

Material Safety Data Sheet



Zep, Inc.
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Atlanta, GA 30318
1-877-I-BUY-ZEP (428-9937)
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Section 1. Chemical Product and Company Identification

Product name BATTERY COAT
Product use Battery Terminal Protector
Product code 0108
Date of issue 08/02/10 **Supersedes** 02/16/04

Emergency Telephone Numbers

For MSDS Information:

Compliance Services 1-877-I-BUY-ZEP (428-9937)

For Medical Emergency

(877) 541-2016 Toll Free - All Calls Recorded

For Transportation Emergency

CHEMTREC: (800) 424-9300 - All Calls Recorded
In the District of Columbia (202) 483-7616

Prepared By

Compliance Services
1420 Seaboard Industrial Blvd.
Atlanta, GA 30318

Printing date: 08/05/10

Section 2. Hazards Identification

Emergency overview

*Hazard Determination System (HDS): Health, Flammability, Reactivity

DANGER !



FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. VAPOR HARMFUL. CAUSES EYE, SKIN AND RESPIRATORY IRRITATION.

CONTENTS UNDER PRESSURE.

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

Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

Skin

May cause skin irritation. May be harmful if absorbed through the skin. Skin inflammation is characterized by itching, scaling, or reddening.

Inhalation

Avoid breathing vapors, spray or mists. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.

Ingestion

Aspiration hazard if swallowed. Can enter lungs and cause damage.

Chronic effects

Repeated or prolonged exposure to the substance can produce target organs damage. Prolonged or repeated contact may dry skin and cause irritation. Contains material which may cause damage to the following organs: blood, kidneys, lungs, peripheral nervous system, liver, heart, brain, gastrointestinal tract, central nervous system (CNS), mucous membranes, and auditory nerve .

Carcinogenicity

Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Trichloroethylene	-	2A	-	-	Possible	+
ethylene glycol monobutyl ether	A3	3	-	-	-	-
Ethylbenzene	A3	2B	-	-	-	-

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
TRICHLOROETHYLENE; acetylene trichloride; 1-chloro-2,2-dichloroethylene	79-01-6	40 - 50
XYLENE; dimethyl benzene; xylol	1330-20-7	10 - 20
PROPANE; dimethylmethane propyl hydride	74-98-6	11 - 18
BUTANE; n-Butane	106-97-8	8 - 13.5
ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve	111-76-2	<5
ETHYL BENZENE	100-41-4	<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 immediately.
Skin Contact	Wash affected area with soap or mild detergent and water. Remove contaminated clothing and shoes. Get medical attention if irritation develops.
Inhalation	Move exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)



Flash Point	Not available.
Flammable Limits	Lower: 8% Upper: 10.5%
Flammability	FLAMMABLE. (CSMA Method)
Fire hazard	CONTENTS UNDER PRESSURE. Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.
Fire-Fighting Procedures	Use an extinguishing agent suitable for the surrounding fire. Cool closed containers exposed to fire with water. Fire-fighters should wear appropriate protective equipment.

Section 6. Accidental Release Measures

Spill Clean up Large spills are unlikely due to packaging.

Section 7. Handling and Storage

Handling	Put on appropriate personal protective equipment (see section 8). Store and use away from heat, sparks, open flame or any other ignition source. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Observe label precautions. Wash contaminated clothing before reusing. Wash thoroughly after handling.
Storage	CONTENTS UNDER PRESSURE. Eliminate all ignition sources. Do not puncture, incinerate or store the container at temperatures above 49°C (120°F) or in direct sunlight. Keep out of the reach of children.

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

TRICHLOROETHYLENE; acetylene trichloride; 1-chloro-2,2-dichloroethylene

XYLENE; dimethyl benzene; xylol

PROPANE; dimethylmethane propyl hydride

BUTANE; n-Butane

ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve

Exposure limits**ACGIH TLV (United States).**

TWA: 10 ppm 8 hour(s).
STEL: 25 ppm 15 minute(s).

OSHA PEL (United States).

TWA: 50 ppm 8 hour(s).
STEL: 200 ppm 15 minute(s).

OSHA (United States).

TWA: 100 ppm

OSHA PEL 1989 (United States, 3/1989).

TWA: 1000 ppm 8 hour(s).
TWA: 1800 mg/m³ 8 hour(s).

NIOSH REL (United States, 6/2009).

TWA: 1000 ppm 10 hour(s).
TWA: 1800 mg/m³ 10 hour(s).

OSHA PEL (United States, 11/2006).

TWA: 1000 ppm 8 hour(s).
TWA: 1800 mg/m³ 8 hour(s).

ACGIH TLV (United States, 1/2009).

TWA: 1000 ppm 8 hour(s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 800 ppm 8 hour(s).
TWA: 1900 mg/m³ 8 hour(s).

NIOSH REL (United States, 6/2009).

