

empackEmpack Spraytech Inc.
98 Walker Drive
Brampton, Ontario, L6T 4H6
Canada
905-792-6571**PRODUCT: Emzone 134A Refrigerant Cylinders - 30lbs****CODE: 045929****Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Identity..... Emzone 134A Refrigerant Cylinders - 30lbs
 Product Item Numbers..... 045929
 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..... Environmental friendly Refrigerant.
 Consumer Commodity..... Yes.
 Hazard Ratings:
 HMIS..... Health: 2 Fire: 0 Reactivity: 0.
 NFPA Rating..... Health: 2 Fire: 0 Reactivity: 0.

Section 02: HAZARDS IDENTIFICATION

Emergency Overview..... Container is under pressure. Container may explode if heated. Do not puncture. Do not burn. Contact with rapidly expanding gases can cause frostbite . KEEP OUT OF REACH OF CHILDREN .
 Potential Health Effects:
 Skin Contact..... Contact with rapidly expanding gas may cause burns and frostbite. Skin may be flushed; as frostbite develops. Blisters may develop.
 Eye Contact..... Direct contact with rapidly expanding gas or frost particles may produce severe and possibly permanent eye damage.
 Ingestion..... Ingestion is not a likely route of exposure.
 Inhalation..... Acts as a simple asphyxiant.

Section 03: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS #	Wt. %
1,1,1,2 Tetrafluoroethane	811-97-2	60-100

Section 04: FIRST AID MEASURES

Eye Contact..... If eye tissue is frozen, seek medical attention immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation, pain, swelling, lacrimation, or photophobia persist, get medical attention as soon as possible .
 Skin Contact..... 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. If frostbite has NOT occurred, immediately and thoroughly wash contaminated skin with soap and water.
 Ingestion..... As this product is a gas, refer to the inhalation section.
 Inhalation..... If inhaled, remove to fresh air. If not breathing, give artificial respiration and obtain immediate medical assistance. If breathing is difficult, give oxygen and get medical attention.
 Additional Information..... Note to the doctor; treat symptomatically.

Section 05: FIRE FIGHTING MEASURES

Flammability Class..... Non-Flammable.
 Extinguishing Media..... Use media suitable to the surrounding fire such as foam, dry chemical or water fog.
 Sensitivity to Mechanical Impact..... Not expected to be sensitive.
 Sensitivity to Static Discharge..... Not expected to be sensitive.

Section 06: ACCIDENTAL RELEASE MEASURES

Spills and Leaks..... Remove flames and heating elements. Asphyxiant-lack of oxygen can kill. Immediately evacuate all personnel from danger area. Use self-contained breathing apparatus and protective clothing. Shut off leak if without risk. Ventilate area of leak or move cylinder to a well-ventilated area.

PRODUCT: Emzone 134A Refrigerant Cylinders - 30lbs

CODE: 045929

Section 07: HANDLING AND STORAGE

Handling..... Use with adequate ventilation. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling. Do not store in temperatures above 120°F (50°C).

Section 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye/Type..... Wear appropriate eye protection to prevent eye contact with the liquid that could result in burns or tissue damage from frostbite .

Skin/Type..... Compressed gases may create low temperatures when they expand rapidly. Leaks and uses that allow rapid expansion may cause a frostbite hazard. Wear appropriate personal protective clothing to prevent the skin from becoming frozen .

Respiratory/Type..... Use approved NIOSH respirators for emergencies.

Engineering Controls..... Local exhaust ventilation required to maintain the point of use below the Threshold Limit Value if unprotected personnel are involved.

Exposure Limits

Ingredients	TWA	ACGIH TLV		PEL	OSHA PEL		REL	NIOSH
			STEL			STEL		
1,1,1,2 Tetrafluoroethane	Not available	Not available	Not available	Not available	Not available	Not available	Not available	Not available

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

Physical State..... Gas.

Physical Appearance..... Colorless gas.

Odour..... Gasoline like or natural gas odor .

Odour Threshold (ppm)..... Not available.

pH..... Not applicable.

Vapour Pressure (psig)..... 80- 95 .

Vapour Density (Air=1)..... 3.5.

Evaporation Rate (n-Butyl Acetate = 1)..... Not available.

Boiling Point (° C)..... -26.4 °C (-14.8 °F).

VOC Content..... None .

Specific Gravity (Liquid)..... 0.980-1.020.

Specific Gravity (Aerosol)..... Not available.

Solubility in water..... Not soluble in water.

Aerosol Flame Projection..... Not applicable.

Auto Ignition Temperature (Propellant), ° C.. Not applicable.

Flashback..... No data .

Flash Point (° C), Method..... None.

Lower Flammable Limit (% Vol)..... Not applicable.

Upper Flammable Limit (% Vol)..... Not applicable.

Section 10: STABILITY AND REACTIVITY

Stability..... Stable at normal temperatures and pressures.

Incompatibility..... Do not mix with alkali or alkaline earth metals (Al, Zn, Be, Cu). Strong Oxidizers.

Conditions to Avoid..... Avoid sources of heat and flame, and electrostatic charge.

Hazardous Products of Decomposition..... Under normal conditions of storage and use, hazardous decomposition products should not be produced .

Hazardous Polymerization..... Under normal conditions of storage and use, hazardous polymerization will not occur .

Section 11: TOXICOLOGICAL INFORMATION

Route of Exposure..... Skin contact, Eye contact, Inhalation.

Effects of Acute Exposure..... May cause frostbite . Contact with skin and eyes may cause mild to moderate irritation and frostbite. Symptoms may include redness, pain, numbness, prickling and itching.

Effects of Chronic Exposure..... Contain material that may cause target organ damage, based on animal data .

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
1,1,1,2 Tetrafluoroethane	>500000 ppm (mouse - 4h)	Not available

PRODUCT: Emzone 134A Refrigerant Cylinders - 30lbs

CODE: 045929

Section 12: ECOLOGICAL INFORMATION

Environmental..... Complete information is not yet available. This product has not been tested. Based on information available on its ingredients, no adverse environmental impact is anticipated under intended use in accordance with instructions.

Section 13: DISPOSAL CONSIDERATIONS

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

Section 14: TRANSPORT INFORMATION

TDG (Canada- Road)..... 1,1,1,2-TETRAFLUOROETHANE, Class 2.2, UN3159.
 DOT (US-Road)..... 1,1,1,2-TETRAFLUOROETHANE, Class 2.2, UN3159.
 IMDG (International- Marine)..... 1,1,1,2-TETRAFLUOROETHANE (REFRIGERANT GAS R 134a), Class 2.2, UN3159.
 IATA (International- Air)..... 1,1,1,2-TETRAFLUOROETHANE, Class 2.2, UN3159.

Section 15: REGULATORY INFORMATION

Canada..... WHMIS Classification. A: Compressed gas.
 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; WHIMIS: Workplace Hazardous Materials Information System.

Prepared by Regulatory Affairs
 Preparation Date..... Oct24/13
 Last Revision Date Sep17/14