Section 1: Product & Company Identification

Product Name: Radiator Flush

Product Number(s): 05337

Product Use: Radiator cleaner

Manufacturer / Supplier Contact Information:

In United States:
CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com
1-215-674-4300 (General)
(800) 521-3168 (Technical)
(800) 272-4620 (Customer Service)

In Canada:
CRC Canada Co.
2-1246 Lorimar Drive
Mississauga, Ontario L5S 1R2
www.crc-canada.ca
1-905-670-2291

In Mexico:
CRC Industries Mexico
Av. Benito Juárez 4055 G
Colonia Orquídea
San Luis Potosí, SLP CP 78394
www.crc-mexico.com
52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview

WARNING: May cause eye irritation
Appearance & Odor: Yellow liquid, pleasant odor

Potential Health Effects:

ACUTE EFFECTS:
   EYE: May cause mild irritation to the eyes.
   SKIN: No acute effects expected. However, prolonged contact may cause mild irritation.

INHALATION: No health effects expected under normal conditions of use.

INGESTION: Generally non-toxic if ingested in small amounts. May cause vomiting, diarrhea or gastrointestinal discomfort.

CHRONIC EFFECTS: Unknown

TARGET ORGANS: Unknown

Medical Conditions Aggravated by Exposure: Unknown

See Section 11 for toxicology and carcinogenicity information on product ingredients.
Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>% by Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt; 95</td>
</tr>
<tr>
<td>Amines, tallow alkyl, ethoxylated</td>
<td>61791-26-2</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Sodium tetraborate pentahydrate</td>
<td>11130-12-4</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: If swallowed, DO NOT induce vomiting. Give victim a glass of water. If severe symptoms develop, get medical attention immediately.

Note to Physicians: None

Section 5: Fire-Fighting Measures

Flammable Properties: As defined by OSHA, this product is non-flammable.

- Flash Point: None (TCC)
- Upper Explosive Limit: None
- Autoignition Temperature: None
- Lower Explosive Limit: None

Fire and Explosion Data:

Suitable Extinguishing Media: This material will not burn. Use extinguishing media appropriate for the surrounding fire.

Products of Combustion: If heated, product may produce carbon oxides and nitrogen oxides.

Explosion Hazards: Containers, when exposed to heat from fire, may build pressure and rupture.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains. This product may be harmful to aquatic life.

Methods for Containment & Clean-up: Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.
Section 7: Handling and Storage

Handling Procedures: Avoid contact with eyes, skin and clothing. Properly clean any spilled residue with a wet cloth. Wash hands after use and before handling food items. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Keep container closed when not in use.

Aerosol Storage Level: NA

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
<td>TWA</td>
</tr>
<tr>
<td>Water</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Amines, tallow alkyl, ethoxylated</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Sodium tetraborate pentahydrate</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
</tbody>
</table>

N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile, neoprene or rubber. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: liquid
Color: yellow
Odor: pleasant
Odor Threshold: ND
Specific Gravity: 1.00
Initial Boiling Point: 212°F / 100°C
Freezing Point: 32°F / 0°C
Vapor Pressure: ND
Vapor Density: ND (air = 1)
Evaporation Rate: slow
Solubility: Soluble in water
Coefficient of water/oil distribution: ND
pH: 10.0
Volatile Organic Compounds: wt %: 0 g/L: 0 lbs./gal: 0
Section 10: Stability and Reactivity

Stability: Stable
Conditions to Avoid: None
Incompatible Materials: Strong oxidizers, acids
Hazardous Decomposition Products: None known
Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50 (rat)</th>
<th>Dermal LD50 (rabbit)</th>
<th>Inhalation LC50 (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>&gt; 90 mL/kg</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Amines, tallow alkyl, ethoxylated</td>
<td>&gt; 1200 mg/kg</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Sodium tetraborate pentahydrate</td>
<td>3200 mg/kg</td>
<td>&gt; 2000 mg/kg</td>
<td>No data</td>
</tr>
</tbody>
</table>

Chronic Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA Carcinogen</th>
<th>IARC Carcinogen</th>
<th>NTP Carcinogen</th>
<th>Irritant</th>
<th>Sensitizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E &amp; S</td>
<td>E &amp; S</td>
</tr>
<tr>
<td>Amines, tallow alkyl, ethoxylated</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E (mild)</td>
<td>E (severe)</td>
</tr>
<tr>
<td>Sodium tetraborate pentahydrate</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>unknown</td>
</tr>
</tbody>
</table>

Reproductive Toxicity: No information available
Teratogenicity: No information available
Mutagenicity: No information available
Synergistic Effects: No information available

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: Amines, tallow alkyl, ethoxylated - 48 Hr EC50 Daphnia magna: 0.011 mg/L
Persistence / Degradability: No information available
Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available
Section 13: Disposal Considerations

Waste Classification: This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Wastes should be collected and properly disposed. Do not dump into bodies of water or on the ground. Empty containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

Section 14: Transport Information

US DOT (ground): Not regulated
ICAO/IATA (air): Not regulated
IMO/IMDG (water): Not regulated
Special Provisions: None

Section 15: Regulatory Information

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):
All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):
Reportable Quantities (RQ’s) exist for the following ingredients: None

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:
Section 302 Extremely Hazardous Substances (EHS): None
Section 311/312 Hazard Categories:
- Fire Hazard: No
- Reactive Hazard: No
- Release of Pressure: No
- Acute Health Hazard: No
- Chronic Health Hazard: No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
None

Clean Air Act:
Section 112 Hazardous Air Pollutants (HAPs): None

Occupational Safety and Health Administration:
This product is regulated by the Hazard Communications Standard.

U.S. State Regulations:
Product Name: Radiator Flush

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):
This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: None

Consumer Products VOC Regulations: This product is not regulated.

State Right to Know:
New Jersey: None
Pennsylvania: None
Massachusetts: None
Rhode Island: None

Canadian Regulations:

Controlled Products Regulations:
This product has been classified in accordance with the hazard criteria of the Controlled Product Regulation and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: Not regulated

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

European Union Regulations:


Additional Regulatory Information: None

Section 16: Other Information

<table>
<thead>
<tr>
<th>HMIS® (II)</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 1</td>
<td>0</td>
</tr>
<tr>
<td>Flammability: 0</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity: 0</td>
<td></td>
</tr>
<tr>
<td>PPE: B</td>
<td></td>
</tr>
</tbody>
</table>

Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick
CRC #: 613A
Revision Date: 11/12/2011

Changes since last revision: MSDS reformatted to meet the requirements of the Canadian Controlled Products Regulations.

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