

**MSDS - Material Safety Data Sheet****Product Name: BATTERY TERMINAL CLEANER**

MSDS No.: BTC4

**I. Basic Information:****Manufacturer:** RADIATOR SPECIALTY COMPANY**Address:** 600 RADIATOR ROAD**City, ST Zip:** INDIAN TRAIL, NC 28079**Country:****Contact:** Robert Geer**Information Telephone Number:** 704-684--181 1**Emergency Contact:** Rocky Mountain Poision Control Center**Emergency Telephone Number:** 303-623-5716**Emergency Restrictions:****Product Name:** BATTERY TERMINAL CLEANER**MSDS No.:** BTC4**Issue Date:** 10/09/2008**Supersedes Date:** 06/15/2005**II. Hazards Identification:****EMERGENCY OVERVIEW**

Caution: Contents Under Pressure.

Level 1 Aerosol

**OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Potential Health Effects****Route(s) of Entry:**

Absorption, Inhalation, and Ingestion.

**Health Hazards (Acute and Chronic):**

See signs and symptoms below

**Signs and Symptoms:**

Eye Contact: Direct spray of vapors may be irritating or harmful to eyes.

Skin Contact: Product may cause irritation due to defatting of skin.

Inhalation: High concentration of vapors may irritate nose and throat and cause

headaches and nausea.

Ingestion: Causes irritation, narcosis, liver and kidney damage.

**Medical Conditions Generally Aggravated by Exposure:**

Conditions aggravated by exposure: Liver and kidney disease, nervous system.

**Other Health Warnings:**

None Known

**Potential Environmental Effects**

Not Available

**III. Composition/Information on Ingredients:**

Chemical Name	CAS No.	% Range	Trade Secret
2-Butoxyethanol	111-76-2	1-5	
Butane	106-97-8	1-5	
Propane	74-98-6	1-3	

**IV. First Aid Measures:****Emergency and First Aid Procedures:**

Eye Contact: Flush eyes with water for 15 minutes while lifting upper and lower eyelid. Get prompt medical attention.

Skin Contact: Wash with soap and water. If irritation persists, get prompt medical attention.

Inhalation: Move to fresh air. If breathing becomes difficult, give oxygen and get prompt medical attention.

Ingestion: Drink water or milk. Call Poison Control Center, physician, or hospital emergency room immediately.

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**Note to Physicians:**

N/D

### V. Fire Fighting Measures:

**Suitable Extinguishing Media:**

Water Fog, Foam, Carbon Dioxide, Dry Chemical

**Unsuitable Extinguishing Media:**

N/D

**Products of Combustion:**

Exposure to temperatures above 120°F may cause containers to burst. Do not store near fire, sparks, or flame. Do not puncture or incinerate.

**Protection of Firefighters:**

Wear self-contained positive pressure breathing apparatus and protective clothes. Use shield to protect from rupturing and venting containers. At elevated temperatures containers may vent, rupture or burst, even violently

### VI. Accidental Release Measures:

**Personal Precautions:**

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

**Environmental Precautions:**

Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred.

**Methods for Containment:**

Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc).

**Methods for Cleanup:**

Using a non-metallic scoop, place contaminated material into an approved chemical waste container. Where possible, vacuum spilled liquid using an explosion proof vacuum to recover material.

**Other Information:**

If run-off occurs, notify proper authorities that a spill has occurred. Use appropriate protective equipment.

### VII. Handling and Storage:

**Handling Precautions:**

Use with adequate ventilation and proper protective equipment.  
Do not use or store near fire, sparks, or open flame. Do not puncture or incinerate container. Exposure to temperatures above 120° may cause container to vent, rupture, or burst.

**Storage Precautions:**

KEEP AWAY FROM CHILDREN AND ANIMALS!

### VIII. Exposure Controls/Personal Protection:

Chemical Name	OSHA PEL	ACGIH TLV	Other Limits
2-Butoxyethanol	25 ppm	25 ppm	Not Available
Propane	N/E	1000 ppm	Not Available
Butane	N/E	800 ppm	Not Available

**Engineering Controls:**

See Section above for applicable exposure limits. If TLV is exceeded, wear NIOSH approved respirator.

