

Material Safety Data Sheet

1. Chemical Product and Company Information

Product Name: emzone Air Duster (Compressed Gas Duster)

Product Item Numbers: 47020, 47022, 47050, 47060, 47062, 47064

Product Manufacturer: Empack Spraytech Inc.
Address: 98 Walker Drive
 Brampton, Ontario, Canada L6T 4H6

Telephone: (905) 792 – 6571

Emergency Telephone: Empack: (905) 792-6571 (8:00 am – 4:00 pm ET)
 CANUTEC: (613) 996-6666 collect (24 Hours)

Product Use: Removing dust from home, office and car items

Prepared By: Empack Regulatory Department

Preparation Date: May 2007

Last Revision: October 4, 2011

2. Composition / Information on Ingredients

Hazardous Ingredients	CAS Number	Weight %	TLV (ppm)
1,1 Difluoroethane	75-37-6	100	Not Available

3. Hazards Identification

Emergency overview:
 High vapour concentrations may cause drowsiness. Gas reduces oxygen available for breathing. Flammable gas. Contents under pressure. Can decompose at high temperatures forming toxic gases.

Potential Health Effects:

Inhalation: This product, when present in high concentrations in air, acts primarily as a simple asphyxiant without other significant effects. See "Other Health Effects" Section.

Skin Contact: Rapid evaporation may cause frostbite. Evaporation of liquid from the skin can produce chilling sensation. Skin injury does not result. Systemic toxic concentrations are unlikely to be absorbed through the skin in humans.

Skin Absorption: Not likely to be absorbed through the skin.

Eye Contact: The liquid of this material can produce chilling sensation and discomfort. This product causes irritation, redness and pain.

Ingestion: Product is a gas. Ingestion is not a likely route of exposure.

Carcinogenicity of Material: Not classified as carcinogenic.

4. First Aid Measures

Inhalation: Move victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing AND no pulse. Obtain medical attention IMMEDIATELY.

Skin Contact: Treat frostbite by immediately immersing affected areas in warm water until the skin has warmed up and turned pink. Obtain medical attention IMMEDIATELY.

Eye Contact: Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY.

Ingestion: Do not attempt to give anything by mouth to an unconscious person. If victim is alert and not convulsing, rinse mouth out and give 1/2 to 1 glass of water to dilute material. DO NOT induce vomiting. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. Obtain medical attention IMMEDIATELY.

Note to Physicians: Treat symptomatically.

5. Fire Fighting Measures

Flammability Class (WHMIS): B-1: Flammable Gas.

Flash Point: -50 °C (-58 °F) - Tag Closed Cup

Autoignition Temperature: 454 °C (849 °F)

Flammability Limits in Air (%): LEL: 3.9, UEL:16.9.

Hazardous Combustion Products: Thermal decomposition products are toxic and may include carbonyl halides, Hydrofluoric Acid and oxides of carbon.

Sensitivity to Mechanical Impact: Not expected to be sensitive.

Sensitivity to Static Discharge: Expected to be sensitive when vapours are present between lower and upper limits.

6. Accidental Release Measure

Spill and Leak: Large spill or leak is unlikely in aerosol containers. If happens, ventilate enclosed spaces. Eliminate all sources of ignition. Enforce NO SMOKING rules in area of use. Notify applicable government authority if release is reportable or could adversely affect the environment.

7. Handling And Storage

Do not breathe vapour or mist. Contents are under pressure. Use with adequate ventilation. Keep away from heat, sparks, and open flames. Store in a cool, dry and well-ventilated place away from incompatibles. Do not store in direct sunlight.

8. Exposure Controls/Personal Protection

Engineering Controls: Local exhaust ventilation required to maintain the point of use below the Threshold Limit Value if unprotected personnel are involved. Ground all equipment and cylinders before use.

Respiratory Protection: Not required on a short-term basis or if exhaust ventilation is provided. Use approved NIOSH respirators for emergencies.

Eye Protection: Use chemical safety glasses.

Skin Protection: Use gloves & protective clothing against cold temperature made from viton, butyl rubber, PVC, neoprene or nitrile.

9. Physical And Chemical Properties

Physical State:	Liquefied Gas
Appearance:	Colourless
Odour:	Ether Odour
Odour Threshold:	Not Available
Boiling Point:	-25 °C (-13 °F)
% Weight Volatile:	100
Vapour Density (Air = 1):	2.4
Specific Gravity (Water = 1):	0.91
Vapour Pressure:	78 psi @ 20 °C (68 °F)
Evaporation Rate:	1 (n-Butyl Acetate = 1)
pH:	Not Applicable
Solubility in Water:	0.27 % weight @ 25 °C (77 °F)

10. Stability And Reactivity

Chemical Stability: Stable at normal temperature & pressures.

Incompatible Materials: Alkali and alkaline earth metals, powdered aluminium, zinc, beryllium and magnesium.

Hazardous Products of Decomposition: Halogens, halogen acids, possibly carbonyl halides.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

1,1-Difluoroethane LC50 (Inhal'n, Mouse, 4h) = 690,843 mg/M3

Carcinogenicity: Not classified as carcinogenic by ACGIH, IARC, OSHA or NTP.

Reproductivity: No adverse reproductive effects are anticipated.

Teratogenicity: No adverse teratogenic effects are anticipated.

Mutagenicity: No adverse mutagenic effects are anticipated.

Respiratory / Skin Sensitization Data: None known.

Synergistic Materials: None known.

12. Ecological Information

Ecotoxicity is not available. May be harmful to aquatic life.

13. Disposal Considerations

Dispose of in accordance with local, provincial and federal regulations.

14. Transport Information

Ground: Consumer Commodity, ORM-D.

Air: Cannot be shipped by air.

Sea: Limited quantity, 1, 1-Difluoroethane, UN# 1030, Class 2.1.

15. Regulatory Information**CANADA**

CEPA - NSNR: All constituents of this product are included on the DSL.

CEPA - NPRI: Not included.

WHMIS Classification: A: Compressed Gas, B-1: Flammable Gas.

USA

Environmental Protection Act: Constituents of this product are included on the TSCA inventory.

OSHA (29CFR 1910.1200) Classification: Compressed Gas, Flammable Gas.

HMIS: 1 Health, 4 Fire, 1 Reactivity.

16. Other Information**Abbreviations:**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration, USA
TSCA	Toxic Substances Control Act 1976, USA
PEL	Permissible Exposure Limit
TLV	Threshold Limit Value
WHMIS	Workplace Hazardous Materials Information System

Disclaimer:

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. **This MSDS is valid for three years.**

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