



# Product List

**Product Code: 75048**

## **Single Use Battery Maintenance Twin Pack**

This kit contains 2 products. Safety Data Sheets for the following products follow this cover page:

75646 – **Battery Terminal Protector**

75697 – **Battery Cleaner with Indicator**



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## Section 1: Product & Company Identification

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**Product Name:** Battery Terminal Protector (aerosol)

**Product Number (s):** 75046, 75646

**Product Use:** Battery Terminal Protector

**Manufacturer / Supplier Contact Information:**

In United States:

CRC Industries, Inc.

885 Louis Drive

Warminster, PA 18974

[www.crcindustries.com](http://www.crcindustries.com)

1-215-674-4300(General)

(800) 521-3168 (Technical)

(800) 272-4620 (Customer Service)

In Canada:

CRC Canada Co.

2-1246 Lorimar Drive

Mississauga, Ontario L5S 1R2

[www.crc-canada.ca](http://www.crc-canada.ca)

1-905-670-2291

In Mexico:

CRC Industries Mexico

Av. Benito Juárez 4055 G

Colonia Orquídea

San Luís Potosí, SLP CP 78394

[www.crc-mexico.com](http://www.crc-mexico.com)

52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

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## Section 2: Hazards Identification

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### Emergency Overview

**DANGER:** Extremely Flammable. Harmful or Fatal if Swallowed. Contents Under Pressure.  
Appearance & Odor: Dark red viscous liquid with petroleum solvent odor

**Potential Health Effects:**

**ACUTE EFFECTS:**

**EYE:** May cause mild to moderate irritation including stinging, tearing and redness.

**SKIN:** Single, brief exposures may cause mild irritation. Frequent or prolonged contact may cause more severe irritation, defatting of the skin, and dermatitis.

**INHALATION:** High vapor concentrations are irritating to the mucous membranes and upper respiratory tract and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects, including death. May cause peripheral nervous system disorder and/or damage.

**INGESTION:** Low order of toxicity by ingestion. May cause irritation of the gastrointestinal lining and nausea. Main hazard is aspiration into the lungs during swallowing or vomiting. Small amounts aspirated into the respiratory system may cause bronchopneumonia or pulmonary edema, possibly progressing to death.

**CHRONIC EFFECTS:** Overexposure to n-hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs.

**TARGET ORGANS:** central nervous system, peripheral nervous system, respiratory system

Medical Conditions Aggravated by Exposure: skin and respiratory conditions

See Section 11 for toxicology and carcinogenicity information on product ingredients.

**Product Name: Battery Terminal Protector (aerosol)**

**Product Number (s): 75046, 75646**

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### **Section 3: Composition/Information on Ingredients**

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| <b>COMPONENT</b>                       | <b>CAS NUMBER</b>     | <b>% by Wt.</b> |
|--|-----------------------|-----------------|
| Heptane                                | 142-82-5              | 50 – 60         |
| Liquefied petroleum gas                | 68476-86-8            | 25 - 35         |
| Hexane isomers                         | 64742-49-0 / 107-83-5 | 15 – 25         |
| Petrolatum                             | 8009-03-8             | 10 – 20         |
| Xylene                                 | 1330-20-7             | 2 – 5           |
| Solvent-refined paraffinic distillates | 64741-88-4            | 2 – 5           |
| Ethylbenzene                           | 100-41-4              | 0.8             |
| n-Hexane                               | 110-54-3              | 0.4             |

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### **Section 4: First Aid Measures**

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**Eye Contact:** Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

**Skin Contact:** Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

**Inhalation:** Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

**Ingestion:** Do NOT induce vomiting. Contact a physician immediately. If victim is conscious, give 2 glasses of water.

**Note to Physicians:** Treat symptomatically. This product is an aspiration hazard. Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

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### **Section 5: Fire-Fighting Measures**

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**Flammable Properties:** This product is extremely flammable in accordance with aerosol flammability definitions. (See 16 CFR 1500.3(c)(6) ).

Flash Point: < 0°F / < -18°C (TCC)      Upper Explosive Limit: 8 (estimate)  
Autoignition Temperature: 500°F / 260°C      Lower Explosive Limit: 1 (estimate)

**Fire and Explosion Data:**

**Suitable Extinguishing Media:** Class B fire extinguishers, dry chemical, foam or CO<sup>2</sup>

**Products of Combustion:** Fumes, smoke and carbon monoxide

**Explosion Hazards:** Aerosol containers, when exposed to heat from fire, may build pressure and explode. Vapors may accumulate in a confined space and create a flammable atmosphere.

