

**empack**Empack Spraytech Inc.  
98 Walker Drive  
Brampton, Ontario, L6T 4H6  
Canada  
905-792-6571**PRODUCT: Emzone Air Duster - 284g****CODE: 047020****Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Identity..... Emzone Air Duster - 284g  
 Product Item Numbers..... 047020  
 Manufactured by..... Empack Spraytech Inc.  
 98 Walker Drive  
 Brampton  
 Ontario  
 Canada  
 L6T 4H6  
 905-792-6571  
 24 hour emergency telephone number..... CANUTEC: (613)-996-6666 collect.  
 Recommended Use..... Odour neutralizer.  
 Consumer Commodity..... Yes.  
 Hazard Ratings:  
 HMIS..... Health: 1 Fire: 4 Reactivity: 0.  
 NFPA Rating..... Health: 1 Fire: 4 Reactivity: 0.

**Section 02: HAZARDS IDENTIFICATION**

Emergency Overview..... Caution. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Do not breathe fumes. Contact with rapidly expanding gases can cause frostbite .  
 KEEP OUT OF REACH OF CHILDREN .  
 Potential Health Effects:  
 Eye Contact..... May cause irritation, redness and pain.  
 Skin Contact..... Rapid evaporation may cause frostbite.  
 Ingestion..... Ingestion is not a likely route of exposure.  
 Inhalation..... Inhalation may cause respiratory tract irritation. Can cause Central Nervous System depression; symptoms include nausea, headache, dizziness, unconsciousness .

**Section 03: COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous Ingredients	CAS #	Wt. %
1,1-Difluoroethane	75-37-6	100

**Section 04: FIRST AID MEASURES**

Eye Contact..... Check for and remove contact lenses. Immediately flush eyes with water for a minimum of 15 minutes keeping eyelids open. Consult a doctor if any irritation occurs. Get medical attention if irritation persists.  
 Skin Contact..... If frostbite has NOT occurred, immediately and thoroughly wash contaminated skin with soap and water. If frostbite has occurred, seek medical attention immediately; do NOT rub the affected areas or flush them with water. In order to prevent further tissue damage, do NOT attempt to remove frozen clothing from frostbitten areas.  
 Ingestion..... If swallowed, call a Poison Control Center or doctor immediately. Do not induce vomiting.  
 Inhalation..... Move victim to fresh air. If breathing has stopped, give artificial respiration. If heartbeat absent, give external cardiac compression. Monitor breathing and pulse. If symptoms persist, call a physician.  
 Additional Information..... Note to the doctor; treat symptomatically.

**Section 05: FIRE FIGHTING MEASURES**

Flammability Class..... Not flammable gas. Only flammable when liquid.  
 Extinguishing Media..... Carbon dioxide, dry chemicals, foam or water fog.  
 Sensitivity to Mechanical Impact..... Not expected to be sensitive.  
 Sensitivity to Static Discharge..... Can be sensitive.

**Section 06: ACCIDENTAL RELEASE MEASURES**

Spills and Leaks..... Large spill or leak is unlikely in aerosol containers. If spill or leak occurs, ventilate enclosed spaces and disperse gas with floor-level forced-air ventilation. Exhaust vapours outdoors. Do not smoke or operate internal combustion engines. Notify applicable government authority if release is reportable or could adversely affect the environment.

PRODUCT: Emzone Air Duster - 284g

CODE: 047020

**Section 07: HANDLING AND STORAGE**

Handling..... Do not breathe vapour or mist. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Use with adequate ventilation.

**Section 08: EXPOSURE CONTROLS / PERSONAL PROTECTION**

Eye/Type..... Safety glasses with side-shields.  
 Skin/Type..... Normally, no hand protection is required; however, prolonged or repeated contact with skin use chemical resistant gloves conforming to appropriate regulations. Observe the instructions regarding permeability and breakthrough time that are provided by the supplier of the gloves.  
 Respiratory/Type..... Not normally required if good ventilation is maintained. NIOSH approved respirator recommended if vapours or mists are generated.  
 Engineering Controls..... Good general ventilation should be used. Ventilation rates should be matched to conditions. Use local exhaust ventilation to maintain airborne levels below the Threshold Limit Value.

