View Section: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER NAME: RADIATOR SPECIALTY COMPANY

ADDRESS **600 RADIATOR ROAD**

MSDS Manufacturer Number: ISSUED: 09/30/2008 SUPERSEDES: 01/12/2006

PRODUCT NAME: NON-CHLORINATED BRAKE CLEANER (UPC: 078698130774) (AAP SKU:

7040036)

TRADE NAME: NON-CHLORINATED BRAKE CLEANER (UPC: 078698130774) (AAP SKU:

704-684--1811

Product Information: EMERGENCY PHONE: 303-623-5716

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS#	Ingredient Percent
2-Propanone	67-64-1	40.0 - 70.0 by Weight
Heptane	142-82-5	10.0 - 30.0 by Weight
Methanol	67-56-1	10.0 - 30.0 by Weight
Propane	74-98-6	7.0 - 13.0 by Weight

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Danger: Extremely Flammable. Liquid and Vapor may cause a Flash Fire.

Poison, Harmful or fatal if swallowed. Vapor harmful. Eye and skin

irritant. Contents under pressure. Level 3 Aerosol

PHYSICAL HAZARDS: See signs & symptoms below

POTENTIAL ENVIRONMENTAL Not Available

EFFECTS: **ROUTES OF ENTRY:**

Inhalation, eye/skin contact

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.

AGGRAVATION OF CONDITIONS:

OTHER HEALTH HAZARD INFORMATION:

Pre-existing conditions, see other health warnings.

Vomiting and subsequent aspiration into the lungs may lead to chemical pneumonia and pulmonary edema which is a potentially fatal condition. 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 apiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. Preexisting 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.

SECTION 4 - FIRST AID MEASURES

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/D

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water Fog, Foam, Carbon Dioxide, Dry Chemical

UNSUITABLE 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.

HAZARDOUS COMBUSTION

PROTECTIVE EQUIPMENT:

Carbon dioxide, carbon monoxide, and hydrocarbons.

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

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONNEL PRECAUTIONS: Persons not wearing protective equipment should be excluded from

area of spill until clean-up has been completed.

ENVIRONMENTAL DATA: 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.

Containment Procedures: Dike or contain spill and absorb with inert materials (sand, sawdust,

absorbent sweeping compounds, rags, etc).

SPILL CLEAN UP MEASURES: Using a non-metalic scoop, place contaminated material into an

approved chemical waste container. Where possible, vacuum spilled

liquid using an explosion proof vacuum to recover material.

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

SECTION 7 - HANDLING and STORAGE

HANDLING:

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 deg may cause container to vent, rupture, or burst. Concentrate is a poison and

can not be made non-poison.

Avoid contact with eyes. Avoid prolonged or repeated breathing of vapors. If exposure exceed occupational exposure limits, use a NIOSH STORAGE:

approved respirator to prevent over-exposure.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

ENGINEERING CONTROLS: See Section above 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 For prolonged exposure wear protective safety glasses, gloves, and

Ingredient: 2-Propanone OSHA PEL (TWA): 1000 ppm ACGIHTLV - TWA: 750 ppm OTHER: Not Available Ingredient: Propane OSHA PEL (TWA): N/E ACGIHTLV - TWA: 1000 ppm OTHER: Not Available Ingredient: Heptane OSHA PEL (TWA): 500 ppm ACGIHTLV - TWA: 400 ppm OTHER: Not Available Ingredient: Methanol OSHA PEL (TWA): 200 PPM ACGIHTLV - TWA: 200 PPM

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Not Available

BOILING POINT: <100 dea F **SOLUBILITY IN WATER:** very slight ODOR THRESHOLD: Not Available Vapor Density (Air = 1): N.D.(AIR = 1)pH: Not Available DECOMPOSITION Not Available TEMPERATURE:

SPECIFIC GRAVITY: 0.76 (H20 = 1)Additional information: N/D

Flash Point: - 10 deg F Flammable Limits - LEL: 2.2 MELTING POINT: N/A FREEZING POINT: Not Available

Evaporation Rate >1 (Butyl Acetate = 1)

(but.ace.=1):

APPEARANCE AND ODOR: Clear liquid spray with hydrocarbon odor Vapor Pressure (mmHg): N/D (mm Hg.) Coefficient of water/oil Not Available

distribution:

OTHER:

Autoignition temperature: Not Available

Flammable Limits - UEL:

SECTION 10 - STABILITY and REACTIVITY

STABILITY: Product is stable.

CONDITIONS TO AVOID: See Incompatible Materials below. INCOMPATIBLE MATERIALS: Avoid contact with strong oxidizers

HAZARDOUS DECOMPOSITION Carbon dioxide, carbon monoxide, and hydrocarbons.

PRODUCTS:

DANGEROUS REACTIONS: Will not occur

SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicological Information: N/D

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL N/D INFORMATION:

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: 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.

SECTION 14 - TRANSPORT INFORMATION

DOT Proper shipping name: Not Available **DOT Hazard class:** Not Available **UN NUMBER:** Not Available **Packing Group:** Not Available **DOT Subsidiary Hazards:** Not Available

DOT Proper shipping name: Consumer Commodity

DOT Hazard class: ORM-D

DOT:

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.

IATA UN Number: UN1950 IATA Proper shipping name: Aerosols IATA Class: 2.1 **IMDG UN Number:** UN1950 IMDG Class: **EMS Number:** F-D, S-U IMDG Proper shipping name: Aerosols

SECTION 15 - REGULATORY INFORMATION

SECTION 313: Methanol 67-56-1

TSCA INVENTORY STATUS: All components of this material are listed on the US TSCA Inventory. This

fuel additive is registered in the United States

Additional warning phrases: This product contains a chemical known to the State of California to cause cancer or birth defects or other reproductive harm. State RTK Chemicals Acetone 67-64-1 Methanol 67-56-1 Heptane 142-82-5

SECTION 16 - ADDITIONAL INFORMATION

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

Not Available

NFPA - FIRE: 4 NFPA - HEALTH: 2 NFPA - REACTIVITY: 0 **HMIS - HEALTH:** HMIS - FLAMMABILITY: HMIS - REACTIVITY: HMIS - PERSONAL PROTECTION:

DISCLAIMER:

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.