**Protection of Fire-Fighters:** Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition. Do not spray water directly on fire; product will float and could be reignited on surface of water.

**Product Name: Battery Terminal Protector (aerosol)**

**Product Number (s): 75046, 75646**

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## Section 6: Accidental Release Measures

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**Personal Precautions:** Use personal protection recommended in Section 8.

**Environmental Precautions:** Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

**Methods for Containment & Clean-up:** Dike area to contain spill. Remove all sources of ignition. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

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## Section 7: Handling and Storage

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**Handling Procedures:** Do not use product near any potential source of ignition. Avoid contact with eyes and skin. Avoid breathing vapors. Wash thoroughly after handling and before contacting food. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For product use instructions, please see the product label.

**Storage Procedures:** Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120°F / 49°C to prevent cans from rupturing. Do not store near potential sources of ignition.

**Aerosol Storage Level:** III

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## Section 8: Exposure Controls/Personal Protection

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### **Exposure Guidelines:**

| COMPONENT                              | OSHA   |         | ACGIH |      | OTHER |        | UNIT              |
|--|--------|---------|-------|------|-------|--------|-------------------|
|  | TWA    | STEL    | TWA   | STEL | TWA   | SOURCE |                   |
| Heptane                                | 500    | NE      | 400   | 500  | NE    |        | ppm               |
| Liquefied petroleum gas                | 1000   | NE      | 1000  | NE   | NE    |        | ppm               |
| Hexane isomers                         | 500(v) | 1000(v) | 500   | 1000 | NE    |        | ppm               |
| Petrolatum                             | NE     | NE      | NE    | NE   | NE    |        |                   |
| Xylene                                 | 100    | NE      | 100   | 150  | NE    |        | ppm               |
| Solvent-refined paraffinic distillates | 5      | NE      | 5     | 10   | NE    |        | mg/m <sup>3</sup> |
| Ethylbenzene                           | 100    | NE      | 20    | NE   | NE    |        | ppm               |
| n-Hexane                               | 500    | NE      | 50(s) | NE   | NE    |        | ppm               |

N.E. – Not Established      (c) – ceiling      (s) – skin      (v) – vacated

### **Controls and Protection:**

**Engineering Controls:** Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

**Respiratory Protection:** None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved

**Product Name: Battery Terminal Protector (aerosol)**

**Product Number (s): 75046, 75646**

cartridge respirator with organic vapor cartridge. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

**Eye/face Protection:** For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

**Skin Protection:** Use protective gloves such as nitrile, PVC or Viton®. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

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## Section 9: Physical and Chemical Properties

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Physical State: liquid

Color: dark red, viscous

Odor: petroleum solvent

Odor Threshold: ND

Specific Gravity: 0.727

Initial Boiling Point: 118°F / 48°C

Freezing Point: ND

Vapor Pressure: ND

Vapor Density: > 1 (air = 1)

Evaporation Rate: fast

Solubility: negligible in water

Coefficient of water/oil distribution: ND

pH: NA

Volatile Organic Compounds: wt %: 86.3                      g/L: 627.4                      lbs./gal: 5.23

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## Section 10: Stability and Reactivity

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**Stability:** Stable

**Conditions to Avoid:** Sources of ignition, temperature extremes

**Incompatible Materials:** Strong oxidizers

**Hazardous Decomposition Products:** Oxides of carbon, aldehydes and other products of incomplete combustion

**Possibility of Hazardous Reactions:** No

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## Section 11: Toxicological Information

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Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

### **Acute Toxicity:**

| <u>Component</u>                       | <u>Oral LD50 (rat)</u> | <u>Dermal LD50 (rabbit)</u> | <u>Inhalation LC50 (rat)</u> |
|--|------------------------|-----------------------------|------------------------------|
| Heptane                                | No data                | No data                     | 103 g/m <sup>3</sup> /4H     |
| Liquefied petroleum gas                | No data                | No data                     | No data                      |
| Hexane isomers                         | No data                | No data                     | No data                      |
| Petrolatum                             | > 5 g/kg               | > 2 g/kg                    | No data                      |
| Xylene                                 | 4300 mg/kg             | > 1700 mg/kg                | 5000 ppm/4H                  |
| Solvent-refined paraffinic distillates | No data                | No data                     | No data                      |
| Ethylbenzene                           | 3500 mg/kg             | > 5000 mg/kg                | 55,000 mg/m <sup>3</sup> /2H |
| n-Hexane                               | 28,710 mg/kg           | 3000 mg/kg                  | 48,000 ppm/4H                |

