

**empack**Empack Spraytech Inc.  
98 Walker Drive  
Brampton, Ontario, L6T 4H6  
Canada  
905-792-6571**PRODUCT: Emzone Foaming Glass Cleaner G5 - 517g****CODE: 044005****Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Item Numbers..... 044005  
 Product Identity..... Emzone Foaming Glass Cleaner G5 - 517g  
 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..... Cleans windows, mirrors, windshields, tile, porcelain, stainless steel, chrome.  
 Consumer Commodity..... Yes.  
 Hazard Ratings:  
 HMIS..... Health: 1 Fire: 1 Reactivity: 0.  
 NFPA Rating..... Health: 1 Fire: 1 Reactivity: 0.

**Section 02: HAZARDS IDENTIFICATION**

Emergency Overview..... Caution. Poison. Contents under pressure. Container may explode if heated. May irritate eyes and skin. Do not breathe fumes. Do not puncture. Do not burn. Do not get in eyes, skin or clothing. KEEP OUT OF REACH OF CHILDREN .

Potential Health Effects:  
 Eye Contact..... May cause irritation, redness and pain.  
 Skin Contact ..... Can cause skin irritation. Prolonged or repeated contact may dry the skin.  
 Ingestion..... Can be harmful if ingested .  
 Inhalation..... Prolong Inhalation of content may cause irritation.

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

Hazardous Ingredients	CAS #	Wt. %
Isopropyl Alcohol	67-63-0	7-13
Isobutane	75-28-5	5-10
2-Butoxyethanol	111-76-2	3-7

**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.  
 Skin Contact..... If symptoms persist, seek medical attention. Wash thoroughly with soap and lukewarm water.  
 Ingestion..... If swallowed, get medical attention 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..... Non-flammable (but contains flammable gas).  
 Extinguishing Media..... Not flammable. Use regular extinguishing media whenever needed.  
 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..... Put on appropriate personal protective equipment (see Section 08). Eliminate all sources of ignition and ventilate area. Contain spillage, and then collect with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13).

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**Section 07: HANDLING AND STORAGE**

Handling..... Do not breathe vapour or mist. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not enter confined spaces unless adequately ventilated.

**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..... Typical use of this product under normal conditions does not require the use of respiratory protection. If airborne concentrations are above the applicable exposure limits (listed below), use NIOSH approved respiratory protection .  
 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		
Isopropyl Alcohol	400 ppm (983 mg/m <sup>3</sup> )	500 ppm (1230 mg/m <sup>3</sup> )		400 ppm (980 mg/m <sup>3</sup> )	500 ppm (1,225 mg/m <sup>3</sup> )			400 ppm (TWA)
Isobutane	800 ppm	1000 ppm		800ppm	Not available			800 ppm (TWA)
2-Butoxyethanol	20 ppm	Not available		50 ppm	Not available			Not available

**Section 09: PHYSICAL AND CHEMICAL PROPERTIES**

Physical State..... Aerosol.  
 Physical Appearance..... Cloudy liquid .  
 Odour..... Fragrance.  
 Odour Threshold (ppm)..... Not determined.  
 pH..... 6.0 - 8.0.  
 Internal can pressure (psig)..... 50-70.  
 Vapour Density (Air=1)..... > 1.  
 Evaporation Rate (n-Butyl Acetate = 1)..... No data.  
 Initial Boiling Point/Boiling Range (°C)..... Not available.  
 VOC Content..... 95-100 %wt.  
 Specific Gravity (Liquid)..... 0.980-1.020.  
 Specific Gravity (Aerosol)..... 0.910-0.970.  
 Solubility in water..... Soluble in water.  
 Aerosol Flame Projection..... Not available .  
 Auto Ignition Temperature (Propellant), °C... 460 °C/860 °F.  
 Flashback..... No data .  
 Flash Point (°C), Method..... Closed cup: -83.15 °C (-117.7 °F).  
 Lower Flammable Limit (% Vol)..... 1.8.  
 Upper Flammable Limit (% Vol)..... 8.5.

**Section 10: STABILITY AND REACTIVITY**

Stability..... Stable at normal temperatures and pressures.  
 Incompatibility..... Strong oxidizing agents.  
 Conditions to Avoid..... Avoid sources of heat and flame, and electrostatic charge.  
 Hazardous Products of Decomposition..... May form carbon dioxide and carbon monoxide, various hydrocarbons.  
 Hazardous Polymerization..... Will not occur.

**Section 11: TOXICOLOGICAL INFORMATION**

Route of Exposure..... Eye contact, Skin contact, Skin absorption, Inhalation, and Ingestion.  
 Effects of Acute Exposure..... May cause dermatitis, irritation to eyes, dizziness, and vomiting.  
 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. Reproductive Effects.  
 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
Isopropyl Alcohol	>20,000 ppm (4hrs-rat)	4,700 - 5,800 mg/kg (oral,rat)
Isobutane	658 mg/L (4hrs,rat)	Not available

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**Section 11: TOXICOLOGICAL INFORMATION**

Ingredients	LC50	LD50
2-Butoxyethanol	450 ppm (4hr, rat)	470 mg/kg (4hr, oral, rat)

**Section 12: ECOLOGICAL INFORMATION**

Environmental..... Isopropanol alcohol: Toxicity to fish: LC50 9,640 mg/L, 96 hrs; Toxicity to other aquatic invertebrates: 5,102 mg/L, 96 hrs; Toxicity to algae: EL50 >2,000 mg/L, 72 hrs. Avoid release to the environment.

Ecotoxicological Information

**Section 13: DISPOSAL CONSIDERATIONS**

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

**Section 14: TRANSPORT INFORMATION**

TDG (Canada- Road)..... AEROSOLS, Class 2.2, UN1950.  
 DOT (US-Road)..... AEROSOLS, Class 2.2, UN1950, LTD QTY, Consumer Commodity ORM-D.  
 IMDG (International- Marine)..... AEROSOLS, Class 2.2, UN1950.  
 IATA (International- Air)..... AEROSOLS, Class 2.2, UN1950, LTD QTY .

**Section 15: REGULATORY INFORMATION**

Canada..... WHMIS Classification. A: Compressed gas. D2B: Material causing other toxic Materials. CPR (Canadian Controlled Product Regulations): All ingredients are CEPA approved for import to Canada. This product has been classified in accordance with the hazard criteria of the CPR and this SDS contains all information required by CPR. IDL (Canadian Ingredient Disclosure List): Component(s) of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List (section 03).

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.

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