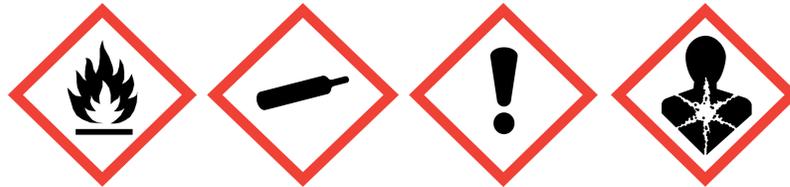


**empack**Empack Spraytech Inc.  
98 Walker Drive  
Brampton, Ontario, L6T 4H6  
Canada  
905-792-6571**PRODUCT: Emzone Heavy Duty Engine Shampoo - 446g****CODE: P6-045001****SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Item Numbers..... P6-045001  
 Product Identity..... Emzone Heavy Duty Engine Shampoo - 446g  
 Manufacturer..... Empack Spraytech Inc.  
 98 Walker Drive  
 Brampton  
 Ontario  
 Canada  
 L6T 4H6  
 905-792-6571  
 24 hour emergency telephone number..... In Canada: Call CANUTEC (613) 996-6666 - In The United States: Call CHEMTREC (800) 424-9300.  
 Recommended Use..... Cleans heavy grease, dirt, and oil deposits on engines in automobiles, power mowers, boats, tractors and industrial machinery.

**SECTION 02: HAZARDS IDENTIFICATION**

Label Elements:  
 Signal Word..... DANGER.  
 Hazard Classification:  
 Physical Hazards..... Flammable Aerosols - Category 1. Gases Under Pressure - Liquefied Gas .  
 Health Hazards..... Skin Irritation - Category 2. Eye Irritation - Category 2. Carcinogenicity - Category 2.  
 Reproductive Toxicity - Category 2. Aspiration Hazard - Category 1.  
 Environmental Hazards..... Not Classified.  
 Hazard Statement..... Extremely flammable aerosol. Pressurized container: may burst if heated. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May be fatal if swallowed and enters airways.

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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

Response..... 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. Call a POISON CENTER if you feel unwell. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. 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. %
Hydrotreated Light Petroleum Distillate	64742-47-8	40-70
Xylene	1330-20-7	10-30
Propane	74-98-6	10-30
Surfactants	Mix	1-5

PRODUCT: Emzone Heavy Duty Engine Shampoo - 446g

CODE: P6-045001

**SECTION 04: FIRST AID MEASURES**

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. Do not give adrenaline, epinephrine or similar drugs following exposure to this product.
Skin Contact.....	Wash thoroughly with soap and lukewarm water.
Eye Contact.....	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if irritation persists.
Ingestion.....	Do not induce vomiting, get 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**

General Fire Hazards.....	Extremely flammable aerosol.
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.
Specific Hazards Arising from the Chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
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.

**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 contact with eyes, skin, and clothing. 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
Hydrotreated Light Petroleum Distillate	Not available	Not available	Not available	Not available	Not available	Not available
Xylene	50 ppm	150 ppm	100 ppm (435 mg/m3)	Not established	Not established	Not established
Propane	Not available	Not available	1,000 ppm	Not available	Not available	Not available
Surfactants	Not available	Not available	Not available	Not available	Not available	Not available
Appropriate Engineering Controls.....	Local exhaust ventilation required to maintain the point of use below the Threshold Limit Value if unprotected personnel are involved.					

PRODUCT: Emzone Heavy Duty Engine Shampoo - 446g

CODE: P6-045001

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

## Individual Protection Measures:

Eye/Face Protection..... Do not get in eyes. Wear safety glasses with side-shields.  
 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..... Clear liquid.  
 Odor..... Hydrocarbons.  
 Odor Threshold (ppm)..... N/A.  
 Specific Gravity (Liquid)..... 0.800-0.840.  
 Specific Gravity (Aerosol)..... 0.756-0.790.  
 Aerosol Vapour Pressure (psig, 21°C)..... 50-60.  
 Vapour Density (Air=1)..... Not available.  
 pH..... N/A.  
 Boiling Point liquid (°C)..... 137-250.  
 Melting/Freezing Point (°C)..... -68.1°C (-90.58°F). (Petroleum distillates).  
 Flash Point (°C), Method..... -104 °C (-156°F). (Propellant).  
 Evaporation Rate (n-Butyl Acetate = 1)..... > 1 .  
 VOC Content..... Not available.  
 Solubility in water..... Nil.  
 Aerosol Flame Projection..... No data.  
 Auto Ignition Temperature (°C)..... 450°C (842°F). (Propellant).  
 Lower Flammable Limit (% Vol)..... 2.1. (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..... Strong oxidizing agents. Strong acids.  
 Hazardous Decomposition Products..... Carbon Oxides.