**Product Name: Battery Terminal Protector (aerosol)**

**Product Number (s): 75046, 75646**

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**Chronic Toxicity:**

| <u>Component</u>                       | <u>OSHA Carcinogen</u> | <u>IARC Carcinogen</u> | <u>NTP Carcinogen</u> | <u>Irritant Skin</u> | <u>Sensitizer</u> |
|--|------------------------|------------------------|-----------------------|----------------------|-------------------|
| Heptane                                | No                     | No                     | No                    | No                   | No                |
| Liquefied petroleum gas                | No                     | No                     | No                    | No                   | No                |
| Hexane isomers                         | No                     | No                     | No                    | No                   | Unknown           |
| Petrolatum                             | No                     | No                     | No                    | No                   | Unknown           |
| Xylene                                 | No                     | No                     | No                    | Skin                 | No                |
| Solvent-refined paraffinic distillates | No                     | No                     | No                    | No                   | Unknown           |
| Ethylbenzene                           | No                     | Group 2B               | No                    | Eye, Skin            | Unknown           |
| n-Hexane                               | No                     | No                     | No                    | Skin                 | No                |

Reproductive Toxicity: No information available

Teratogenicity: No information available

Mutagenicity: No information available

Synergistic Effects: No information available

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## **Section 12: Ecological Information**

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Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: n-Hexane - 96 Hr LC50 *Lepomis macrochirus*: 4.12 mg/L  
Xylene – 96 Hr LC50 *Oncorhynchus mykiss*: 13.5 – 17.3 mg/L  
Ethylbenzene – 96Hr LC50 *Pimephales promelas*: 12.1 mg/L (flow-through)

Persistence / Degradability: No information available

Bioaccumulation / Accumulation: No information available

Mobility in Environment: No information available

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## **Section 13: Disposal Considerations**

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**Waste Classification:** The dispensed liquid product is a RCRA hazardous waste for the characteristic of ignitability with a waste code of D001. (See 40 CFR Part 261.20 – 261.33)  
Empty aerosol containers may be recycled. Any liquid product should be managed as a hazardous waste.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

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## **Section 14: Transport Information**

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US DOT (ground): UN1950, Aerosols, flammable, 2.1, Limited Quantity\*\*

ICAO/IATA (air): UN1950, Aerosols, flammable, 2.1, Limited Quantity

IMO/IMDG (water): UN1950, Aerosols, 2.1, Limited Quantity

Special Provisions: \*\*This product can be classified and labeled as 'Consumer Commodity, ORM-D' for domestic ground shipping until December 31, 2020.  
If shipping as limited quantity by ground, note that shipping papers are not required.

**Product Name: Battery Terminal Protector (aerosol)**

**Product Number (s): 75046, 75646**

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## **Section 15: Regulatory Information**

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### **U.S. Federal Regulations:**

#### Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

#### Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: Xylene (100 lbs), Ethylbenzene (1000 lbs), n-hexane (5000 lbs)

**Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.**

#### Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:

|                       |     |
|-----------------------|-----|
| Fire Hazard           | Yes |
| Reactive Hazard       | No  |
| Release of Pressure   | Yes |
| Acute Health Hazard   | Yes |
| Chronic Health Hazard | Yes |

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:  
hexane (0.4%), Xylene (3.1%), Ethylbenzene (0.8%)

#### Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): n-hexane, Xylene, Ethylbenzene

#### Occupational Safety and Health Administration:

This product is regulated by the Hazard Communications Standard.

### **U.S. State Regulations:**

#### California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: Ethylbenzene

Consumer Products VOC Regulations: This product is not regulated.

#### State Right to Know:

New Jersey: 75-83-2, 110-54-3, 79-29-8, 68476-86-8, 1330-20-7, 142-82-5, 100-41-4

Pennsylvania: 107-83-5, 75-83-2, 110-54-3, 79-29-8, 68476-86-8, 1330-20-7, 142-82-5, 100-41-4

Massachusetts: 107-83-5, 75-83-2, 110-54-3, 79-29-8, 68476-86-8, 1330-20-7, 142-82-5, 100-41-4

Rhode Island: 110-54-3, 68476-86-8, 1330-20-7, 142-82-5, 100-41-4

### **Canadian Regulations:**

#### Controlled Products Regulations:

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.

