



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name ZEP BATTERY CARE
Product use Battery Terminal Cleaner
Product code 0308
Date of issue 12/05/11 **Supersedes** 03/12/09

Emergency Telephone Numbers

For MSDS Information:
 Technical Services Group
 Telephone (780) 453-8100
 (Business Hours 8:00am - 5:00pm)

For Medical or Transportation Emergency

CANUTEC (24 Hours)
 (613) 996-6666 - Call Collect

Prepared By

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Section 2. Hazards Identification

Emergency overview

Do not breathe vapor or mist. Contains material that may cause target organ damage, based on animal data.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects

Routes of Entry

Dermal contact. Eye contact. Inhalation.

Eyes

Irritating to eyes. Inflammation of the eye is characterized by redness, watering and itching.

Skin

Irritating to skin. Harmful if absorbed through the skin. Direct contact may cause irritation and redness. Prolonged or repeated contact may dry skin and cause irritation.

Inhalation

Harmful by inhalation. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.

Ingestion

May be harmful if swallowed. Can cause gastrointestinal disturbances.

Chronic effects

Contains material which may cause damage to the following organs: blood, kidneys, liver, upper respiratory tract, skin, eyes, central nervous system (CNS).

Overexposure of this product by inhalation or absorption can produce central nervous system depression resulting in headache, nausea and/or dizziness.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients

CAS number

% by Weight

HYDROCARBON PROPELLANT; blend of propane and n-butane	74-98-6; 106-97-8	5 - 10
ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve	111-76-2	1 - 5

Section 4. First Aid Measures

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Skin Contact

Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point	Not available.
Flammable Limits	Not available.
Flammability	Non-flammable. (CSMA)
Auto-ignition Temperature	
Fire-Fighting Procedures	Use an extinguishing agent suitable for the surrounding fire. Cool closed containers exposed to fire with water.
Fire hazard	In a fire or if heated, a pressure increase will occur and the container may burst. Bursting aerosol containers may be propelled from a fire at high speed.
Products of Combustion	carbon oxides (CO, CO ₂) and other unidentified organic compounds
Explosion hazard	Not available.

Section 6. Accidental Release Measures

Spill Clean up Large spills are unlikely due to packaging.

Section 7. Handling and Storage

Handling	Avoid contact with eyes, skin and clothing. Avoid breathing vapors, spray or mists. Do not ingest. Do not puncture or incinerate container. Use only with adequate ventilation.
Storage	Do not store above the following temperature: 49°C (120.2°F). CONTENTS UNDER PRESSURE. Do not puncture or incinerate container. Keep container in a cool, well-ventilated area. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection**Product name**

Propellant; Blend of Isobutane, Propane and n-Butane

Ethylene Glycol Monobutyl Ether

Exposure limits

ACGIH TLV / OSHA PEL (United States). Notes: Propane

TWA: 1000 ppm 8 hour(s).


ACGIH TLV (United States). Skin

TWA: 20 ppm 8 hour(s). Form:

OSHA PEL (United States). Skin

TWA: 50 ppm 8 hour(s). Form:

Personal Protective Equipment (PPE)

Eyes	Safety glasses.	
Hands and Body	Neoprene gloves. Nitrile gloves. Rubber gloves.	
Respiratory	Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.	

Section 9. Physical and Chemical Properties

Physical State	Liquid. [Aerosol.]	Color	Milky-white [Light]
pH	Not applicable	Odor	Mild.
Boiling Point	101.67°C (215°F)	Vapor Pressure	Not determined.
Specific Gravity	1	Vapor Density	Not determined.
Solubility	Easily soluble in the following materials: cold water and hot water.	Evaporation Rate	1 (Water = 1)
Freezing Point		VOC (Consumer)	693.37 (g/l). 5.79 lbs/gal 8.21%

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Reactive or incompatible with the following materials: oxidizing materials and metals.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Carcinogenicity No known significant effects or critical hazards.

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
HYDROCARBON PROPELLANT; blend of propane and n-butane 2-butoxyethanol	LC50 Inhalation Vapor	Rat	658000 mg/m3	4 hours
	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
	LC50 Inhalation Vapor	Guinea pig	>633 ppm	1 hours
	LD50 Dermal	Guinea pig	>2000 mg/kg	-
	LD50 Dermal	Rabbit	220 mg/kg	-
	LD50 Oral	Guinea pig	1200 mg/kg	-
	LD50 Oral	Rat	250 mg/kg	-

Section 12. Ecological Information

Environmental Effects No known significant effects or critical hazards.

Aquatic Ecotoxicity


Not available.

Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

Waste Stream Non-hazardous waste

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	1950	Aerosols, non-flammable	2.2	-		Explosive Limit and Limited Quantity Index 1
IMDG Class	Not available.	Not available.	Not available.	-		-

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment. **Limited Quantity:** Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information**Canada****WHMIS (Canada)**

Class A: Compressed gas.

Class D-2B: Material causing other toxic effects (Toxic).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.