

MSDS - Material Safety Data Sheet**Product Name: ULTRA LOW VOC BRAKE CLEANER**

MSDS No.: M710

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:** ULTRA LOW VOC BRAKE CLEANER**MSDS No.:** M710**Issue Date:** 10/27/2008**Supersedes Date:** 03/02/2004**II. Hazards Identification:****EMERGENCY OVERVIEW**

Danger: Extremely Flammable. Liquid and Vapor may cause a Flash Fire. Harmful or fatal if swallowed. Vapor harmful. Eye and skin irritant. Contents under pressure.

Level 2 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:**

Inhalation, ingestion and eye/skin contact

Health Hazards (Acute and Chronic):

This material shortens the time of onset or worsens the liver and kidney damage induced by other chemicals.

Signs and Symptoms:

Eye Contact: Irritant. Prolonged contact may cause conjunctivitis.

Skin Contact: Irritant. Defatting of tissue, dermatitis may occur.

Inhalation: Irritant to mucous membranes. Repeated exposure may cause narcosis..

Ingestion: HARMFUL OR FATAL IF SWALLOWED. May cause burns to mouth, throat & stomach.

Medical Conditions Generally Aggravated by Exposure:

Inhalation of high concentrations, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias.

Sympathomethic drugs may initiate cardiac arrhythmias in persons exposed. This material contains a substance(s) that is an aspiration hazard.

Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. Pre-existing disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung, kidney, auditory system. Individuals with pre-existing heart disorders may be more susceptible to arrhythmias if exposed.

Other Health Warnings:

Vomiting and subsequent aspiration into the lungs may lead to chemical pneumonia and pulmonary edema which is a potentially fatal condition.

Potential Environmental Effects

Not Available

III. Composition/Information on Ingredients:

Chemical Name	CAS No.	% Range	Trade Secret
2-Propanone	67-64-1	60.0-100.0	
Carbon dioxide	124-38-9	7.0-13.0	

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

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Eye Contact: Flush eyes with clean water for 15 minutes while lifting eyelids. Get prompt medical attention.

Skin Contact: Wash with soap and water thoroughly. If adverse effects persist, get prompt medical attention. Launder contaminated clothing before reuse.

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

Ingestion: DO NOT INDUCE VOMITING! Call Poison Control Center, physician, or hospital emergency room immediately.

Note to Physicians:

N/E

V. Fire Fighting Measures:

Suitable Extinguishing Media:

Alcohol resistant Foam, Carbon Dioxide, Dry Chemical

Unsuitable Extinguishing Media:

Water may be ineffective for extinguishment unless used under favorable conditions by experienced.

Products of Combustion:

May form carbon dioxide and carbon monoxide.

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. Run off to sewer may create fire or explosion hazard.

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:

Eliminate all ignition sources. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. If run-off occurs, notify proper authorities as required that a spill has occurred.

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:

If exposure exceed occupational exposure limits, use a NIOSH approved respirator to prevent over-exposure.

VIII. Exposure Controls/Personal Protection:

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Chemical Name	OSHA PEL	ACGIH TLV	Other Limits
2-Propanone	1000 ppm	750 ppm	Not Available
Carbon dioxide	N/AV	5000 ppm	Not Available

Engineering Controls:

See Section above for applicable exposure limits. In restricted areas, use approved chemical/mechanical filters designed to remove a combination of particles and vapor. In confined areas, use approved air line type respirator or hood. A self-contained breathing apparatus is required for vapor concentrations above TLV limits.

Personal Protective Equipment:

Maintain adequate ventilation. Avoid prolonged or repeated breathing of vapors. For prolonged exposure wear protective safety glasses, gloves, and apron.

IX. Physical and Chemical Properties:**Boiling Point:** 133°F**Boiling Range:** N/D**Solubility In Water:** soluble**Flash Point:** -4°F**Odor Threshold:** N/D**Vapor Density (AIR = 1):** > 1**pH Range:** N/A**Decomposition Temp:** N/D**Lower Explosive Limit:** 2.6**Specific Gravity (H2O = 1):** 0.88**Other Information:** VOC Content: 0%**Melting Point:** N/A**Freezing Point:** -139°F**Evaporation Rate (Butyl Acetate = 1):** >1**Flash Point Method:** TCC**Appearance and Odor:** Clear liquid spray with aromatic odor**Vapor Pressure (mm Hg.):** 185 @ 65°F**Partition Coefficient:** N/D**Auto-Ignition Temp:** 869°F**Upper Explosive Limit:** 12.8**X. Stability and Reactivity:****Stability:**

Product is stable.

Conditions to Avoid:

See Incompatible materials below

Incompatible Materials:

Avoid contact with strong oxidizer, acids, alkalis, reducing agents..

Hazardous Decomposition Products:

Carbon dioxide, carbon monoxide.

Possibility of Hazardous Reactions:

Will not occur

XI. Toxicological Information:

N/D

XII. Ecological Information:

N/D

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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, state government and federal laws and regulations.

XIV. Transport Information:

Shipping Name: Not Available

DOT Hazard Class: Not Available

DOT Subsidiary Hazard Class: Not Available

UN/NA#: Not Available

Packing Group: Not Available

Transportation Information:

DOT Hazard Class: ORM-D

Shipping Name: Consumer Commodity

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)

Shipping Name: Aerosols

Class: 2.2

UN number: UN1950

International:

ICAO/IATA

UN number: UN1950

Shipping Name: Aerosols

Class: 2.2

IMDG

UN number: UN1950

Shipping Name: Aerosols

Class: 2.2

EmS: F-D, S-U

XV. Regulatory Information:

SARA 313 Reportable Chemicals:

None

USA TSCA: All chemicals used are listed on the TSCA Inventory.

Warning: This product contains a chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

Product is compliant with SCAQMD Rule 1171.

State RTK Chemicals:

2-Propanone 67-64-1

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XVI. Other Information:

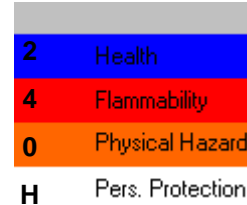
- Chemical State:** Liquid Gas Solid
- Chemical Type:** Pure Mixture
- Hazard Category:**
- Acute Chronic Fire Reactive
- Pressure



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.