WHMIS Hazard Class: A, B5, D2A, D2B

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

**Product Name: Battery Terminal Protector (aerosol)**

**Product Number (s): 75046, 75646**

**European Union Regulations:**

**RoHS Compliance:** This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

**Additional Regulatory Information:** None

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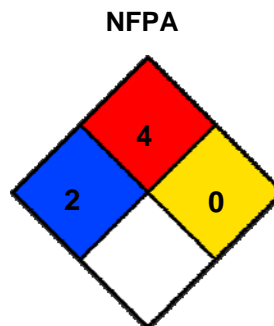
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**Section 16: Other Information**

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| HMIS® (II)    |   |
|---------------|---|
| Health:       | 2 |
| Flammability: | 4 |
| Reactivity:   | 0 |
| PPE:          | B |



Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick  
CRC #: 597P/Q  
Revision Date: 01/30/2014

Changes since last revision: part number added

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists  
CAS: Chemical Abstract Service  
CFR: Code of Federal Regulations  
DOT: Department of Transportation  
DSL: Domestic Substance List  
g/L: grams per Liter  
HMIS: Hazardous Materials Identification System  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
IMDG: International Maritime Dangerous Goods  
IMO: International Maritime Organization  
lbs./gal: pounds per gallon  
LC: Lethal Concentration  
LD: Lethal Dose

NA: Not Applicable  
ND: Not Determined  
NIOSH: National Institute of Occupational Safety & Health  
NFPA: National Fire Protection Association  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Administration  
PMCC: Pinsky-Martens Closed Cup  
PPE: Personal Protection Equipment  
ppm: Parts per Million  
RoHS: Restriction of Hazardous Substances  
STEL: Short Term Exposure Limit  
TCC: Tag Closed Cup  
TWA: Time Weighted Average  
WHMIS: Workplace Hazardous Materials Information System





# MATERIAL SAFETY DATA SHEET

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## Section 1: Product & Company Identification

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**Product Name:** Battery Cleaner with Indicator (aerosol)

**Product Number (s):** 75097, 75697

**Product Use:** Battery Cleaner

**Manufacturer / Supplier Contact Information:**

In United States:

CRC Industries, Inc.

885 Louis Drive

Warminster, PA 18974

[www.crcindustries.com](http://www.crcindustries.com)

1-215-674-4300 (General)

(800) 521-3168 (Technical)

(800) 272-4620 (Customer Service)

In Canada:

CRC Canada Co.

2-1246 Lorimar Drive

Mississauga, Ontario L5S 1R2

[www.crc-canada.ca](http://www.crc-canada.ca)

1-905-670-2291

In Mexico:

CRC Industries Mexico

Av. Benito Juárez 4055 G

Colonia Orquídea

San Luís Potosí, SLP CP 78394

[www.crc-mexico.com](http://www.crc-mexico.com)

52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

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## Section 2: Hazards Identification

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**Emergency Overview**

**CAUTION:** Contents Under Pressure.  
Appearance & Odor: Yellow foam, no odor

**Potential Health Effects:**

**ACUTE EFFECTS:**

**EYE:** May cause mild irritation including redness and burning.

**SKIN:** Prolonged or repeated contact can cause irritation and defatting of the skin.

**INHALATION:** Inhalation of a small amount is not expected to cause health effects. Prolonged exposure may cause dizziness or throat irritation.

**INGESTION:** Ingestion of a small amount is not expected to cause health effects. Ingestion of a larger amount may cause irritation to gastrointestinal tract.

**CHRONIC EFFECTS:** None known

**TARGET ORGANS:** None known

**Medical Conditions Aggravated by Exposure:** Pre-existing skin or eye disorders

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Product Name: **Battery Cleaner with Indicator** (aerosol)

Product Number (s): **75097, 75697**

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### Section 3: Composition/Information on Ingredients

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| COMPONENT               | CAS NUMBER  | % by Wt. |
|-------------------------|-------------|----------|
| Water                   | 7732-18-5   | 80 - 90  |
| 2-Butoxyethanol         | 111-76-2    | 2.9      |
| Sodium bicarbonate      | 144-55-8    | 5 - 10   |
| Detergent               | 127087-87-0 | < 1      |
| Liquefied Petroleum Gas | 68476-86-8  | 3 - 8    |

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### Section 4: First Aid Measures

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Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: Do not induce vomiting. Call physician.

