



Material Safety Data Sheet

and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name ZEP BATTERY CARE
Product Use Aerosol Battery Terminal Cleaner
Product Code 0308
Date of issue 03/14/06 **Supersedes** 06/11/03

Emergency Telephone Numbers For MSDS Information:
 Technical Services Group
 Zep Manufacturing of Canada
 Telephone: (780) 453-8100 (Business Hours 8:00-5:00)

For a Medical or Transportation Emergency:
 CANUTEC (24 Hours)
 (613) 996-6666 - Call Collect

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Printing date: 17/03/06

Date of Preparation : 03/14/06

Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Toxicity Data			
ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve	111-76-2	1 - 5	LD50	Rat	Oral	1746 mg/kg
			LD50	Rabbit	Dermal	680 mg/kg
			LC50	Rat (Female)	Inhalation	450 ppm (4 hour(s))
HYDROCARBON PROPELLANT; blend of propane, isobutane & n-butane	75-28-5; 74-98-6; 106- 97-8	7-13	Not available.	Not available.	Not available.	Not available.

Section 3. Hazards Identification

Acute Effects

Routes of Entry Dermal contact. Inhalation.

Skin Hazardous in case of skin contact (irritant, permeator). Harmful if absorbed through the skin. Direct contact may cause irritation and redness. Prolonged or repeated contact may dry skin and cause irritation.

Eyes Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

Inhalation Hazardous in case of inhalation. Avoid breathing vapors or spray mists. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system depression.

Ingestion May be harmful if swallowed. Can cause gastrointestinal disturbances.

Chronic Effects

The substance may be toxic to 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. Repeated or prolonged exposure to the substance can produce target organs damage.

Additional information : See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention immediately.

Skin Contact In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops.

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 applicable. **Flammable Limits** Not applicable.

Flammability Non-flammable. (CSMA)

Auto-ignition Temperature

Fire-Fighting Procedures Use DRY chemicals, CO₂, water spray or foam. Cool closed containers exposed to fire with water.

Fire Hazard CONTENTS UNDER PRESSURE. Container explosion may occur under fire conditions or when heated.

Products of Combustion Carbon Dioxide, Carbon Monoxide and other organic materials..

Explosion hazard

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. Do not ingest. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Observe label precautions. Wash thoroughly after handling.**Storage** CONTENTS UNDER PRESSURE. Do not puncture or incinerate container. Keep container in a cool, well-ventilated area. Do not store above 49°C (120.2°F). Keep out of the reach of children.**Section 8. Exposure Controls, Personal Protection****Engineering Controls****Personal Protection****Eyes** Safety glasses.**Hands and Body** Rubber gloves. Nitrile gloves. Neoprene 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.**Protective Clothing (Pictograms)****Exposure Limits**

Name of Hazardous Ingredients	CAS #	Exposure Limits
Propellant; Blend of Isobutane, Propane and n-Butane	75-28-5; 74-98-6; 106-97-8	ACGIH TLV / OSHA PEL (United States). Notes: Propane TWA: 1000 ppm 8 hour(s). OSHA PEL / ACGIH TLV (United States). Notes: n-Butane TWA: 800 ppm 8 hour(s).
Ethylene Glycol Monobutyl Ether	111-76-2	ACGIH TLV (United States). TWA: 20 ppm 8 hour(s). OSHA PEL (United States). Skin TWA: 50 ppm 8 hour(s)

[Consult local authorities for acceptable exposure limits.](#)**Section 9. Physical and Chemical Properties****Physical State** Liquid. (Aerosol.)**pH** Not applicable**Boiling Point** 101.67°C (215°F)**Freezing Point****Specific Gravity** 1 (Water = 1)**Solubility** Easily soluble in cold water, hot water.**Color** Milky-white (Light.)**Odor** Mild.**Vapor Pressure** Not determined.**Vapor Density** Not determined.**Evaporation Rate** 1 compared to Water**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 with oxidizing agents, metals. Incompatible with magnesium, zinc, sodium, potassium and aluminum.**Reactivity** Will not occur.**Hazardous Decomposition Products** Carbon Dioxide, Carbon Monoxide and other organic materials..**Section 11. Toxicological Information****Carcinogenic Effects** Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.**Reproductive Effects****Mutagenic Effects****Teratogenic Effects****Section 12. Ecological Information****Ecotoxicity** Not available.**Biodegradable/OECD** Not available.**Section 13. Disposal Considerations****Waste Information** Waste must be disposed according to applicable regulations. Consult your local or regional authorities. **Waste Stream** Non-hazardous waste**Section 14. Transport Information**

Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
TDG Classification	1950	Aerosols, non-flammable	2.2	-		Explosive Limit and Limited Quantity Index 1

Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to the TDG regulations.

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

Class A: Compressed gas.

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

Other Regulations

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the available information required by the CPR.

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.