SECTION 1: Identification

1.1 Product identifier

Product name Radiator Flush

Product number 4537

1.3 Recommended use of the chemical and restrictions on use

Radiator flush

1.4 Supplier's details

Manufactured For: Imperial Supplies LLC 789 Armed Forces Drive P.O. Box 11008 Green Bay, WI 53407-1008

Telephone 1-800-558-2808

1.5 Emergency phone number(s)

1-800-262-8200

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Acute toxicity, inhalation, Cat. 5
- Eye damage/irritation, Cat. 2A
- Skin corrosion/irritation, Cat. 3

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

H319 Causes serious eye irritation

Precautionary statement(s)

P264 Wash ... thoroughly after handling.
P280 Wear eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Component	Concentration
Component 1 (trade secret)*	1 - 20 % (weight)
CLASSIFICATIONS: No data available HAZARDS: No data available	

CLASSIFICATIONS: No data available. HAZARDS: No data available.

Component 2 (trade secret)* 1 - 5 % (weight)

CLASSIFICATIONS: Acute toxicity, dermal, Cat. 5; Acute toxicity, oral, Cat. 5; Eye damage/irritation, Cat. 2A. HAZARDS: H303 - May be harmful if swallowed; H313 - May be harmful in contact with skin; H319 - Causes serious eye irritation.

Component 3 (trade secret)* 1 - 5 % (weight)

CLASSIFICATIONS: Serious eye damage/eye irritation, Cat. 2; Skin corrosion/irritation, Cat. 2; Flammable liquids, Cat. 4; Acute toxicity, dermal, Cat. 4; Acute toxicity, inhalation, Cat. 4; Acute toxicity, oral, Cat. 4. HAZARDS: H227 - Combustible liquid; H302 - Harmful if swallowed; H312 - Harmful in contact with skin; H315 - Causes skin irritation; H319 - Causes serious eye irritation; H332 - Harmful if inhaled.

Trade secret statement (OSHA 1910.1200(i))

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled Do NOT induce vomiting. Never give anything by mouth to an unconscious

person. Rinse mouth with water. Consult a physician.

In case of skin contact Wash off with soap and plenty of water. Get medical attention if symptoms

persist.

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes. Get medical

attention if symptoms persist.

If swallowed Rinse mouth. If vomiting occurs naturally, have victim lean forward to

reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious

person. Call a poison center or doctor if you feel unwell.

4.2 Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary

No data available

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.

5.2 Specific hazards arising from the chemical

Carbon oxides

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of in accordance with local and national regulations. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Component 2 (trade secret)*

TLV®: 10 ppm; USA (ACGIH)

Liver effects, Kidney effects, Hematologic effects, 2014 Adoption

2. Component 3 (trade secret)*

PEL (Inhalation): 240 mg/m3 (OSHA) OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 20 ppm (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 5 ppm (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov TLV® (Inhalation): 20 ppm; USA (ACGIH) OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls

Not normally required. Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Eye/Face Protection: None required with normal household use. Industrial Setting: For splash protection, use chemical goggles. Eye wash fountain is recommended.

Skin protection

Skin Protection: None required with normal household use. Industrial Setting: Protective gloves (for hands) and protective clothing are required where repeated or prolonged skin contact may occur.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)

Clear light blue liquid

Odor Sweet

Odor threshold Not determined

pH 7.5-9.5

Melting point/freezing point
Initial boiling point and boiling range
Flash point
Evaporation rate
Flammability (solid, gas)
Upper/lower flammability limits
Vapor pressure

Not determined
Not applicable
Not applicable
Not determined
Not determined

Vapor pressure Not determined Vapor density Not determined

Relative density 1.051

Solubility(ies) Water 100%
Partition coefficient: n-octanol/water Not determined
Auto-ignition temperature Not applicable

Auto-ignition temperature Not applicable
Decomposition temperature Not determined
Viscosity Not determined

Explosive properties Not applicable Oxidizing properties Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

Normally unreactive

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal use conditions.

10.4 Conditions to avoid

None under normal use conditions.

10.5 Incompatible materials

Strong oxidizing agents, Light metals

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

ATE (inhalation, gaseous) of mixture: 90000 ppm

Component 2

LD50 Oral - Rat - 470 mg/kg

Component 2

LC50 Inhalation - Rat - 450 ppm

Remarks: Remarks: Behavioral:Ataxia. Nutritional and Gross Metabolic:Weight loss or decreased weight gain

Component 3

LD50 Oral - Rat - male - 7,291 mg/kg Remarks: (OECD Test Guideline 401)

Component 3

LD50 Skin - Rabbit - male - 2,764 mg/kg Remarks: (OECD Test Guideline 402)

Skin corrosion/irritation

Irritating to skin.

Serious eye damage/irritation

Causes eye irritation.

Respiratory or skin sensitization

Based on available data, classification data are not met

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration hazard

No data available

SECTION 12: Ecological information

Toxicity

Component 2

LC50 - Oncorhynchus mykiss (rainbow trout) - 1,474 mg/l - 96 h

Remarks: OECD Test Guideline 203

Component 3

LC50 - Lepomis macrochirus (bluegill) - 1,300 mg/l - 96 h

Remarks: (OECD Test Guideline 203)

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

SECTION 13: Disposal considerations

Disposal of the product

Dispose of contents/ container in accordance with the local/regional/national/international regulations. Non Household Setting: Products covered by this SDS, in their original form, when disposed as waste, are considered non hazardous waste according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state and federal regulations. Solutions of diluted detergent in the course of use, may be allowed to be flushed down sewer. First check with your local water treatment plant. Do not landfill.

Disposal of contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

HMIS Rating



NFPA Rating

