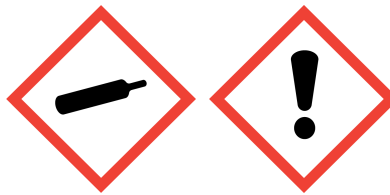


**empack**Empack Spraytech Inc.  
98 Walker Drive  
Brampton, Ontario, L6T 4H6  
Canada  
905-792-6571**PRODUCT: Emzone Glass Cleaner Ammonia Fortified - 517g****CODE: P6-044003****SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Item Numbers..... P6-044003  
 Product Identity..... Emzone Glass Cleaner Ammonia Fortified - 517g  
 Manufacturer..... Empack Spraytech Inc.  
 98 Walker Drive  
 Brampton  
 Ontario  
 Canada  
 L6T 4H6  
 905-792-6571  
 24 hour emergency telephone number..... CHEM TREC: 800-424-9300.  
 Recommended Use..... Cleaning Solution.  
 Chemical Family..... Mixture.

**SECTION 02: HAZARDS IDENTIFICATION**

Hazard Classification:  
 Physical Hazards..... Aerosols - Category 3. Gases Under Pressure - Liquefied Gas .  
 Health Hazards..... Eye Damage/Irritation - Category 2B. Skin Irritation - Category 3. Acute Toxicity Inhalation - Category 4.  
 Environmental Hazards..... Not Classified.  
 Label Elements:  
 Signal Word..... WARNING.  
 Hazard Statement..... Pressurized container: may burst if heated. Contains gas under pressure; may explode if heated. Causes eye irritation. Causes mild skin irritation. Harmful if inhaled.  
 Precautionary Statements:  
 Prevention..... Wash hand thoroughly after handling. Do not pierce or burn, even after use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.  
 Response..... If Skin Irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER if you feel unwell.  
 Storage..... Protect from sunlight. Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C /122°F.  
 Disposal..... Dispose of contents/ container in accordance with local/regional/national/international regulations.  
 Hazard(s) not otherwise classified (HNOC).. None Known.

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

HAZARDOUS INGREDIENTS	CAS #	WT. %
Isobutane	75-28-5	5-10
Isopropyl Alcohol	67-63-0	5-10
2-Butoxyethanol	111-76-2	1-5
Ammonia Solution	7664-41-7	0.1-1
Fragrance	Mix.	0.1-1

**SECTION 04: FIRST AID MEASURES**

Inhalation..... If inhaled, remove to fresh air. If not breathing, give artificial respiration and obtain immediate medical assistance.  
 Skin Contact..... Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Consult a poison control centre or physician immediately.

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**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.

Ingestion..... Ingestion is unlikely to occur. If swallowed do not induce vomiting because of risk of aspiration into the lungs. If aspiration is suspected obtain immediate medical attention.

Most important symptoms/effects, acute and delayed Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Direct contact with eyes may cause temporary irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause redness and pain.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. In case of shortness of breath give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

**SECTION 05: FIRE FIGHTING MEASURES**

Suitable Extinguishing Media..... Dry chemical powder. Carbon dioxide. Foam, water spray or fog.

Unsuitable Extinguishing Media..... Do not use water jet as an extinguisher, as this will spread the fire.

Specific Hazards Arising from the Chemical. In case of fire, the following can be released: Carbon Oxides (CO, CO2), Other unidentified Organic Compounds.

Special Protective Equipment and Precautions for Firefighters ..... Firefighters must use standard protective equipment including flame retardant coat, helmet with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

General Fire Hazards..... N/A.

**SECTION 06: ACCIDENTAL RELEASE MEASURES**

Personal Precautions, Protective Equipment and Emergency Procedures No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid walking through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 08).

Methods and Materials for Containment and Cleaning Up 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). Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Environmental Precautions..... Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

**SECTION 07: HANDLING AND STORAGE**

Precautions for Safe Handling..... Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Avoid breathing vapour of this product. Avoid contact with skin and eyes. Avoid prolonged exposure. Use in well-ventilated areas.

Conditions for Safe Storage including any Incompatibilities Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C (122°F). Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store away from incompatible materials (see Section 10).

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

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL	NIOSH
Isobutane	800 ppm	1000 ppm	800 ppm	Not available	800 ppm (TWA)	
Isopropyl Alcohol	400 ppm (983 mg/m3)	500 ppm (1230 mg/m3)	400 ppm (980 mg/m3)	500 ppm (1,225 mg/m3)	400 ppm (TWA)	
2-Butoxyethanol	20 ppm	Not available	50 ppm	Not available	Not available	
Ammonia Solution	25 ppm	35 ppm	50 ppm	Not available	25 ppm	
Fragrance	Not established	Not established	Not established	Not established	Not established	
Appropriate Engineering Controls.....	Local exhaust ventilation required to maintain the point of use below the Threshold Limit Value if unprotected personnel are involved.					
Individual Protection Measures:						
Eye/Face Protection.....	Chemical splash goggles are recommended.					
Skin Protection.....	Chemical resistant gloves are recommended. Avoid contact with the skin. Wear appropriate chemical resistant clothing.					

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

Respiratory Protection..... Use dust and mist respirator.  
 Thermal Hazards..... None Known.  
 General Hygiene Considerations..... When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment prior to use.

**SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES**

Form..... Aerosol.  
 Physical Appearance..... Clear liquid.  
 Odor..... Spearmint fragrance.  
 Odor Threshold (ppm)..... N/A.  
 Specific Gravity (Aerosol)..... 0.951.  
 Specific Gravity (Liquid)..... 0.980.  
 Aerosol Vapour Pressure (psig, 21°C)..... 55-65.  
 Vapour Density (Air=1)..... >1.  
 pH..... 10.5-11.0.  
 Boiling Point liquid (°C)..... 100°C (212°F).  
 Melting/Freezing Point (°C)..... N/A.  
 Flashback..... N/A.  
 Flash Point, °C (Propellant), Method..... -83 °C (-117°F). Closed Cup.  
 Evaporation Rate (n-Butyl Acetate = 1)..... > 1 .  
 VOC Content..... < 25%.  
 Solubility in water..... Miscible in water.  
 Aerosol Flame Projection..... N/A.  
 Auto Ignition Temperature (°C)..... 460°C (860°F). (Propellant).  
 Lower Flammable Limit (% Vol)..... 1.8. (Propellant).  
 Upper Flammable Limit (% Vol)..... 8.4. (Propellant).  
 Coefficient of Water/Oil Distribution..... N/A.  
 Viscosity..... N/A.

**SECTION 10: STABILITY AND REACTIVITY**

Reactivity ..... Product not reactive under normal conditions of use.  
 Chemical Stability..... Material is stable under normal conditions.  
 Possibility of Hazardous Reactions..... Will not occur.  
 Conditions to Avoid..... Avoid sources of heat and flame, and electrostatic charge.  
 Incompatible Materials..... Keep away from heat. Strong oxidizing agents.  
 Hazardous Decomposition Products..... See Section 05.

**SECTION 11: TOXICOLOGICAL INFORMATION**

INGREDIENTS	LC50	LD50
Isobutane	658 mg/L (4hrs,Rat)	Not available
Isopropyl Alcohol	>20,000 ppm (4hrs-rat)	4,700 - 5,800 mg/kg (oral,rat)
2-Butoxyethanol	450 ppm (4hr,rat)	470 mg/kg (4hr,oral,rat)
Ammonia Solution	2,000 (rat- 4hrs)	Not applicable
Fragrance	No data	No data
Information on Likely Routes of Exposure:		
Routes of entry - Inhalation.....	Prolonged inhalation may be harmful.	
Routes of entry - Skin & Eye.....	Direct contact with eyes may cause temporary irritation.	
Routes of entry - Ingestion.....	Can cause irritation, nausea and vomiting.	
Routes of entry - Skin Absorption.....	2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.	
Symptoms Related to the Physical, Chemical and Toxicological Characteristics		
Acute Toxicity.....	Harmful or fatal if swallowed. Irritating to the eyes,nose and throat. Skin contact may cause irritation.	
Skin Corrosion/Irritation.....	Causes skin irritation.	
Serious Eye Damage/Eye Irritation.....	Causes eye irritation.	
Respiratory or Skin Sensitization.....	N/A.	
Germ Cell Mutagenicity.....	No data available to indicate product or any components present at greater than 0.1% are mutagenic.	
Carcinogenicity.....	2-Butoxyethanol (CAS#: 111-76-2): ACGIH-A3 Confirmed animal carcinogen with unknown relevance to humans; IARC-3 Not Classifiable as to carcinogens to humans.	
Reproductive Toxicity.....	No information is available.	

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**SECTION 11: TOXICOLOGICAL INFORMATION**

STOT - Single Exposure..... Not classified.  
 STOT - Repeated Exposure..... Not classified.  
 Aspiration Hazard..... Not classified.  
 Chronic Effects..... Prolonged inhalation may be harmful. May be harmful if absorbed through skin.

**SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicity..... May be dangerous for the environment. No data is available on the product itself. Should not be released into the environment. This product contains the following substance which may also be hazardous for the environment.: Isopropanol alcohol (CAS#: 67-63-0): 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. Ammonia Solution (CAS#: 7664-41-7): Toxicity to fish: LC50 0.16- 1.1mg/L, 96 hrs; Toxicity to other aquatic invertebrates: EC 50 25.4 mg/L, 48 hrs; Toxicity to algae: EC50 >2,700 mg/L, 432 hrs.

Persistence and degradability ..... The product itself has not been tested.  
 Bioaccumulation Potential..... The product itself has not been tested.  
 Mobility in Soil..... The product itself has not been tested.  
 Other Adverse Effects..... None Known.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Appropriate Disposal Methods..... This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Spilled material and water rinses are classified as chemical waste and must be disposed of in accordance with current local, provincial and federal regulations. Contents under pressure. Do not puncture, incinerate or expose to heat, even when empty.

**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 Regulations:..... WHMIS Classification. A: Compressed gas. D2B: Material causing other toxic Materials.  
 Canadian Environmental Protection Act ..... All ingredients listed appear on the Domestic Substances List (DSL).  
 (CEPA)  
 US Regulations  
 TSCA Inventory Status..... All components are listed on TSCA .  
 OSHA..... This product is considered hazardous under the Federal OSHA hazard communication standard.  
 California Proposition 65..... This product does not contain any chemical(s) known to the state of California to cause cancer or reproductivity toxicity.

**SECTION 16: OTHER INFORMATION**

Disclaimer..... The information contained herein is based on data considered accurate. No guarantee or warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. The SDS provider 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. .

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 STOT: Specific Target Organ Toxicity.

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