**SECTION 11: TOXICOLOGICAL INFORMATION**

INGREDIENTS	LC50	LD50
Hydrotreated Light Petroleum Distillate	>6.03 mg/L (Rat - 4hrs)	>5,000 mg/kg (Oral - Rat); >2,000 mg/kg (Dermal - Rabbit)
Xylene	27.6 mg/L (Rat - 4hrs)	3,253 mg/kg (Oral - Rat); 12,180 mg/kg (Dermal - Rabbit)
Propane	658 mg/L (Rat - 4hrs)	Not available
Surfactants	Not available	Not available

## Information on Likely Routes of Exposure:

Routes of entry - Inhalation..... Yes.  
 Routes of entry - Skin & Eye..... Yes.  
 Routes of entry - Ingestion..... No.  
 Routes of entry - Skin Absorption..... No.  
 Symptoms Related to the Physical, ..... 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.  
 Chemical and Toxicological Characteristics  
 Acute Toxicity..... Toxic if inhaled.  
 Skin Corrosion/Irritation..... Causes mild skin irritation. Prolonged contact may be more irritating.  
 Serious Eye Damage/Eye Irritation..... Causes serious eye irritation.  
 Respiratory or Skin Sensitization..... May cause sensitization by skin contact.  
 Germ Cell Mutagenicity..... Xylene: Not expected to be mutagenic.

PRODUCT: Emzone Heavy Duty Engine Shampoo - 446g

CODE: P6-045001

**SECTION 11: TOXICOLOGICAL INFORMATION**

Carcinogenicity.....	Xylene (CAS#: 1330-20-7): ACGIH A4 Not Classified as a human carcinogen; IARC 3 Not classifiable as to carcinogenicity to humans. Ethylbenzene (CAS#: 100-41-4): IARC: Group 2B (Possibly Carcinogenic to Humans); ACGIH: Group A3 (Confirmed Animal carcinogen with unknown relevance to humans). Ethylbenzene is classified as an A3 known animal carcinogen.
Reproductive Toxicity.....	Xylene (CAS#: 1330-20-7): Can cause adverse reproductive effects- such as birth defects, miscarriages, or infertility.
STOT - Single Exposure.....	Based on available data, the classification criteria are not met.
STOT - Repeated Exposure.....	Not classified.
Aspiration Hazard.....	Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.
Chronic Effects.....	No known adverse effects .

**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: Xylene (CAS#:1330-20-7): Toxicity to fish: 780.0 mg/L, 96 hrs; Toxicity to other aquatic invertebrates: EC50 0.8 mg/L , 48 hrs; Toxicity to algae: EC50 10.0mg/L. Ethylbenzene (CAS#:100-41-4): Toxicity to fish: LC50 4.3mg/L,96hr; Toxicity to aquatic invertebrates: LC50 2.6mg/L,96hr; Toxicity to algae: EC5.0mg/L,96hr.
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. Avoid release to the environment .

**SECTION 13: DISPOSAL CONSIDERATIONS**

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

**SECTION 14: TRANSPORT INFORMATION**

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

**SECTION 15: REGULATORY INFORMATION**

Canada Regulations:.....	WHMIS Classification. B5: Flammable Aerosol. D2B: Material causing other toxic Materials. A: Compressed gas.
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.
OSHA.....	This product is considered hazardous under the Federal OSHA hazard communication standard.
California Proposition 65.....	*WARNING: This product contains a chemical known to the State of California to cause cancer. (Ethyl benzene).

**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.
Prepared by .....	Regulatory Affairs
Latest Revision .....	JUN 04/2018