*Note to Physicians:* This product contains 2-Butoxyethanol which, if ingested in significant quantities, may result in red blood cell hemolysis.

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### Section 5: Fire-Fighting Measures

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**Flammable Properties:** This product is non-flammable in accordance with aerosol flammability definitions. (See 16 CFR 1500.3(c)(6) ).

|                           |      |                        |    |
|---------------------------|------|------------------------|----|
| Flash Point:              | None | Upper Explosive Limit: | ND |
| Autoignition Temperature: | None | Lower Explosive Limit: | ND |

#### **Fire and Explosion Data:**

Suitable Extinguishing Media: Use extinguishing agents appropriate for surrounding fire.

Products of Combustion: None

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and explode.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

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### Section 6: Accidental Release Measures

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Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

**Product Name: Battery Cleaner with Indicator (aerosol)**

**Product Number (s): 75097, 75697**

Methods for Containment & Clean-up: Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

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## Section 7: Handling and Storage

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Handling Procedures: Use with adequate ventilation. Avoid contact with skin and eyes. Wash hands after use. Do not expose aerosol containers to heat or flame. Do not incinerate container. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120°F / 49°C to prevent cans from rupturing.

Aerosol Storage Level: I

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## Section 8: Exposure Controls/Personal Protection

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### Exposure Guidelines:

| COMPONENT               | OSHA   |      | ACGIH |      | OTHER |        | UNIT |
|-------------------------|--------|------|-------|------|-------|--------|------|
|                         | TWA    | STEL | TWA   | STEL | TWA   | SOURCE |      |
| Water                   | NE     | NE   | NE    | NE   | NE    |        |      |
| 2-Butoxyethanol         | 50 (s) | NE   | 20    | NE   | NE    |        | ppm  |
| Sodium bicarbonate      | NE     | NE   | NE    | NE   | NE    |        |      |
| Detergent               | NE     | NE   | NE    | NE   | NE    |        |      |
| Liquefied Petroleum Gas | 1000   | NE   | 1000  | NE   | NE    |        | ppm  |

N.E. – Not Established      (c) – ceiling      (s) – skin      (v) – vacated

### Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Product Name: **Battery Cleaner with Indicator (aerosol)**

Product Number (s): **75097, 75697**

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## Section 9: Physical and Chemical Properties

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Physical State: liquid

Color: yellow foamy

Odor: no odor

Odor Threshold: ND

Specific Gravity: 1.04

Initial Boiling Point: ~ 212°F / 100°C

Freezing Point: ~ 32°F / 0°C

Vapor Pressure: ND

Vapor Density: > 1 (air = 1)

Evaporation Rate: slow

Solubility: soluble in water

Coefficient of water/oil distribution: ND

pH: 8.5

Volatile Organic Compounds: wt %: 7.9                      g/L: 82.16                      lbs./gal: 0.68

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## Section 10: Stability and Reactivity

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Stability: Stable

Conditions to Avoid: Keep away from heat, direct sunlight, open flames or sparks. Dropping of containers may cause bursting.

Incompatible Materials: Strong oxidizers

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide

Possibility of Hazardous Reactions: No

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## Section 11: Toxicological Information

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Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

### **Acute Toxicity:**

| <u>Component</u>        | <u>Oral LD50 (rat)</u> | <u>Dermal LD50 (rabbit)</u> | <u>Inhalation LC50 (rat)</u> |
|-------------------------|------------------------|-----------------------------|------------------------------|
| Water                   | > 90 mL/kg             | No data                     | No data                      |
| 2-Butoxyethanol         | 470 mg/kg              | 220 mg/kg                   | 450 ppm/4H                   |
| Sodium bicarbonate      | 4220 mg/kg             | No data                     | No data                      |
| Detergent               | 3000 mg/kg             | 4400 mg/kg                  | No data                      |
| Liquefied Petroleum Gas | No data                | No data                     | No data                      |

### **Chronic Toxicity:**

| <u>Component</u>        | <u>OSHA Carcinogen</u> | <u>IARC Carcinogen</u> | <u>NTP Carcinogen</u> | <u>Irritant</u>                        | <u>Sensitizer</u> |
|-------------------------|------------------------|------------------------|-----------------------|--|-------------------|
| Water                   | No                     | No                     | No                    | No                                     | No                |
| 2-Butoxyethanol         | No                     | No                     | No                    | E (severe) /<br>S (mild) /<br>R (mild) | No                |
| Sodium bicarbonate      | No                     | No                     | No                    | None                                   | No                |
| Detergent               | No                     | No                     | No                    | E (severe)                             | No                |
| Liquefied Petroleum Gas | No                     | No                     | No                    | No                                     | No                |

