Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
- Trade name: Bar’s Leaks® Radiator 10 Minute Flush
- Article number: 1211
1.2 Relevant identified uses of the substance or mixture and uses advised against
- No further relevant information available.
1.3 Details of the supplier of the Safety Data Sheet
- Manufacturer/Supplier:
  Bar’s Products
  P.O. Box 187
  Holly, MI 48442 USA
  Phone: (810) 603-1321
- 1.4 Emergency telephone number:
  ChemTel Inc.
  (800)255-3924, +1 (813)248-0585

2 Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xxi: Irritant
R36/38: Irritating to eyes and skin.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
- The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)
Trade name: Bar's Leaks® Radiator 10 Minute Flush

- Hazard pictograms

![Pictogram]

GHS07

- Signal word Warning
- Hazard statements
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
- Precautionary statements
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.
  P103 Read label before use.
  P280 Wear protective gloves and eye protection.
  P264 Wash thoroughly after handling.
  P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P332+P313 If skin irritation occurs: Get medical advice/attention.
  P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- Additional information: N/A
- Hazard description:
- WHMIS-symbols:
  D2B - Toxic material causing other toxic effects

- NFPA ratings (scale 0 - 4)

  ![NFPA Rating]

  Health = 1
  Fire = 1
  Reactivity = 0

- HMIS-ratings (scale 0 - 4)

  ![HMIS Rating]

  Health = 1
  Fire = 1
  Reactivity = 0

- HMIS Long Term Health Hazard Substances

  None of the ingredients is listed.

- 2.3 Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
3 Composition/information on ingredients

- **3.2 Mixtures**
  - **Description:** Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Hazard Code</th>
<th>Substance</th>
<th>Xi Code</th>
<th>% Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2, H319</td>
<td>Sodium Citrate, Dihydrate</td>
<td>R36</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>Eye Dam. 1, H318</td>
<td>Ethoxylated alcohol phosphate esters</td>
<td>R38-41</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>Skin Irrit. 2, H315</td>
<td>4-nonylphenyl-polyethylene glycol</td>
<td>R41; N R50</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>Eye Dam. 1, H318</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute 1, H400</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **4.1 Description of first aid measures**
  - **General information:** No special measures required.
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **After skin contact:**
    - Immediately wash with water and soap and rinse thoroughly.
    - If skin irritation continues, consult a doctor.
  - **After eye contact:**
    - Protect unharmed eye.
    - Remove contact lenses if worn.
    - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - **After swallowing:**
    - Rinse out mouth and then drink plenty of water.
    - Do not induce vomiting; call for medical help immediately.

- **4.2 Most important symptoms and effects, both acute and delayed**
  - Gastric or intestinal disorders
  - Dizziness
  - **Hazards:** No further relevant information available.

- **4.3 Indication of any immediate medical attention and special treatment needed**
  - Medical supervision for at least 48 hours.

5 Firefighting measures

- **5.1 Extinguishing media**
  - **Suitable extinguishing agents:**
    - CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Trade name: Bar's Leaks® Radiator 10 Minute Flush

- For safety reasons unsuitable extinguishing agents: None.
- 5.2 Special hazards arising from the substance or mixture: No further relevant information available.
- 5.3 Advice for firefighters
  - Protective equipment:
    - Wear self-contained respiratory protective device.
    - Wear fully protective suit.
  - Additional information: Cool endangered receptacles with water spray.

6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  - Particular danger of slipping on leaked/spilled product.
- 6.2 Environmental precautions:
  - Dilute with plenty of water.
  - Do not allow to enter sewers/surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Ensure adequate ventilation.
- 6.4 Reference to other sections
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

7 Handling and storage

- 7.1 Precautions for safe handling
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of aerosols.
  - Information about fire - and explosion protection: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles: No special requirements.
    - Information about storage in one common storage facility: Store away from foodstuffs.
    - Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- 8.1 Control parameters
  - Ingredients with limit values that require monitoring at the workplace:
    - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - DNELs: No further relevant information available.
Trade name: Bar's Leaks® Radiator 10 Minute Flush

- **PNECs** No further relevant information available.
- **Additional information:** The lists valid during the making were used as basis.

