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

· 1.1 Product identifier
  · Trade name: Bar's Leaks® HDC, J-100, T-1000, T-2000
  · Article number: None

· 1.2 Relevant identified uses of the substance or mixture and uses advised against
  No further relevant information available.

· Application of the substance / the preparation
  Cooling System Sealant

· 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
    The product is not classified according to the CLP regulation.
  · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
  · 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 N/A
    · Hazard pictograms N/A
    · Signal word N/A
    · Hazard statements N/A
    · Additional information: Safety data sheet available on request.
  · Hazard description:
    · WHMIS-symbols: D2B - Toxic material causing other toxic effects

(Contd. on page 2)
Trade name: Bar’s Leaks® HDC, J-100, T-1000, T-2000

· NFPA ratings (scale 0 - 4)
  Health = 0  Fire = 1  Reactivity = 0
· HMIS-ratings (scale 0 - 4)
  Health = 0  Fire = 1  Reactivity = 0
  * - Indicates a long term health hazard from repeated or prolonged exposures.

· 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
  · Description: Mixture of substances listed below with nonhazardous additions.
  · Dangerous components:

<table>
<thead>
<tr>
<th>CAS: 84696-15-1</th>
<th>Ginger</th>
<th>&gt;50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 283-634-2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| CAS: 458-37-7     | 1,7-bis(4-hydroxy-3-methoxyphenyl)hepta-1,6-diene-3,5-dione | 10-25% |
| EINECS: 207-280-5 |                 |      |

| CAS: 25322-68-3   | polyethylene glycol substance with a Community workplace exposure limit | <10% |
| NLP: 500-038-2    |                 |      |

| CAS: 497-19-8     | Sodium Carbonate | <10% |
| EINECS: 207-838-8 |                   |      |
| Index number: 011-005-00-2 | Eye Irrit. 2, H319 |      |
|                    | Almond shell     | <10% |

  · 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:
      Unlikely route of exposure.
      Supply fresh air; consult doctor in case of complaints.
    · After skin contact:
      Immediately wash with water and soap and rinse thoroughly.
Trade name: Bar’s Leaks® HDC, J-100, T-1000, T-2000

If skin irritation continues, consult a doctor.

- **After eye contact:**
  - 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

- **Hazards** No further relevant information available.

- **4.3 Indication of any immediate medical attention and special treatment needed**
  - No further relevant information available.

### 5 Firefighting measures

- **5.1 Extinguishing media**
  - Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

- **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** No further relevant information available.

### 6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.

- **6.2 Environmental precautions** No special measures required.

- **6.3 Methods and material for containment and cleaning up** Pick up mechanically.

- **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** Prevent formation of dust.

- **7.2 Conditions for safe storage, including any incompatibilities**

  - **Storage:**
    - Requirements to be met by storerooms and receptacles:
      - Avoid storage near extreme heat, ignition sources or open flame.
      - Protect from humidity and water.
      - Store in a cool location.
Trade name: Bar’s Leaks® HDC, J-100, T-1000, T-2000

**8 Exposure controls/personal protection**

- **8.1 Control parameters**
  - **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**
  - 25322-68-3 polyethylene glycol
  - WEEL (USA) 10 mg/m³ (H); MW>200

- **DNELs** No further relevant information available.
- **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:**
      The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of work.
    - **Respiratory protection:**
      Not required under normal conditions of use.
      Use suitable respiratory protective device in case of insufficient ventilation.
  - **Protection of hands:** Not required for handling under normal conditions.
  - **Eye protection:**
    - Safety glasses

- **Body protection:** Not required under normal conditions of use.
- **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.
### 9.1 Information on basic physical and chemical properties

#### General Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Tablets</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Tablets</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>Light brown</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>Odourless</td>
</tr>
<tr>
<td><strong>Odour threshold</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH-value</strong></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

#### Change in condition

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Melting point/Melting range</strong></td>
<td>Undetermined.</td>
</tr>
<tr>
<td><strong>Boiling point/Boiling range</strong></td>
<td>Undetermined.</td>
</tr>
</tbody>
</table>

#### Flammability

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flash point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous)</strong></td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

#### Decomposition temperature

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

#### Self-igniting

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-igniting</strong></td>
<td>Product is not self-igniting.</td>
</tr>
</tbody>
</table>

#### Danger of explosion

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Danger of explosion</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
</tbody>
</table>

#### Explosion limits

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Upper</strong></td>
<td>Not determined</td>
</tr>
</tbody>
</table>

#### Vapour pressure

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

#### Density

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

#### Solubility in / Miscibility with water

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solubility in / Miscibility with water</strong></td>
<td>Soluble.</td>
</tr>
</tbody>
</table>

#### Partition coefficient (n-octanol/water)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partition coefficient (n-octanol/water)</strong></td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

#### Viscosity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dynamic</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Kinematic</strong></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

#### 9.2 Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9.2 Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>
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 oxidizing agents.
  Reacts with strong acids.
- 10.4 Conditions to avoid
  No further relevant information available.
- 10.5 Incompatible materials:
  No further relevant information available.
- 10.6 Hazardous decomposition products:
  Carbon monoxide and carbon dioxide
  Nitrogen oxides

11 Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity:
  - Primary irritant effect:
    - on the skin: No irritant effect.
    - on the eye: Slight irritant effect on eyes.
  - Additional toxicological information:
    The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
    When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

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.
    Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely.
    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.
  - vPvB: Not applicable.
Trade name: Bar’s Leaks® HDC, J-100, T-1000, T-2000

12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation
    On the basis of the necessary technical regulations and after consultation with the disposal agent and the relevant authorities, can be disposed of with domestic waste or incinerated with domestic waste.
  - 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: N/A
  - 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.
### Trade name: Bar’s Leaks® HDC, J-100, T-1000, T-2000

#### 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%)
  - 497-19-8 Sodium Carbonate

#### 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
  - H319 Causes serious eye irritation.
<table>
<thead>
<tr>
<th>R36</th>
<th>Irritating to eyes.</th>
</tr>
</thead>
</table>

**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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