E – Eye      S – Skin      R - Respiratory

**Product Name: Battery Cleaner with Indicator (aerosol)**

**Product Number (s): 75097, 75697**

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Reproductive Toxicity: No information available  
Teratogenicity: No information available  
Mutagenicity: No information available  
Synergistic Effects: No information available

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## Section 12: Ecological Information

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Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: 2-Butoxyethanol 96 Hr LC50, Bluegill sunfish: 1490 mg/L  
24 Hr LC50, daphnia: 1720 mg/L  
Persistence / Degradability: No information available  
Bioaccumulation / Accumulation: No information available  
Mobility in Environment: No information available

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## Section 13: Disposal Considerations

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**Waste Classification:** The dispensed liquid product is not a RCRA hazardous waste. (See 40 CFR Part 261.20 – 261.33)  
Empty aerosol containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

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## Section 14: Transport Information

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US DOT (ground): UN1950, Aerosols, non-flammable, 2.2, Limited Quantity  
ICAO/IATA (air): UN1950, Aerosols, non-flammable, 2.2, Limited Quantity  
IMO/IMDG (water): UN1950, Aerosols, 2.2, Limited Quantity  
Special Provisions: None

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## Section 15: Regulatory Information

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### **U.S. Federal Regulations:**

#### Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

#### Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: None

**Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.**

#### Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

**Product Name: Battery Cleaner with Indicator (aerosol)**

**Product Number (s): 75097, 75697**

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|                                    |                       |     |
|------------------------------------|-----------------------|-----|
| Section 311/312 Hazard Categories: | Fire Hazard           | No  |
|                                    | Reactive Hazard       | No  |
|                                    | Release of Pressure   | Yes |
|                                    | Acute Health Hazard   | Yes |
|                                    | Chronic Health Hazard | No  |

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:  
2-Butoxyethanol (glycol ethers): 2.9%

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

Occupational Safety and Health Administration (OSHA):

This product is regulated under the Hazard Communication Standard.

**U.S. State Regulations:**

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: None

Consumer Products VOC Regulations: This product is not regulated.

State Right to Know:

New Jersey: 111-76-2, 68476-86-8  
Pennsylvania: 111-76-2, 68476-86-8  
Massachusetts: 111-76-2, 68476-86-8  
Rhode Island : 111-76-2, 68476-86-8

**Canadian Regulations:**

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

WHMIS Hazard Class: A, D2B

**European Union Regulations:**

RoHS Compliance: This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

**Additional Regulatory Information:** None

**Product Name: Battery Cleaner with Indicator (aerosol)**

**Product Number (s): 75097, 75697**

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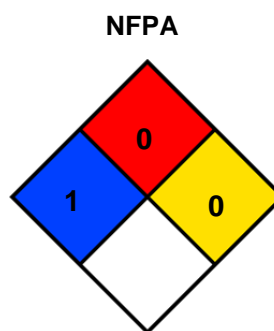
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## Section 16: Other Information

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| HMIS® (II)    |   |
|---------------|---|
| Health:       | 1 |
| Flammability: | 0 |
| Reactivity:   | 0 |
| PPE:          | B |



Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick  
CRC #: 530C  
Revision Date: 01/30/2014

Changes since last revision: Part number added

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists  
CAS: Chemical Abstract Service  
CFR: Code of Federal Regulations  
DOT: Department of Transportation  
DSL: Domestic Substance List  
g/L: grams per Liter  
HMIS: Hazardous Materials Identification System  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
IMDG: International Maritime Dangerous Goods  
IMO: International Maritime Organization  
lbs./gal: pounds per gallon  
LC: Lethal Concentration  
LD: Lethal Dose

NA: Not Applicable  
ND: Not Determined  
NIOSH: National Institute of Occupational Safety & Health  
NFPA: National Fire Protection Association  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Administration  
PMCC: Pensky-Martens Closed Cup  
PPE: Personal Protection Equipment  
ppm: Parts per Million  
RoHS: Restriction of Hazardous Substances  
STEL: Short Term Exposure Limit  
TCC: Tag Closed Cup  
TWA: Time Weighted Average  
WHMIS: Workplace Hazardous Materials Information System