

Material Safety Data Sheet

Revision Date 31-Mar-2014

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product code 52455
Product name Duster
Recommended Use Electronic maintenance

Supplier Lawson Products, Inc.
1666 East Touhy Avenue
Des Plaines, IL 60018
(847)-827-9666

Emergency telephone number (888) 426-4851

2. HAZARDS IDENTIFICATION

Emergency Overview

Irritant. Harmful by inhalation. Contents under pressure.

Aggravated Medical Conditions

None Known

Principal Routes of Exposure

Eyes. Skin. Inhalation.

Potential health effects

Eyes Irritation. May cause severe irritation.

Skin Repeated or prolonged exposure may cause: Defatting. Skin Irritation. Dermatitis. Exposure to rapidly expanding gas or vaporizing liquid may cause frostbite ("cold" burn).

Inhalation Harmful by inhalation. At high concentration: VAPOR/GAS REDUCES OXYGEN AVAILABLE FOR BREATHING. May cause the following effects. Central nervous system effects. Dizziness. Drowsiness. Headaches. Nausea. Paralysis. Central nervous system depression. Possible cardiac arrhythmias. Possible unconsciousness. Death. Keep people away from such vapors without self-contained breathing apparatus. Misuse by deliberately concentrating vapors and inhaling contents can be harmful or fatal.

Ingestion No hazard under normal industrial and institutional use.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
1,1,1,2-Tetrafluoroethane	811-97-2	60-100

4. FIRST AID MEASURES

Eye contact Flush eyes immediately with large amounts of water. Seek medical attention if irritation persists.

Skin contact In case of cold burns (frostbite) caused by rapidly expanding gas or vaporizing liquids, get medical attention promptly.

Ingestion This material is not likely to be hazardous by ingestion. Do Not induce vomiting without medical advice.

Inhalation Remove to fresh air. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Seek medical attention immediately.

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

5. FIRE FIGHTING MEASURES

Flash point °C Not Applicable
Flash point °F Not Applicable
Method Not Applicable

Autoignition temperature °C > 750 °C
Autoignition temperature °F >1382

Flammability Limits (% in Air)

Upper none
Lower none

Suitable extinguishing media

Product is nonflammable. Use extinguishing media appropriate to surrounding fire.

Special protective equipment for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Specific hazards

May decompose on contact with flames or extremely hot metal surfaces to produce toxic and corrosive products.

Fire and Explosion Hazards

This product is not flammable at ambient temperatures and atmospheric pressure. However, this material may become combustible when mixed with air under pressure and exposed to strong ignition sources. Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

Hazardous decomposition products

See Section 10.

Sensitivity to shock

No information available.

Sensitivity to static discharge

No information available.

6. ACCIDENTAL RELEASE MEASURES**Environmental precautions**

Spills and releases may have to be reported to Federal and/or local authorities.

Methods for cleaning up

Restrict entry to spill area. Evacuate area of unprotected and unnecessary personnel.

7. HANDLING AND STORAGE**Handling**

Use in a well ventilated area. Follow standard safety precautions for handling and use of compressed gas cylinders.

Storage

Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Store in temperatures below 120 degrees F (50 degrees C) . Keep away from direct sunlight. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
1,1,1,2-Tetrafluoroethane	-	-	-	-

Ventilation and Environmental Controls

Provide adequate ventilation to keep exposure limits below TLV. Local: required.

Hygiene measures

Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Respiratory protection

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Hand Protection

Leather gloves. The following gloves are recommended for prolonged or repeated contact: . Neoprene gloves. Butyl rubber gloves.

Eye protection

ANSI approved safety glasses or splash goggles with face shield are recommended.

Skin and body protection

Wear suitable protective clothing.

Other Protective Equipment

A safety shower and eye wash station should be available for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Gas
Color	Clear
Odor	Very faint Ether-like
Odor Threshold	No information available
pH	Neutral
Specific Gravity	1.220
Vapor pressure	85.8 PSI @ 70 F
Density	10.05 lb/gal, 1204 g/l
Vapor density	3.5 (air=1)
Evaporation Rate	> 1
Water solubility	Negligible
VOC Content	0%
Partition Coefficient (n-octanol/water)	No data available
Boiling point/range °C	-26.2
Boiling point/range °F	-15.1
Melting point/range °C	-101
Melting point/range °F	-149.8
Flash point °C	Not Applicable
Flash point °F	Not Applicable

10. STABILITY AND REACTIVITY**Stability**

Stable.

Conditions to avoid

Avoid heat. Avoid elevated temperatures which cause product to decompose .

Incompatibility

None known.

Hazardous Decomposition Products

When heated beyond normal or when burned, this product will liberate forms of: Hydrochloric acid. Hydrofluoric acid. carbonyl halides.

Polymerization

Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION**Component Information**

Chemical Name	LD50 (oral, rat)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat)
1,1,1,2-Tetrafluoroethane 811-97-2	-	-	1500 g/m ³

Synergistic Products

None known

Potential health effects**Sensitization**

None known

Chronic toxicity

None known

Product code **52455**Product name **Duster**

Mutagenic effects None known

Teratogenic effects None known

Reproductive toxicity None known

Target Organ Effects See Section 2

Carcinogenic effects See table below

Chemical Name	ACGIH OEL - Carcinogens	IARC	NTP - Known Carcinogens	NTP - Suspected Human Carcinogens	OSHA RTK Carcinogens
1,1,1,2-Tetrafluoroethane	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

Ecotoxicity effects This material is a gas at room temperature; therefore, it is unlikely to remain in water

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products

As supplied, this product is classified as non-hazardous waste according to RCRA regulations. Dispose in accordance with federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

DOT

Consumer commodity, ORM-D. DOT-SP 10232 Must have a copy of DOT-SP 10232 with each shipment. UN3159 1,1,1,2-Tetrafluoroethane, Class 2.2

TDG

UN3159 1,1,1,2-Tetrafluoroethane, Class 2.2 Consumer commodity, ORM-D.

15. REGULATORY INFORMATION

US EPA SARA 313 This product contains no listed chemicals subject to reporting

State Regulations

Chemical Name	New Jersey - RTK	Pennsylvania - RTK	California Prop. 65
1,1,1,2-Tetrafluoroethane	Not Listed	Not Listed	Not Listed

International Inventories

Chemical Name	EINECS	DSL	NDSL	TSCA
1,1,1,2-Tetrafluoroethane	X	X	-	X

CPR

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by the Controlled Product Regulations

16. OTHER INFORMATION

NFPA

NFPA

Health - 2
Flammability - 1
Reactivity - 0

HMS

Health - 1
Flammability - 1
Physical Hazard - 0

Prepared By

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The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.