 19898;  
1-800-441-7515

Emergency Phone #: Chemtrec 1-800-424-9300

Mfg. Model No.: DPNXL

FSPID: 0095

SECTION II - HAZARDOUS INGREDIENTS

Ingredients	CAS #	%	TLV	PEL	UNITS
1,1,1,2-Tetrafluoroethane	811-97-2	100%			

SECTION III - FIRE AND EXPLOSION HAZARD DATA

Flash Point - Will  
not burn

Flammable Limits

LEL - NA

UEL - NA

HFC-134a is not flammable at ambient temperatures and atmospheric pressure. However, HFC-134a has been shown in tests to be combustible

at pressure as low as 5.5 psig at 177 deg C (351 deg F) when mixed with air at concentrations of generally more than 60 volume % air. At lower temperatures, higher pressures are required for combustibility. Experimental data have also been reported which indicate combustibility of HFC-134a in the presence of certain concentrations of chlorine.

Fire and Explosion Hazards - Cylinders may rupture under fire conditions. Decomposition may occur.

Extinguishing Media - As appropriate for combustibles in area.

Special Fire Fighting Procedures - Cool cylinders with water spray. Self-contained breathing apparatus (SCBA) may be required if cylinders rupture or release under fire conditions.

#### SECTION IV - ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel) - NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Accidental Release Measures: Ventilate area, especially low or enclosed places where heavy vapors might collect. Remove open flames. Use self-contained breathing apparatus (SCBA) if large spill or leak occurs.

#### SECTION V - HAZARDS IDENTIFICATION

Potential Health Effects - Inhalation of high concentrations of vapor is harmful and may cause heart irregularities, unconsciousness or death. Intentional misuse or deliberate inhalation may cause death without warning. Vapor reduces oxygen available for breathing and is heavier than air. Liquid contact can cause frostbite.

Human Health Effects - Overexposure by inhalation to very high concentrations may cause temporary alteration of the heart's electrical activity with irregular pulse, palpitations, or inadequate circulation. Skin contact may cause frostbite.

Individuals with preexisting diseases of the central nervous or cardiovascular system may have increased susceptibility to the toxicity of excessive exposures.

Carcinogenicity Information - None of the components present in this material at concentrations equal to or greater than 0.1% are listed by

IARC, NTP, OSHA or ACGIH as a carcinogen.

#### SECTION VI - FIRST AID

Inhalation - If high concentrations are inhaled, immediately remove to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Skin Contact - In cases of contact, immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician. Treat for frostbite if necessary by gently warming affected area. Wash contaminated clothing before reuse.

Eye Contact - In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Ingestion - Ingestion is not considered a potential route of exposure.

Notes to Physicians - 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.

#### SECTION VII - STORAGE

Storage - Clean, dry area. Do not heat above 52 deg C (125 deg F).

#### SECTION VIII - PHYSICAL DATA

Boiling Point -26.5 C (-15.7F) @ 736 mm Hg

Vapor Pressure 96 psia at 25 deg C (77 deg F)

Vapor Density 3.60 (Air = 1.0) at 25 deg C (77 deg F)

% Volatiles 100 WT %

Solubility in Water 0.15 WT% @ 25 C (77 F) and 14.7 psia

Odor Slight ethereal

Form Liquefied gas

Color Colorless

Density 1.21 g/cc at 25 deg C (77 deg F) - Liquid

#### SECTION IX - HAZARDOUS REACTIVITY

Chemical Stability - Material in stable. However, avoid open flames and high temperatures.

Incompatibility with Other Materials - Incompatible with alkali or alkaline earth metal - powdered Al, Zn, Be, etc.

Decomposition - Decomposition products are hazardous. This material can be decomposed by high temperatures (open flames, glowing metal surfaces, etc.) forming hydrofluoric acid and possibly carbonyl fluoride.

Polymerization - Polymerization will not occur.

#### SECTION X - TRANSPORTATION INFORMATION

Shipping Information -

Shipping Containers

DOT

Proper Shipping Name Consumer Commodity ORM-D

APPROVAL Manufacturing Support  
4-21-97

Name Title Revision Date

Please contact Falcon for product status. Some products may be in transition.