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### Personal Protective Equipment:

Use with adequate ventilation. For prolonged exposure wear protective safety glasses, gloves, and apron.

### **IX. Physical and Chemical Properties:**

**Boiling Point:** 212°F

**Boiling Range:** Not Available

**Solubility In Water:** Soluble

**Flash Point:** N/A

**Odor Threshold:** Not Available

**Vapor Density (AIR = 1):** N/A

**pH Range:** Not Available

**Decomposition Temp:** Not Available

**Lower Explosive Limit:** N/A

**Specific Gravity (H2O = 1):** 1.00

**Other Information:** pH 7.5-8.5

Flammability per Flame Extension: Non-Flammable

VOC Content: 9.9% (Wt)

**Melting Point:** N/A

**Freezing Point:** Not Available

**Evaporation Rate (Butyl Acetate = 1):** <1

**Flash Point Method:** N/A

**Appearance and Odor:** Light foamy spray with light solvent odor

**Vapor Pressure (mm Hg.):** N/A

**Partition Coefficient:** Not Available

**Auto-Ignition Temp:** Not Available

**Upper Explosive Limit:** N/A

### **X. Stability and Reactivity:**

#### Stability:

Stable

#### Conditions to Avoid:

See Incompatible Materials below.

#### Incompatible Materials:

Avoid contact with strong oxidizing agents

#### Hazardous Decomposition Products:

Carbon Monoxide, Carbon Dioxide, and Hydrocarbons.

#### Possibility of Hazardous Reactions:

Will not occur.

### **XI. Toxicological Information:**

N/D

### **XII. Ecological Information:**

N/D

### **XIII. Disposal Considerations:**

DISPOSAL: This container may be recycled in aerosol recycling centers when empty. Before offering for recycling, empty the can by using the product according to the label. DO NOT PUNCTURE! If recycling is not available, wrap the container and discard in the trash. Dispose of unused product in accordance with all local and state government laws and regulations.

### **XIV. Transport Information:**

**Shipping Name:** Not Available

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DOT Hazard Class: Not Available

DOT Subsidiary Hazard Class: Not Available

UN/NA#: Not Available

Packing Group: Not Available

**Transportation Information:**

Shipping Name: Consumer Commodity  
 DOT Hazard Class: ORM-D

The DOT description is provided to assist in the proper shipping classification of this product and may not be suitable for international and air shipping purposes.

ICAO/IATA (US)  
 UN number: UN1950  
 Shipping Name: Aerosols  
 Class: 2.1

International:

ICAO/IATA  
 UN number: UN1950  
 Shipping Name: Aerosols  
 Class: 2.1

IMDG  
 UN number: UN1950  
 Shipping Name: Aerosols  
 Class: 2.1  
 EMS: F-D, S-U

**XV. Regulatory Information:**

SARA 313 Reportable Chemicals.  
 2 Butoxyethanol 111-76-2

USA TSCA: All components of this material are listed on the US TSCA Inventory.

State RTK Chemicals:  
 2 Butoxyethanol 111-76-2

**XVI. Other Information:**

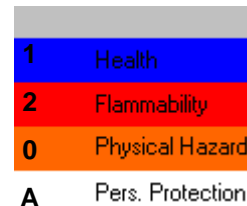
**Chemical State:**     Liquid     Gas     Solid  
**Chemical Type:**     Pure     Mixture  
**Hazard Category:**  
 Acute     Chronic     Fire  
 Pressure     Reactive



**Additional Manufacturer Warnings:**

Do not used in confined area without proper ventilation. Contact lenses may cause further damage in case of splash into eye. KEEP AWAY FROM CHILDREN AND ANIMALS!

N/E: Not Established  
 N/D: Not Determined  
 N/A: Not Applicable  
 N/AV: Not Available



**Additional Product Information:**

While Radiator Specialty Company believes this data is accurate as of the revision date, we make no warranty with respect to the data and we expressly disclaim all liability for reliance thereon. The data is offered solely for information, investigation, and verification. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this MSDS. The user is responsible for full compliance.