### 8.2 Exposure controls
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    - Keep away from foodstuffs, beverages and feed.
    - Immediately remove all soiled and contaminated clothing
    - Wash hands before breaks and at the end of work.
    - Avoid contact with the eyes and skin.
  - **Respiratory protection:**
    - Not required under normal conditions of use.
    - Use suitable respiratory protective device when aerosol or mist is formed.
- **Protection of hands:**
  - Protective gloves

  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  - **Material of gloves**
    - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - **Penetration time of glove material**
    - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
  - Safety glasses

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**
  - No further relevant information available.
- **Risk management measures**
  - See Section 7 for additional information.
  - No further relevant information available.
### 9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  - General Information
  - Appearance:
    - Form: Liquid
    - Colour: Clear
    - Odour: Light
    - Odour threshold: Not determined.
  - pH-value at 20 °C: 9.5
  - Change in condition
    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: 212 °F / 100 °C
  - Flash point: >199 °F / >93 °C
  - Flammability (solid, gaseous): Not applicable.
  - Ignition temperature: Not determined.
  - Decomposition temperature: Not determined.
  - Self-igniting: Product is not self-igniting.
  - Danger of explosion: Product does not present an explosion hazard.
  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.
  - Vapour pressure at 20 °C: 23 hPa
  - Density at 20 °C: 1.03 g/cm³
  - Relative density: Not determined.
  - Vapour density: Not determined.
  - Evaporation rate: Not determined.
  - Solubility in / Miscibility with water: Fully miscible.
  - Partition coefficient (n-octanol/water): Not determined.
  - Viscosity:
    - Dynamic: Not determined.
    - Kinematic: Not determined.
  - Solvent content:
    - Organic solvents: Not determined.
  - Solids content: Not determined.
  - 9.2 Other information
    - No further relevant information available.
10 Stability and reactivity

- 10.1 Reactivity
- 10.2 Chemical stability
  - Thermal decomposition / conditions to be avoided:
    - No decomposition if used and stored according to specifications.
  - 10.3 Possibility of hazardous reactions: Reacts with strong acids and oxidizing agents.
  - 10.4 Conditions to avoid: No further relevant information available.
  - 10.5 Incompatible materials: No further relevant information available.
  - 10.6 Hazardous decomposition products:
    - Phosphorus compounds
    - Sulphur oxides (SOx)
    - Carbon monoxide and carbon dioxide

11 Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity:
  - Primary irritant effect:
    - on the skin: Irritant to skin and mucous membranes.
    - on the eye: Irritating effect.
  - Sensitization: Sensitizing effect by skin contact is possible by prolonged exposure.
- Additional toxicological information:
  - The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
    - Irritant
    - Repeated dose toxicity: Repeated exposures may result in skin and/or respiratory sensitivity.

12 Ecological information

- 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability: No further relevant information available.
- 12.3 Bioaccumulative potential: No further relevant information available.
- 12.4 Mobility in soil: No further relevant information available.
- Additional ecological information:
- General notes:
  - This statement was deduced from the properties of the single components.
  - Avoid transfer into the environment.
  - Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
  - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
13 Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

14.1 UN-Number
DOT, ADR, ADN, IMDG, IATA N/A

14.2 UN proper shipping name
DOT, ADR, ADN, IMDG, IATA N/A

14.3 Transport hazard class(es)
DOT, ADR, ADN, IMDG, IATA
Class N/A

14.4 Packing group
DOT, ADR, IMDG, IATA N/A

14.5 Environmental hazards:
Marine pollutant: No

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

UN "Model Regulation": -
### 15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **United States (USA)**
  - **SARA**
    - **Section 355 (extremely hazardous substances):** None of the ingredients is listed.
    - **Section 313 (Specific toxic chemical listings):** None of the ingredients is listed.
  - **TSCA (Toxic Substances Control Act):** All ingredients are listed.
  - **Proposition 65 (California):**
    - **Chemicals known to cause cancer:** None of the ingredients is listed.
    - **Chemicals known to cause reproductive toxicity for females:** None of the ingredients is listed.
    - **Chemicals known to cause reproductive toxicity for males:** None of the ingredients is listed.
    - **Chemicals known to cause developmental toxicity:** None of the ingredients is listed.
  - **Carcinogenic Categories**
    - **EPA (Environmental Protection Agency):** None of the ingredients is listed.
    - **IARC (International Agency for Research on Cancer):** None of the ingredients is listed.
    - **TLV (Threshold Limit Value established by ACGIH):** None of the ingredients is listed.
    - **NIOSH-Ca (National Institute for Occupational Safety and Health):** None of the ingredients is listed.
    - **OSHA-Ca (Occupational Safety & Health Administration):** None of the ingredients is listed.
  - **Canada**
    - **Canadian Domestic Substances List (DSL):** All ingredients are listed.
    - **Canadian Ingredient Disclosure list (limit 0.1%):** None of the ingredients is listed.
    - **Canadian Ingredient Disclosure list (limit 1%):** None of the ingredients is listed.
Trade name: Bar's Leaks® Radiator 10 Minute Flush

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  H315 Causes skin irritation.
  H318 Causes serious eye damage.
  H319 Causes serious eye irritation.
  H400 Very toxic to aquatic life.
  R36 Irritating to eyes.
  R38 Irritating to skin.
  R41 Risk of serious damage to eyes.
  R50 Very toxic to aquatic organisms.

- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  ACGIH: American Conference of Governmental Industrial Hygienists
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  WHMIS: Workplace Hazardous Materials Information System (Canada)

Sources

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