



Empack Spraytech Inc.
98 Walker Drive
Brampton, Ontario, L6T 4H6
Canada
905-792-6571

PRODUCT: Emzone Battery Cleaner & Acid Detector - 215 g

CODE: P6-045033

SECTION 01: IDENTIFICATION

Product Item Numbers..... P6-045033
Product Identity..... Emzone Battery Cleaner & Acid Detector - 215 g
Manufacturer..... Empack Spraytech Inc.
98 Walker Drive
Brampton
Ontario
Canada
L6T 4H6
905-792-6571
24 hour emergency telephone number..... CANUTEC: 1-613-996-6666.
Recommended Use..... Cleans: Battery terminals, Cable, Hold downs, Battery boxes.
Chemical Family..... Mixture.

SECTION 02: HAZARD IDENTIFICATION



Label Elements:
Signal Word..... WARNING.
Hazard Classification:
Physical Hazards..... Aerosols - Category 3. Gases Under Pressure - Liquefied Gas.
Health Hazards..... Skin Irritation - Category 3. Eye Damage/Irritation - Category 2A. Carcinogenicity - Category 2.
Environmental Hazards..... Not Classified.
Hazard Statement..... H229:Pressurised container: May burst if heated (3). H280:Contains gas under pressure; may explode if heated (L). H316:Causes mild skin irritation. H319:Causes serious eye irritation. H351:Suspected of causing cancer.
Precautionary Statements:
Prevention..... P210:Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P251:Do not pierce or burn, even after use. P264+P265: Wash hands thoroughly after handling. Do not touch eyes. P203:Obtain, read and follow all safety instructions before use. P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
Response..... P332+P317:If skin irritation occurs: Get medical help. P305+P351+P338:IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P317:If eye irritation persists: Get medical help. P318: IF exposed or concerned, get medical advice. .
Storage..... P410+P412:Protect from sunlight. Do not expose to temperatures exceeding 50°C /122°F.
Disposal..... P403:Store in a well ventilated place . P405: Store locked up.
Hazard(s) not otherwise classified (HNOC) P501:Dispose of contents/container in accordance with local, regional, national, and/or international regulations.
None Known.

SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME AND SYNONYMS	CAS #	WT. %
Isobutane	75-28-5	7-13
Triethanolamine	102-71-6	1-5
2-Butoxyethanol	111-76-2	0.1-1
DIETHANOLAMINE	111-42-2	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..... Wash thoroughly with soap and lukewarm water. If symptoms persist, seek medical attention.

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Eye Contact..... Check for and remove contact lenses. Rinse with water. If symptoms persist, seek medical attention.

Ingestion..... If swallowed, call a Poison Control Center or doctor immediately. Do not induce vomiting.

Most important symptoms/effects, acute .. Provide general supportive measures and treat symptomatically.

and delayed

Indication of immediate medical attention and special treatment needed Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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 Contents under pressure. Pressurized container may explode when exposed to heat or flame. In case of fire, the following can be released: Carbon Oxides, Hydrocarbons, Aldehydes, Ketones.

Special Protective Equipment and Firefighters must use standard protective equipment including flame retardant coat, helmet Precautions for Firefighters 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..... Non Flammable aerosol, but contains flammable propellant.

SECTION 06: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective No action shall be taken involving any personal risk or without suitable training. Evacuate Equipment and Emergency Procedures 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 .. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, and Cleaning Up 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	ACGIH TLV		OSHA PEL		REL NIOSH
	TWA	STEL	PEL	STEL	

Isobutane	Not available	1,000 ppm	Not available	Not available	Not available
Triethanolamine	5 mg/m ³	Not established	Not established	Not established	Not established
2-Butoxyethanol	20 ppm	Not available	50 ppm	Not available	Not available
DIETHANOLAMINE	0.46 PPM TWA ACGIH				

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..... 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.

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SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

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..... Liquid.
 Odor..... Odorless.
 Odor Threshold (ppm)..... N/A.
 Specific Gravity (Aerosol)..... 1.005-1.035.
 Specific Gravity (Liquid)..... 0.980-1.020.
 Aerosol Vapour Pressure (psig, 21°C)..... 55-85.
 Vapour Density (Air=1)..... >1.
 pH..... N/A.
 Boiling Point liquid (°C)..... 98 °C (209°F). Estimated.
 Melting/Freezing Point (°C)..... N/A.
 Flash Point (°C), Method..... -82.8. Closed cup. (For propellant).
 Evaporation Rate (n-Butyl Acetate = 1)..... Slow.
 Solubility in water..... Completely.
 Aerosol Flame Projection..... No data.
 Auto Ignition Temperature (°C)..... 460°C (860°F). (Propellant).
 Lower Flammable Limit (% Vol)..... 1.8. (Propellant).
 Upper Flammable Limit (% Vol)..... 8.8. (Propellant).

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..... Contact with incompatible substances.
 Incompatible Materials..... Strong oxidizing agents.
 Hazardous Decomposition Products..... Carbon Oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
Isobutane	658 mg/L (Rat - 4 hrs)	Not available
Triethanolamine	Not available	6,400 mg/kg (Oral - Rat); >2,000 mg/kg (Dermal - Rabbit)
2-Butoxyethanol	450 ppm (Rat - 4 hrs)	470 mg/kg (Oral - Rat)
DIETHANOLAMINE	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.....	Yes.	
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	No known significant effects.	
Acute Toxicity.....	Causes skin irritation.	
Skin Corrosion/Irritation.....	Direct eye contact may cause slight redness. Spraying directly into the eyes may cause frostbite, damage to the cornea resulting in permanent eye injury.	
Serious Eye Damage/Eye Irritation.....	Not classified.	
Respiratory or Skin Sensitization.....	No information is available, and no adverse effects are expected.	
Germ Cell Mutagenicity.....	This product contains the following: Diethanolamine.	
Carcinogenicity.....	This product is not expected to cause reproductive or developmental effects.	
Reproductive Toxicity.....	Not classified.	
STOT - Single Exposure.....	Not classified.	
STOT - Repeated Exposure.....	Based on available data, the classification criteria are not met.	
Aspiration Hazard.....	Prolonged inhalation may be harmful.	
Chronic Effects.....		

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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.

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..... The dispensed liquid product is not a hazardous waste. Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: TRANSPORT INFORMATION

TDG (Canada- Road)..... UN1950, AEROSOLS, Class 2.2, Ltd. qty.

DOT (US-Road)..... UN1950, AEROSOLS, Class 2.2, Ltd. qty., Consumer Commodity, ORM-D.

IMDG (International- Marine)..... UN1950, AEROSOLS, Class 2.2, Ltd. qty.

IATA (International- Air)..... UN1950, AEROSOLS, Class 2.2, Ltd. qty.

SECTION 15: REGULATORY INFORMATION

Canada Regulations:..... WHMIS Classification. A: Compressed gas. 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.

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 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. 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; WHMIS: Workplace Hazardous Materials Information System STOT: Specific Target Organ Toxicity.

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