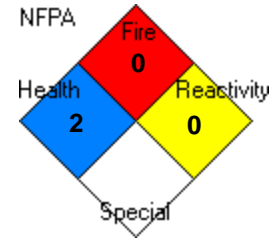


MSDS - Material Safety Data Sheet**Product Name: BRAKE CLEANER**

MSDS No.: M720

I. Basic Information:

Manufacturer: RADIATOR SPECIALTY COMPANY
Address: P.O. BOX 159, 600 RADIATOR ROAD
City, ST Zip: INDIAN TRAIL, NC 28079
Emergency Contact: Rocky Mountain Poison Control Center
Emergency Telephone Number: 303-623-5716
Contact: Robert Geer
Information Telephone Number: 704-688-3430

**Last Update:** 02/20/2003**Chemical State:** Liquid Gas Solid**Chemical Type:** Pure Mixture

2	Health
0	Flammability
0	Reactivity
H	Pers. Protection

II. Ingredients: Trade Secret

CAS No.	Chemical Name	% Range	EHS		IARC		SARA		OSHA PEL	ACGIH TLV	Other Limits
			NTP		SUB Z	313					
124389	Carbon dioxide	1-3								5000 ppm	
127184	Tetrachloroethylene	90-100					X	100 ppm		25 ppm	

III. Hazardous Identification:**Hazard Category:**
 Acute Chronic Fire Pressure Reactive
Hazardous Identification Information:

Danger: Harmful or Fatal if Swallowed. Vapor harmful. Eye and Skin Irritant. Contents Under Pressure.

Level 1 Aerosol

IV. First Aid Measures:**Route(s) of Entry:**

Absorption, inhalation, and ingestion

Health Hazards (Acute and Chronic):

Affects of overexposure are:

Acute: Liquid splashed on eyes and skin can result in discomfort, pain and irritation. Inhalation can cause irritation of the respiratory tract, dizziness, nausea, headache, loss of coordination and equilibrium, unconsciousness and even death in confined or poorly ventilated areas. Ingestion may result in irritation of the mouth and GI tract.

Prolonged exposure above the OSHA permissible exposure limit may complicate existing liver and kidney diseases.

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.

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Medical Conditions Generally Aggravated by Exposure:

May complicate existing liver and kidney diseases.

Emergency and First Aid Procedures:

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. If breathing stops, give artificial respiration and get prompt medical attention.

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

Aspiration of vomitus into the lungs can cause pneumonitis, which can be fatal. Do not administer adrenaline or other sympathomimetic drugs to persons overexposed to Perchloroethylene.

Other Health Warnings:

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

V. Fire Fighting Measures:

Flash Point: None

Lower Explosive Limit:

Upper Explosive Limit:

F.P. Method: N/A

Fire Extinguishing Media: Water Fog, Foam, Carbon Dioxide, Dry Chemical

Special Fire Fighting Procedures:

Wear self-contained positive pressure breathing apparatus and protective clothes. Cool containers with a water fog. Use shield to protect from venting, rupturing, and venting containers.

Unusual Fire and Explosion:

Contents under pressure. May explode when heated. Vapors of this product may present a future health hazard in poorly ventilated areas. May liberate corrosive hydrochloric acid or toxic phosgene fumes.

VI. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc). Shovel up and place contaminated material into an approved chemical waste container. 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.

VII. Handling and Storage:

Precautions to be Taken:

Handling: Use with adequate ventilation and proper protective equipment.

Do not use or store near fire, sparks, or flame. Do not puncture or incinerate container. Exposure to temperatures above 120° may cause container to vent, rupture, or burst.

Other Precautions:

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Vapors are heavier than air and will collect in low areas. This material or its vapors when in contact with flames, hot glowing surfaces or electric arcs can decompose to form hydrogen chloride gas and possible traces of phosgene. Avoid contamination with water supplies.

VIII. Exposure Controls/Personal Protection:

Ventilation Requirements:

See Section 2 for applicable exposure limits. Maintain adequate ventilation. Avoid breathing vapors. In restricted areas, use respirator with approved chemical filters designed to remove vapor. In confined areas, use approved air line type respirator or hood. A self-contained breathing apparatus is required for vapor concentrations above TLV limit.

Personal Protective Equipment:

See Section 2 for applicable exposure limits. For prolonged exposure wear protective safety glasses, gloves, and apron.

IX. Physical and Chemical Properties:

Boiling Point: 250°F

Melting Point: N/A

Evaporation Rate (Butyl Acetate = 1): 1.66

Vapor Pressure (mm Hg.): 13

Specific Gravity (H₂O = 1): 1.61000

Vapor Density (AIR = 1): 5.7

Solubility In Water: Insoluble

Appearance and Odor: Colorless volatile liquid with ether-like odor

Other Information:

X. Stability and Reactivity:

Stability:

Stable

Incompatibility (Materials to Avoid):

Water, alkalis, powdered metals (esp. zinc) aluminum and amines. Sparks, flames, electric arcs, and or hot metal surfaces.

Decomposition/By Products:

In the presence of water: hydrochloric acid. Ignition sources and hot metals surfaces: phosgene and chlorine. Flames, welding, and high temperatures induce decomposition.

Hazardous Polymerization:

Will not occur.

XI. Toxicological Information:

ACUTE INHALATION LC50: (rats) 5040 ppm for 8 hours. Moderately toxic.

ACUTE DERMAL LD50: (rabbit) > 3228 mg/kg. Slight to very low toxicity

SKIN IRRITATION: Mildly irritating.

EYE IRRITATION: Mildly irritating.

ACUTE ORAL LD50: (rats) 2629 mg/kg. Moderately toxic.

XII. Ecological Information:

Toxic to aquatic life

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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:

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

XV. Regulatory Information:

USA TSCA: All chemicals used are listed on the TSCA Inventory.
CERCLA RQ: 1000 lbs
SARA 302: Not listed as a Extremely Hazardous Substance
SARA 311/312 HAZARD CLASS: Acute, Chronic
SARA 313 REPORTABLE: See Section 2 for SARA Reportable Chemicals.
PROPOSITION 65 WARNING: This product contains a chemical known to the State of California to cause Cancer.
NEW JERSEY RIGHT-TO-KNOW: Tetrachloroethylene

XVI. Other Information:

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!

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