



# MATERIAL SAFETY DATA SHEET

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## Section 1: Product & Company Identification

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

**Product Number (s):** 03176, 83176

**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.

As defined by OSHA's Hazard Communication Standard, this product is hazardous.

Appearance & Odor: Clear liquid, 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 (aerosol)**

**Product Number (s): 03176, 83176**

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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>
Water	7732-18-5	80 - 90
2-Butoxyethanol	111-76-2	2.9
Sodium bicarbonate	144-55-8	5 - 10
Detergent	various	< 1
Liquefied Petroleum Gas	68476-86-9	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 a 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  
Autoignition Temperature: None

Upper Explosive Limit: ND  
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 (aerosol)**

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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 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. Air monitoring is needed to determine actual employee exposure levels. Use a NIOSH-approved 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.

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## Section 9: Physical and Chemical Properties

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Physical State: liquid

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

**Product Number (s): 03176, 83176**

Color: clear  
Odor: no odor  
Odor Threshold: ND  
Specific Gravity: 1.04  
Initial Boiling Point: ~ 212°F  
Freezing Point: ~ 32°F  
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) / S (mild) / R (mild)	No
Sodium bicarbonate	No	No	No	No	No
Detergent	No	No	No	E (severe) / Se (mild)	No
Liquefied Petroleum Gas	No	No	No	No	No

E – Eye      S – Skin      R - Respiratory

Reproductive Toxicity: No information available

Teratogenicity: No information available

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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. Pressurized containers are a D003 reactive 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): Consumer Commodity, ORM-D

ICAO/IATA (air): Consumer Commodity, ID8000, 9

IMO/IMDG (water): Aerosols, UN1950, 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

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

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

**Product Number (s): 03176, 83176**

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

**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:**

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, D1A, D1B, D2B

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

**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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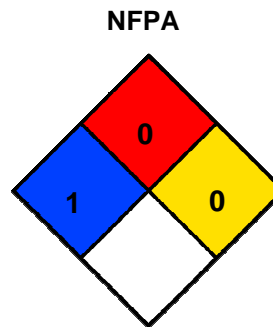
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**Section 16: Other Information**

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



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

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Prepared By: Michelle Rudnick

CRC #: 530B

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Changes since last revision: MSDS reformatted to meet the requirements of the Canadian Controlled Products Regulations.

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