



## MATERIAL SAFETY DATA SHEET

### UNIVERSAL DUSTER - 3.5 OZ.

HMIS: 1-4-1

#### SECTION I - CHEMICAL INFORMATION

Trade Name: "Dymel" 152a  
Chemical Name: Difluoroethane, R152a  
Chemical Manufacturer: DuPont  
Address & Phone #: 1007 Market Street, Wilmington, DE 19898, Ph. 1-800-441-9442  
Product Manufacturer: Falcon Safety Products, Inc.  
Address & Phone #: 25 Chubb Way, Branchburg, NJ 08876, Ph. 908-707-4900  
**Emergency Phone #: Chemtrec 1-800-424-9300**  
Mfg. Model No.: U51502  
FSPID: 0151

#### SECTION II - HAZARDOUS INGREDIENTS

Ingredients	CAS #	%	TLV	PEL	UNITS
1,1-Difluoroethane	75-37-6	100			

#### SECTION III - PHYSICAL DATA

**Boiling Point (°F)** -25 C (-13F) **Specific Gravity (H<sub>2</sub>O=1)**  
**Vapor Pressure (MM Hg)** 87 psia at 25 deg C (77 deg F) **Percent Volatile by Vol.** 100 WT %  
**Vapor Density (Air=1)** 2.4 at 25 deg C (77 deg F) **Density** 0.90 g/cc at 25 deg C (77 deg F) - Liquid  
**Solubility in Water** 0.28 WT% at 25 deg C (77 deg F) **Evap Rate (Ether = 1)**  
**Appearance and Odor** Slight ethereal, Clear, colorless **Form** Gas

#### SECTION IV - HAZARDOUS REACTIVITY

**Instability** - Stable, however, avoid open flames and high temperatures.

**Incompatibility** - Incompatible with alkaline or alkaline earth metals.

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

**Polymerization** - Polymerization will not occur.

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## SECTION V - FIRE AND EXPLOSION HAZARD DATA

**Flash Point** <-50 C (<-58 F)      **Flammable Limits**      **LEL** - 3.9      **UEL** - 16.9

**Fire and Explosion Hazards** - Flammable. Cylinders are equipped with temperature and pressure relief devices but still may rupture under fire conditions. Use water spray to cool cylinders and tanks.

**Extinguishing Media** - Water spray, Water fog, Dry chemical.

**Special Fire Fighting Procedures** - Keep container cool with water spray. If gas exiting container ignites, stop flow of gas. Do not put out the fire unless leak can be stopped immediately. Self-contained breathing apparatus (SCBA) is required if containers rupture and contents are released under fire conditions.

**National Fire Protection Association (NFPA 30B)** - Level 1 Aerosols (lowest flammability rating)

**Consumer Products Safety Commission (CPSC 1500.3(c)(6).16CFR)** - Not flammable

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## SECTION VI - HEALTH HAZARD INFORMATION

### 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:

Contact with the liquid may cause frostbite. Overexposure by inhalation may include nonspecific discomfort, such as nausea, headache, or weakness; or temporary nervous system depression with anesthetic effects such as dizziness, headache, confusion, incoordination and loss of consciousness. Higher exposures (>20%) may cause temporary lung irritation effects with cough, discomfort, difficulty breathing, or shortness of breath; or temporary alteration of the heart's electrical activity with irregular pulse, palpitations, or inadequate circulation, abnormal kidney function as detected by laboratory tests. Gross overexposure may be fatal.

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

### First Aid

**Eyes:** Immediately flush eyes with large amounts of water for at least 15 minutes while holding the eyelids open. Get prompt medical attention.

**Skin:** Immediately remove contaminated clothing; wash skin with large amounts of water for at least 15 minutes. Treat for frostbite with gentle warming affected area if necessary. Get prompt medical attention.

**Inhalation:** Move victim to fresh air and restore breathing if necessary. Stay with victim until arrival of emergency medical personnel.

**Ingestion:** Contact local Poison Control Center or physician immediately!

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## SECTION VII - TOXICOLOGICAL INFORMATION

The compound is untested for skin or eye irritation, and for animal sensitization. Effects in animals from single, high exposure by inhalation include labored breathing, lung irritation, lethargy, incoordination, and loss of consciousness. Cardiac sensitization occurred in dogs exposed to a concentration of 150,000 ppm in air and given an intravenous epinephrine challenge. Effects of repeated exposure include increased urinary fluorides, reduced kidney weight, and reversible kidney changes. The effects of a single, high oral dose include weight loss and lethargy.

Tests in animals demonstrate no carcinogenic activity or developmental effects. Tests in animals for reproductive effects have not been performed. This compound does not produce genetic damage in bacterial cell cultures but has not been tested in animals.

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## SECTION VIII - TRANSPORTATION INFORMATION

### Shipping Information

#### DOT - Domestic Ground Transportation

Proper Shipping Name	DIFLUOROETHANE, R152a
Hazard Class	2.1
I.D. No. (UN/NA)	UN 1030

Shipping Paper Information:	None required
Mark Packages with:	DIFLUOROETHANE, R152a, UN 1030, DOT-E11516
Placarding:	None required

**Note:** Falcon Safety Products has been granted a DOT exemption that allows this product to be shipped similar to a Consumer Commodity (ORM-D). A copy of the DOT exemption can be obtained by calling Falcon Safety Products at 908-707-4900.

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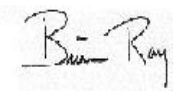
## SECTION IX - SPECIAL PROTECTION INFORMATION

**Waste Disposal Method** - Reclaim by distillation, incinerate, or remove to a permitted waste facility. Comply with Federal, State and Local regulations.

This material may be a RCRA Hazardous waste upon disposal due to the ignitability characteristic.

**PPE-PERSONAL PROTECTIVE EQUIPMENT REQUIRED: NONE**

APPROVAL



Brian S. Ray

Technical Manager

Title

6/4/2002

Revision Date