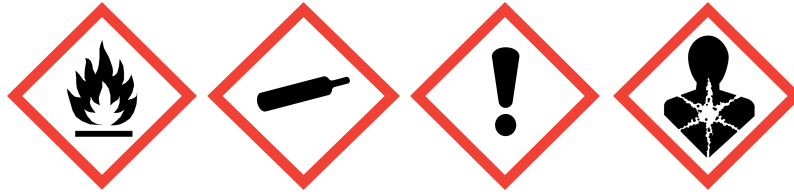


**empack**Empack Spraytech Inc.  
98 Walker Drive  
Brampton, Ontario, L6T 4H6  
Canada  
905-792-6571**PRODUCT: emzone Penetrating Foam - 445g****CODE: P6-045028****SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Item Numbers..... P6-045028  
 Product Identity..... emzone Penetrating Foam - 445g  
 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..... Non-drip Foam penetrates rust, loosens tight parts.  
 Chemical Family..... Mixture.

**SECTION 02: HAZARDS IDENTIFICATION**

Hazard Classification:  
 Physical Hazards..... Flammable Aerosols - Category 1. Gases Under Pressure - Liquefied Gas .  
 Health Hazards..... Acute Toxicity Oral - Category 5. Acute Toxicity Dermal - Category 5. Skin Irritation - Category 2. Eye Damage/Irritation - Category 2B. Specific Target Organ Toxicity, Single Exposure - Category 3. Aspiration Hazard - Category 1.  
 Environmental Hazards..... Acute Aquatic Hazard - Category 3.  
 Label Elements:  
 Signal Word..... DANGER.  
 Hazard Statement..... Extremely flammable aerosol. Pressurized container; may burst if heated. Contains gas under pressure; may explode if heated. May be harmful if swallowed. May be harmful in contact with skin . Causes skin irritation. Causes eye irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Harmful to aquatic life.  
 Precautionary Statements:  
 Prevention..... Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Wash hand thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment.  
 Response..... Call a POISON CENTER if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. 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. IF SWALLOWED: Immediately call a POISON CENTER. Do NOT induce vomiting.  
 Storage..... Protect from sunlight. Do not expose to temperatures exceeding 50°C /122°F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.  
 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. %
Kerosene	8008-20-6	10-30
Propane	74-98-6	10-30
Oleic acid	112-80-1	7-13
Methyl isobutyl carbinol	108-11-2	5-10
Isobutane	75-28-5	5-10

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

2-Butoxyethanol	111-76-2	3-7
Ammonium Hydroxide	1336-21-6	1-5

**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.
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.....	Extremely flammable aerosol.

**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
Kerosene	200mg/m3	Not available	Not available	Not available		Not available
Propane	2,500 ppm	Not available	1,000 ppm	Not available		1,000 ppm
Oleic acid	Not available	Not available	Not available	Not available		Not available

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

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL NIOSH
Methyl isobutyl carbinol	25 ppm	40 ppm	Not available	40 ppm	Not available
Isobutane	800 ppm	1000 ppm	800 ppm	Not available	800 ppm (TWA)
2-Butoxyethanol	20 ppm	Not available	50 ppm	Not available	Not available
Ammonium Hydroxide	25 ppm	35 ppm	Not available	Not available	25 ppm
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.				
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.....	Brown liquid .
Odor.....	Hydrocarbons.
Odor Threshold (ppm).....	N/A.
Specific Gravity (Liquid).....	0.870.
Specific Gravity (Aerosol).....	0.780.
Aerosol Vapour Pressure (psig, 21°C).....	70-100.
Vapour Density (Air=1).....	< 1.
pH.....	No data.
Boiling Point liquid (°C).....	190-250. (Kerosene).
Melting/Freezing Point (°C).....	N/A.
Flash Point (°C), Method.....	-83.15°C/ -117.7°F. Closed cup.
Flashback.....	N/A.
Evaporation Rate (n-Butyl Acetate = 1).....	< 1.
VOC Content.....	Not available.
Solubility in water.....	Slightly miscible in water.
Aerosol Flame Projection.....	N/A.
Auto Ignition Temperature (°C).....	460°C (860°F).
Lower Flammable Limit (% Vol).....	1.8. (Propellant).
Upper Flammable Limit (% Vol).....	9.5. (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
Kerosene	>5,000 ppm (inh, 4hr, rat)	>5000 mg/kg (oral, rat); >2000 mg/kg (dermal, rabbit)
Propane	>800,000 ppm (Rat,15min)	Not available
Oleic acid	Not available	74,000 mg/kg
Methyl isobutyl carbinol	> 3776 ppm (4 hrs)	2590 mg/kg (4hr,Inh, rat)
Isobutane	658 mg/L (4hrs,Rat)	Not available

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**SECTION 11: TOXICOLOGICAL INFORMATION**

INGREDIENTS	LC50	LD50
2-Butoxyethanol	74.9 mg/L (Inhalation,Rat,3hr)	1,300 mg/kg (Oral,Rat); 2,000 mg/kg (Dermal,Rat)
Ammonium Hydroxide	Not available	350 mg/kg
Information on Likely Routes of Exposure:		
Routes of entry - Inhalation.....	Yes.	
Routes of entry - Skin & Eye.....	Yes.	
Routes of entry - Ingestion.....	Yes.	
Routes of entry - Skin Absorption.....	Yes.	
Symptoms Related to the Physical, Chemical and Toxicological Characteristics	Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.	
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.....	May cause sensitization by skin contact. Inhalation may cause respiratory tract irritation.	
Germ Cell Mutagenicity.....	No data available to indicate product or any components present at greater than 0.1% are mutagenic.	
Carcinogenicity.....	No information is available.	
Reproductive Toxicity.....	Based on available data, the classification criteria are not met.	
STOT - Single Exposure.....	Specific target organ toxicity single exposure Category 3. May cause drowsiness and dizziness.	
STOT - Repeated Exposure.....	2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been observed in humans.	
Aspiration Hazard.....	Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.	
Chronic Effects.....	Organic solvents may be absorbed into the body by inhalation and ingestion and cause permanent damage to the nervous system, including the brain. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.	

**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.: 2-butoxyethanol (CAS#: 111-76-2): Not established. Kerosene: Toxicity to fish: LC50 2-5mg/L, 96 hrs; Toxicity to other aquatic invertebrates: EC 4 mg/L, 48 hrs; Toxicity to algae: EC50 1-3mg/L, 72hrs.
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.
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**SECTION 14: TRANSPORT INFORMATION**

TDG (Canada- Road).....	AEROSOLS, Class 2.1, UN1950.
DOT (US-Road).....	AEROSOLS, Class 2.1, UN1950, LTD QTY, Consumer commodity ORM-D.
IMDG (International- Marine).....	AEROSOLS, Class 2.1, UN1950.
IATA (International- Air).....	AEROSOLS, Class 2.1, UN1950, LTD QTY.

**SECTION 15: REGULATORY INFORMATION**

Canada Regulations:.....	WHMIS Classification. A: Compressed gas. B5: Flammable Aerosol. D2B: Material causing other toxic Materials.
Canadian Environmental Protection Act (CEPA) .....	All ingredients listed appear on the Domestic Substances List (DSL).
US Regulations.....	Environmental Protection Act: Constituents of this product are included on the TSCA inventory.

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**SECTION 15: REGULATORY INFORMATION**

OSHA..... This product is considered hazardous under the Federal OSHA hazard communication standard.

**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 vendors or users or third parties, caused by the material. Such vendors 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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