## Exposure Limits

Ingredients	TWA	ACGIH TLV		PEL	OSHA PEL		REL	NIOSH
		STEL	STEL		STEL	STEL		
1,1-Difluoroethane	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available

**Section 09: PHYSICAL AND CHEMICAL PROPERTIES**

Physical State..... Aerosol.  
 Physical Appearance..... Colorless liquid.  
 Odour..... Ether odour.  
 Odour Threshold (ppm)..... Not determined.  
 pH..... Not applicable.  
 Internal can pressure (psig)..... 70 - 90.  
 Vapour Density (Air=1)..... > 1.  
 Evaporation Rate (n-Butyl Acetate = 1)..... Not applicable.  
 Initial Boiling Point/Boiling Range (° C)..... (-20.0°C) - (-30.0°C).  
 VOC Content..... > 95 wt%.  
 Specific Gravity (liquid)..... Not available.  
 Specific Gravity (Aerosol)..... 0.910-0.970.  
 Solubility in water..... slightly soluble.  
 Aerosol Flame Projection..... Not available.  
 Auto Ignition Temperature (Propellant), ° C.. 454°C (849°F).  
 Flashback..... No.  
 Flash Point (° C), Method..... <-50°C (<-58°F).  
 Lower Flammable Limit (% Vol)..... 3.9.  
 Upper Flammable Limit (% Vol)..... 16.9.

**Section 10: STABILITY AND REACTIVITY**

Stability..... Stable under the recommended storage and handling conditions.  
 Incompatibility..... Alkali and alkaline earth metals, powdered aluminium, zinc, beryllium and magnesium.  
 Conditions to Avoid..... Avoid sources of heat and flame, and electrostatic charge.  
 Hazardous Products of Decomposition..... Halogens, halogen acids (HF), Carbon monoxide, Carbon dioxide, and carbonyl halides.  
 Hazardous Polymerization..... Will not occur.

**Section 11: TOXICOLOGICAL INFORMATION**

Route of Exposure..... Skin contact, Eye contact, Inhalation.  
 Effects of Acute Exposure..... Contact with skin and eyes may cause mild to moderate irritation and frostbite. Symptoms may include redness, pain, numbness, prickling and itching. Inhalation of vapours causes irritation to the nose, throat and respiratory tract, with coughing, wheezing, dizziness, headache, drowsiness, nausea and vomiting. Inhalation of higher concentrations may result in central nervous system depression and unconsciousness. High vapour concentrations reduce oxygen available for breathing, resulting in asphyxiation.  
 Effects of Chronic Exposure..... No known adverse effects.  
 Carcinogenicity of Material..... Not classified as carcinogenic by ACGIH, IARC, OSHA or NTP.  
 Reproductive Effects..... No information is available, and no adverse effects are expected.  
 Teratogenicity..... No information is available, and no adverse effects are expected.  
 Mutagenicity..... No information is available, and no adverse effects are expected.

## Toxicological Data

Ingredients	LC50	LD50
1,1-Difluoroethane	690843 mg/m3 (mouse - 4h)	Not available

PRODUCT: Emzone Air Duster - 284g

CODE: 047020

**Section 12: ECOLOGICAL INFORMATION**

Environmental..... May be harmful to aquatic life. Avoid release to the environment. 1,1-Difluoroethane:  
Toxicity to fish: LC50 295.783 mg/L, 96 hrs; Toxicity to other aquatic invertebrates: EC 50  
146.69 mg/L, 48 hrs; Toxicity to algae: EC50 47.755 mg/L, 96 hrs.

**Section 13: DISPOSAL CONSIDERATIONS**

Appropriate Disposal Methods..... Dispose in accordance with local, provincial and federal regulations.

**Section 14: TRANSPORT INFORMATION**

TDG (Canada- Road)..... 1,1-Difluoroethane, Class 2.1, UN1030 .  
DOT (US-Road)..... 1,1-Difluoroethane, Class 2.1, UN1030 .  
IMDG (International- Marine)..... 1,1-Difluoroethane, Class 2.1, UN1030 .  
IATA (International- Air)..... 1,1-Difluoroethane, Class 2.1, UN1030 .

**Section 15: REGULATORY INFORMATION**

Canada..... WHMIS Classification. A: Compressed gas. B5: Flammable Aerosol. D2B: Material causing  
other toxic Materials.  
USA..... Environmental Protection Act: Constituents of this product are included on the TSCA  
inventory. OSHA (29CFR 1910.1200) Classification: Compressed Gas. HIMS  
Classifications: see section 01.

**Section 16: OTHER INFORMATION**

Disclaimer..... The information contained herein is based on data considered accurate. No warranty is  
expressed or implied regarding the accuracy of this data or the results obtained from the  
use thereof. Empack assumes no responsibility for personal injury or property damage to  
vendees or users or third parties, caused by the material. Such vendees or users assume  
all risks with the use of the material. This product has been classified in accordance with  
the hazard criteria of the CPR and the SDS contains all the information required by the  
CPR. THIS SDS IS VALID FOR THREE YEARS.

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; REL: Recommended Exposure Limit; TLV:  
Threshold Limit Value; VOC: Volatile Organic Content; WHMIS: Workplace Hazardous  
Materials Information System.

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