

# SAFETY DATA SHEET

## 1. PRODUCT

### 1.1 Product identifiers

Name: Dust-Pro pressurized duster

CAS-No.: 811-97-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

## 2. HAZARDS IDENTIFICATION


### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Gases under pressure (Compressed gas), H280

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning
Hazard statement(s)	H280 Contains gas under pressure; may explode if heated.
Precautionary statement(s)	P410 + P403 Protect from sunlight. Store in a well-ventilated place.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No data available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Formula:  $C_2H_2F_4$   
CAS-No.: 811-97-2  
EC-No.: 212-377-0

#### Hazardous components

Component	Classification	Concentration
1,1,1,2-Tetrafluoroethane	Press. Gas ; H280	90 -100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

<b>General advice</b>
Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.
<b>If inhaled</b>

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
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<b>In case of skin contact</b>
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Wash off with soap and plenty of water. Consult a physician.
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<b>In case of eye contact</b>
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Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
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<b>If swallowed</b>
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Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
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## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

## 4.2 Indication of any immediate medical attention and special treatment needed

no data available

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## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen fluoride

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers.

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Clean up promptly by sweeping or vacuum.

### 6.4 Reference to other sections

For disposal see section 13.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
1,1,1,2-Tetrafluoroethane	811-97-2	TWA	1,000 ppm	USA. Workplace Environmental Exposure Levels (WEEL)

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

Eye/face protection	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection	Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure	Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Form: Compressed gas Colour: colourless
Odour	no data available
Odour Threshold	no data available
pH	no data available
Melting point/freezing point	Melting point/range: -108 °C (-162 °F)
Initial boiling point and boiling range	-26.5 °C (-15.7 °F) at 1,013 hPa (760 mmHg)
Flash point	no data available
Evaporation rate	no data available
Flammability (solid, gas)	The product is not flammable.
Upper/lower flammability or explosive limits	no data available
Vapour pressure	5,740.00 hPa (4,305.35 mmHg) at 20 °C (68 °F) - OECD Test Guideline 104
Vapour density	no data available
Relative density	1.21 g/cm <sup>3</sup> at 25 °C (77 °F) -
Water solubility	1 g/l at 25 °C (77 °F)
Partition coefficient: n-octanol/water	log Pow: 1.06 at 25 °C (77 °F) - OECD Test Guideline 107
Auto-ignition temperature	> 743 °C (> 1,369 °F) at 1,013 hPa (760 mmHg)
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	no data available
Oxidizing properties	no data available

## 9.2 Other safety information

no data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Strong oxidizing agents Alkali metals

### 10.6 Hazardous decomposition products

In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

no data available  
LC50 Inhalation - rat - 4 h - 1,500,000 mg/m<sup>3</sup>  
Dermal: no data available  
no data available

#### Skin corrosion/irritation

Skin - rabbit  
Result: Mild skin irritation - 24 h

#### Serious eye damage/eye irritation

Eyes - rabbit  
Result: Mild eye irritation

#### Respiratory or skin sensitisation

- guinea pig  
Result: Does not cause skin sensitisation.

#### Germ cell mutagenicity

Ames test  
S. typhimurium  
Result: negative  
OECD Test Guideline 486  
rat - male  
Result: negative  
DNA repair DNA damage

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

no data available  
no data available

<b>Specific target organ toxicity -single exposure</b>
no data available
<b>Specific target organ toxicity -repeated exposure</b>
no data available
<b>Aspiration hazard</b>
no data available
<b>Additional Information</b>
RTECS: KI8842500 May be harmful., Prolonged or repeated exposure to skin causes defatting and dermatitis. Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish	semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - 450 mg/l - 96 h (Directive 67/548/EEC, Annex V, C.1.)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 980 mg/l - 48 h (Directive 67/548/EEC, Annex V, C.2.)
Toxicity to algae	No data available
Toxicity to bacteria	Growth inhibition EC50 - Pseudomonas putida - > 730 mg/l - 6 h

### 12.2 Persistence and degradability

Biodegradability	aerobic - Exposure time 28 d Result: 3 % - Not readily biodegradable. (OECD Test Guideline 301D)
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### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

no data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

<b>Product</b>
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
<b>Contaminated packaging</b>
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 3159 Class: 2.2

Proper shipping name: 1,1,1,2-Tetrafluoroethane

Reportable Quantity (RQ):

Marine pollutant: No

Poison Inhalation Hazard: No

### IMDG

UN number: 3159 Class: 2.2 EMS-No: F-C, S-V

Proper shipping name: 1,1,1,2-TETRAFLUOROETHANE

Marine pollutant: No

### IATA

UN number: 3159 Class: 2.2

Proper shipping name: 1,1,1,2-Tetrafluoroethane

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## 15. REGULATORY INFORMATION

### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Sudden Release of Pressure Hazard, Chronic Health Hazard

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

Component	CAS-No.	Revision Date
1,1,1,2-Tetrafluoroethane	811-97-2	

### New Jersey Right To Know Components

Component	CAS-No.	Revision Date
1,1,1,2-Tetrafluoroethane	811-97-2	

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## 16. OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3.

H280 Contains gas under pressure; may explode if heated.

Press. Gas Gases under pressure

### HMIS Rating

Health hazard: 0

Chronic Health Hazard: \*

Flammability: 1

Physical Hazard 1

### NFPA Rating

Health hazard: 0

Fire Hazard: 0

Reactivity Hazard: 0

