



ZEP Manufacturing Company
 Acuity Specialty Products Group, Inc.
 P.O. Box 2015
 Atlanta, GA 30301
 1-877-I-BUY-ZEP

Material Safety Data Sheet and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name BATTERY COAT
Product Use Battery Terminal Protector
Product Code 0108
Date of issue 02/16/04 **Supersedes** 02/07/00

Emergency For MSDS Information:

Telephone Numbers Acuity Specialty Products Group, Inc.
Compliance Services 1-877-I-BUY-ZEP

For Medical Emergency

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

For a Transportation Emergency

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

Printing date: 02/16/04

Prepared by Compliance Services Group
 Acuity Specialty Products Group
 1420 Seaboard Industrial Blvd.
 Atlanta, GA 30318

Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
TRICHLOROETHYLENE; acetylene trichloride; 1-chloro-2,2-dichloroethylene	79-01-6	40-50	ACGIH TLV (United States). TWA: 50 ppm 8 hour(s). STEL: 100 ppm 15 minute(s). OSHA PEL (United States). TWA: 50 ppm 8 hour(s). STEL: 200 ppm 15 minute(s).
XYLENE; dimethyl benzene; xylol	1330-20-7	5-15	OSHA (United States). TWA: 100 ppm ACGIH (United States). STEL: 150 ppm
ETHYL BENZENE	100-41-4	<5	OSHA PEL (United States). TWA: 100 ppm 8 hour(s).
ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve	111-76-2	<5	ACGIH TLV (United States). Skin TWA: 20 ppm 8 hour(s). Form: Vapor OSHA PEL (United States). Skin TWA: 25 ppm 8 hour(s). Form: Vapor
BLEND OF ISOBUTANE & PROPANE	74-98-6; 75-28-5	20-30	ACGIH TLV (United States). : 800 ppm 8 hour(s). OSHA PEL (United States). TWA: 1000 ppm 8 hour(s).

Section 3. Hazards Identification

Acute Effects **Routes of Entry** Absorbed through skin. Inhalation.

Skin Hazardous in case of skin contact (irritant). Non-sensitizer for skin. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Eyes Hazardous in case of eye contact (irritant). Liquid in eye may cause irritation with possible damage if not rinsed immediately.

Inhalation Hazardous in case of inhalation (lung irritant). Material is irritating to mucous membranes and upper respiratory tract. Can cause central nervous system depression. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness, and nausea, and may lead to unconsciousness or death. Prolonged repeated exposure may cause chemical pneumonitis. Medical Conditions Aggravated by Overexposure: Respiratory, Heart (Cardiac).

HMIS

Health	2
Fire Hazard	2
Reactivity	0
Personal Protection	B

Ingestion Aspiration hazard if swallowed- can enter lungs and cause damage.

Carcinogenic Effects Trichloroethylene - Classified 2A (Probable for human) by IARC, 2 (Reasonably Anticipated To Be Human Carcinogen) by NTP. Ethyl Benzene - Classified 2B (Possible for human) by IARC.

Chronic Effects The substance may be toxic to kidneys, liver, central nervous system (CNS), and heart. Repeated or prolonged exposure to the substance can produce target organs damage. Defatting to the skin. Prolonged skin contact may cause dermatitis with drying and cracking of skin.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention.

Skin Contact Wash affected area with soap or mild detergent and water. Remove contaminated clothing and shoes. 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 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, keep head lower than hips to help prevent aspiration. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point Not determined. **Flammable Limits** LOWER: 8% UPPER: 10.5%

Flammability FLAMMABLE. (CSMA)

Fire Hazard Vapor may cause fire when exposed to heat or flame.

Fire-Fighting Procedures Use DRY chemicals, CO₂ or foam. Wear special protective clothing and positive pressure, self-contained breathing apparatus.



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 or spray mists. Use only with adequate ventilation. Wash thoroughly after handling. Wash contaminated clothing before reusing. Watch for accumulation in low confined areas. Vapor may cause flash fire. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to heat or sources of ignition.

Storage Keep away from heat and direct sunlight. Keep container in a cool, well-ventilated area. Do not store above 49°C (120.2°F). Do not puncture or incinerate. Keep out of the reach of children.

Section 8. Exposure Controls, Personal Protection

Personal Protection

Protective Clothing (Pictograms)

Eyes Safety glasses. It is generally recognized that contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury.



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 threshold limit value. 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 (130°F) **Vapor Pressure** 8 kPa (60 mmHg) (at 20°C)

Specific Gravity 1.25 (Water = 1) **Vapor Density** Not determined.

Solubility Insoluble in cold water, hot water. **Evaporation Rate** 0.75 compared to Butyl acetate.

VOC (Consumer) 92.3% 8.0 (lb/gal) 955 (g/l)

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Incompatibility Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

Hazardous Polymerization Will not occur.

Hazardous Decomposition Products Carbon Dioxide, Carbon Monoxide, Hydrogen Chloride (HCl), Chlorine, Phosgene Gas and other organic materials.

Section 11. Toxicological Information**Toxicity to Animals****Trichloroethylene:**

ORAL (LD50): Acute: 4920 mg/kg [Rat]. 2402 mg/kg [Mouse].

DERMAL (LD50): Acute: 29800 mg/kg [Rabbit].

Xylene:

ORAL (LD50): Acute: 3500 mg/kg [Rat].

VAPOR (LC50): Acute: 6700 ppm 4 hour(s) [Rat].

Ethylene Glycol Monobutyl Ether:

ORAL (LD50): Acute: 1746 mg/kg [Rat]. 1519 mg/kg [Mouse]. 1414 mg/kg [Guinea pig].

DERMAL (LD50): Acute: 435 mg/kg [Rabbit]. >2000 mg/kg [Guinea pig].

VAPOR (LC50): Acute: 700 ppm 7 hour(s) [Mouse]. >633 ppm 1 hour(s) [Guinea pig].

Section 12. Ecological Information**Ecotoxicity**

Not available.

Biodegradable/OECD

Not available.

Section 13. Disposal Considerations**Waste**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Waste Stream

Code: D001, D041

Classification: - (Hazardous waste.)

Origin: - (RCRA waste.)

Consult your local or regional authorities.

Section 14. Transport Information**Proper shipping name**

Consumer Commodity

DOT Classification

ORM-D

UN number Not regulated.**Section 15. Regulatory Information****U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:

Trichloroethylene,

Xylene, Ethylbenzene

Ethylene Glycol Monobutyl Ether (Glycol Ethers)

Clean Water Act (CWA) 311: Trichloroethylene; Xylene; Ethyl Benzene

Clean air act (CAA) 112 regulated toxic substances: Trichloroethylene; Xylene; Ethyl Benzene;

Ethylene Glycol Monobutyl Ether (Glycol Ethers)

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.