TWA: 800 ppm 10 hour(s).
TWA: 1900 mg/m³ 10 hour(s).

ACGIH TLV (United States, 1/2009).

TWA: 1000 ppm 8 hour(s).

NIOSH REL (United States, 6/2009). Absorbed through skin.

TWA: 5 ppm 10 hour(s).
TWA: 24 mg/m³ 10 hour(s).

ACGIH TLV (United States, 1/2009).

TWA: 20 ppm 8 hour(s).

ETHYL BENZENE

OSHA PEL (United States, 11/2006). Absorbed through skin.

TWA: 50 ppm 8 hour(s).

TWA: 240 mg/m³ 8 hour(s).**OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.**

TWA: 25 ppm 8 hour(s).

TWA: 120 mg/m³ 8 hour(s).**ACGIH TLV (United States, 2/2010).**

TWA: 100 ppm 8 hour(s).

STEL: 125 ppm 15 minute(s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 100 ppm 8 hour(s).

TWA: 435 mg/m³ 8 hour(s).

STEL: 125 ppm 15 minute(s).

STEL: 545 mg/m³ 15 minute(s).**OSHA PEL (United States, 11/2006).**

TWA: 100 ppm 8 hour(s).

TWA: 435 mg/m³ 8 hour(s).**Personal Protective Equipment (PPE)**

Eyes	Safety glasses.	
Body	Chemical-resistant gloves. Viton	
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. Wear appropriate respirator when ventilation is inadequate.	

Section 9. Physical and Chemical Properties

Physical State	Liquid. [Aerosol.]	Color	Red.
pH	Not applicable	Odor	Solvent-like. [Slight]
Boiling Point	54.4°C (129.9°F)	Vapor Pressure	8 kPa (60 mm Hg) (at 20°C)
Specific Gravity	1.25 (Water = 1)	Vapor Density	Not determined.
Solubility	Insoluble in the following materials: cold water and hot water.	Evaporation Rate	0.75 (butyl acetate = 1)
		VOC (Consumer)	Not determined

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Keep away from heat, sparks and flame. Reactive or incompatible with the following materials: oxidizing materials.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	carbon oxides (CO, CO ₂), Hydrogen chloride (HCl), Chlorine, Phosgene gas.

Section 11. Toxicological Information**Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Trichloroethylene	LD50 Dermal	Rabbit	10000 mg/kg	-
	LD50 Oral	Mouse	2402 mg/kg	-
	LD50 Oral	Rat	4920 mg/kg	-
Xylene	LC50 Inhalation Vapor	Rat	6700 ppm	4 hours
	LD50 Oral	Rat	3500 mg/kg	-
Butane	LC50 Inhalation Vapor	Rat	658 g/m ³	4 hours
	ethylene glycol monobutyl ether	LC50 Inhalation Gas.	Rat	450 ppm
LC50 Inhalation Vapor		Guinea pig	>633 ppm	1 hours
Ethylbenzene	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	-
	LD50 Oral	Rat	3500 mg/kg	-

Section 12. Ecological Information

Environmental Effects	Not available.
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Aquatic Ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
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ethylene glycol monobutyl ether	-	Acute EC50 >1000 mg/L Fresh water	Daphnia - Water flea - 48 hours Daphnia magna - <24 hours
	-	Acute LC50 >1000 mg/L Marine water	Crustaceans - Amphipod - Chaetogammarus marinus - Young - 5 mm 48 hours
	-	Acute LC50 1490000 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 33 to 75 mm 96 hours
	-	Acute LC50 1250000 ug/L Marine water	Fish - Inland silverside - Menidia beryllina - 40 to 100 mm 96 hours
	-	Acute LC50 800000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon 48 hours
	-	Chronic NOEC 1000 mg/L Fresh water	Daphnia - Water flea - 48 hours Daphnia magna - <24 hours

Section 13. Disposal Considerations

Waste Information

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

Waste Stream Code: D001, D040
Classification: - [Hazardous waste]
Origin: - [RCRA waste.]

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification	Not regulated.	Consumer commodity ORM-D			
IMDG Class	Not determined.				

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.

PG* : Packing group

Section 15. Regulatory Information

U.S. Federal Regulations

SARA 313 toxic chemical notification and release reporting:

Product name

Trichloroethylene
Xylene
ethylene glycol monobutyl ether
Ethylbenzene

Clean Water Act (CWA) 307: Trichloroethylene; Ethylbenzene

Clean Water Act (CWA) 311: Xylene; Trichloroethylene; Ethylbenzene

Clean Air Act (CAA) 112 regulated toxic substances: Xylene; Trichloroethylene

All Components of this product are listed or exempt from listing on TSCA Inventory.

United States inventory (TSCA 8b): Not determined.

State Regulations

California Prop 65

WARNING: This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.:

Toluene; Benzene; Trichloroethylene; Ethylbenzene

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.

*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.