

MSDS - Material Safety Data Sheet**Product Name: PRO-SERIES NON-CHLORINATED BRAKE CLEANER**

MSDS No.: M705

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:** RMPDC (877-740-5015)**Emergency Telephone Number:** 303-623-5716**Emergency Restrictions:****Product Name:** PRO-SERIES NON-CHLORINATED BRAKE CLEANER**MSDS No.:** M705**Issue Date:** 10/11/2011**Supersedes Date:** 11/16/2009**II. Hazards Identification:****EMERGENCY OVERVIEW**

Danger: Poison, May be fatal or cause blindness if swallowed. Extremely Flammable. Liquid and Vapor may cause a Flash Fire. Vapor harmful. Eye and skin irritant. Contents under pressure. Can not be made non-poisonous.

Level 3 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, eye/skin contact

Health Hazards (Acute and Chronic):

Long term exposure may cause lung, liver, and kidney damage. Also see signs and symptoms below.

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
Acetone	67-64-1	15.0 - 40.0	
Carbon dioxide	124-38-9	3.0 - 7.0	
Heptane	142-82-5	30.0 - 60.0	
Methanol	67-56-1	10.0 - 30.0	

MSDS - Material Safety Data Sheet

Product Name: PRO-SERIES NON-CHLORINATED BRAKE CLEANER

MSDS No.: M705

IV. First Aid Measures:

Emergency and First Aid Procedures:

Eye Contact: Flush eyes with clean water for 15 minutes while lifting eyelids and 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 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:

Water Fog, Foam, Carbon Dioxide, Dry Chemical

Unsuitable Extinguishing Media:

Do not use forced water stream as this could cause the fire to spread. Use shield to protect from venting, rupturing, and venting containers.

Products of Combustion:

Carbon dioxide, 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:

All equipment used with handling the concentrate must be grounded. 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:

Avoid contact with eyes. Avoid prolonged or repeated breathing of vapors. If exposure exceed occupational exposure limits, use a NIOSH approved respirator to prevent over-exposure.

VIII. Exposure Controls/Personal Protection:

MSDS - Material Safety Data Sheet**Product Name: PRO-SERIES NON-CHLORINATED BRAKE CLEANER**

MSDS No.: M705

Chemical Name	OSHA PEL	ACGIH TLV	Other Limits
Heptane	500 ppm	400 ppm	Not Available
Acetone	750 ppm	750 ppm	NJ & PA RTK
Methanol	200 PPM	200 PPM	Not Available
Carbon dioxide	N/AV	5000 ppm	Not Available

Engineering Controls:

See Section 2 for applicable exposure limits. Maintain adequate ventilation.

Avoid breathing vapors. 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:

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

IX. Physical and Chemical Properties:**Boiling Point:** N/D**Boiling Range:** N/D**Solubility In Water:** Slightly soluble**Flash Point:** < 0°F**Odor Threshold:** N/D**Vapor Density (AIR = 1):** > 1**pH Range:** N/A**Decomposition Temp:** N/D**Lower Explosive Limit:** 1.8**Specific Gravity (H2O = 1):** 0.74**Other Information:** Flash Point of the Propellant is - 40°F

Boiling Point range is -40 - 150°C

VOC Content: 52.53% (Wt.)

Melting Point: N/A**Freezing Point:** N/D**Evaporation Rate (Butyl Acetate = 1):** >1**Flash Point Method:** TCC**Appearance and Odor:** Clear liquid spray with petroleum odor**Vapor Pressure (mm Hg.):** N/D**Partition Coefficient:** N/D**Auto-Ignition Temp:** N/D**Upper Explosive Limit:** 7.5**X. Stability and Reactivity:****Stability:**

Product is stable.

Conditions to Avoid:

See Incompatible Material below.

Incompatible Materials:

Avoid contact with strong oxidizers.

Hazardous Decomposition Products:

Carbon dioxide, carbon monoxide.

Possibility of Hazardous Reactions:

Will not occur

XI. Toxicological Information:

N/D

XII. Ecological Information:

N/D

MSDS - Material Safety Data Sheet**Product Name: PRO-SERIES NON-CHLORINATED BRAKE CLEANER**

MSDS No.: M705

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

UN/NA#: Not Available

DOT Subsidiary Hazard Class: 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: 2.1

UN number: UN1950

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:

See Section 2 for SARA Reportable Chemicals.

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.

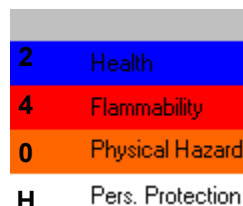
XVI. Other Information:Chemical State: Liquid Gas SolidChemical Type: Pure Mixture

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



MSDS - Material Safety Data Sheet***Product Name: PRO-SERIES NON-CHLORINATED BRAKE CLEANER******MSDS No.: M705*****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.