

Material Safety Data Sheet

Revision Date 31-Mar-2014

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product code 1428556
Product name Electronic Duster
Recommended Use Electronic maintenance

Supplier Lawson Products, Inc.

8770 W.Bryn Mawr Ave.- Suite 900

Chicago, IL 60631 1-866-529-7664

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 damage. 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

CAS-No W	eight %
11-97-2	60-100
	07.10 110

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 No data available
Flash point °F Not Applicable
Method Not Applicable

Autoignition temperature °C >750 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

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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-	=	-	-	-
Tetrafluoroeth				
ane				

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 No data available

(n-octanol/water)

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 No data available Flash point °F Not Applicable

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Avoid heat. Avoid elevated temperatures which cause product to decompose

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Incompatability

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 (dermal ,rat/rab bit)	
1,1,1,2- Tetrafluoroethane 811-97-2	-	=	1500 g/m³

Synergistic Products None known

Potential health effects

Sensitization None known

Chronic toxicity None known

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 - Carcinoge ns	IARC	Carcinoge	NTP - Suspected Human Carcinoge ns	Carcinoge
1,1,1,2- Tetrafluoroeth ane		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

<u>US EPA SARA 313</u> 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	Χ	Χ	-	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

HMIS

HMIS

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.
