1 Identification

- Product identifier
  - Trade name: Bar's Leaks® Head Seal™ Blown Head Gasket Repair
  - Product code: HG-1
- Recommended use and restriction on use
  - Recommended use: Sealant
  - Restrictions on use: No relevant information available.

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

Emergency telephone number:
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

2 Hazard(s) identification

Classification of the substance or mixture

Skin Sens. 1  H317  May cause an allergic skin reaction.

Label elements

GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms:

GHS07

Signal word: Warning

Hazard statements:

H317 May cause an allergic skin reaction.

Precautionary statements:

P261  Avoid breathing mist, vapors, or spray.
P272  Contaminated work clothing must not be allowed out of the workplace.
P280  Wear protective gloves and eye protection.
P302+P352 If on skin: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363  Wash contaminated clothing before reuse.
P501  Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

(Cont'd. on page 2)
Trade name: Bar's Leaks® Head Seal™ Blown Head Gasket Repair

Chemical characterization: Mixtures

Components:

<table>
<thead>
<tr>
<th>Component ID</th>
<th>Chemical Name</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1344-09-8</td>
<td>Silicic acid, sodium salt</td>
<td>&lt;10%</td>
</tr>
<tr>
<td></td>
<td>Met. 1, H290; Skin 1B, H314; Eye Dam. 1, H318</td>
<td></td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titanium dioxide</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>4719-04-4</td>
<td>2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol</td>
<td>&lt;1%</td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 2, H330</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STOT RE 1, H372</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 4, H302; Eye Irrit. 2A, H319; Skin Sens. 1, H317</td>
<td></td>
</tr>
</tbody>
</table>

Additional information:
Non-classification as a carcinogen is based on non-respirable form of product.

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:
Immediately remove any clothing soiled by the product.
Immediately wash with water and soap and rinse thoroughly.
If skin irritation is experienced, 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; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:
Allergic reactions
Slight irritant effect on eyes.
Slight irritant effect on skin and mucous membranes.
Gastric or intestinal disorders when ingested.
Nausea in case of ingestion.

Indication of any immediate medical attention and special treatment needed:
Treat skin and mucous membrane with antihistamine and corticoid preparations.
Contains 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol. May produce an allergic reaction.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: Use fire fighting measures that suit the environment.

For safety reasons unsuitable extinguishing agents: None.

Special hazards arising from the substance or mixture
Formation of toxic gases is possible during heating or in case of fire.

Advice for firefighters

Protective equipment:

(Cont'd. on page 3)
Trade name: Bar's Leaks® Head Seal™ Blown Head Gasket Repair

Wear self-contained respiratory protective device.
Wear fully protective suit.

(Cont'd. of page 2)

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Use respiratory protective device against the effects of fumes/dust/aerosol.
  Wear protective equipment. Keep unprotected persons away.
  Ensure adequate ventilation.
- Environmental precautions
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- Methods and material for containment and cleaning up
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Send for recovery or disposal in suitable receptacles.
- 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

- Handling
  - Precautions for safe handling:
    Prevent formation of aerosols.
    Avoid splashes or spray in enclosed areas.
    Use only in well ventilated areas.
  - Information about protection against explosions and fires: No special measures required.

- Conditions for safe storage, including any incompatibilities
  - Requirements to be met by storerooms and receptacles:
    Avoid storage near extreme heat, ignition sources or open flame.
  - Information about storage in one common storage facility:
    Store away from foodstuffs.
    Do not store together with oxidizing and acidic materials.
  - Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
  - Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

- Control parameters
  - Components with limit values that require monitoring at the workplace:
    13463-67-7 titanium dioxide
    - PEL (USA) Long-term value: 15* mg/m³
      *total dust
    - REL (USA) See Pocket Guide App. A

(Cont'd. on page 4)
Trade name: Bar's Leaks® Head Seal™ Blown Head Gasket Repair

<table>
<thead>
<tr>
<th>TLV (USA)</th>
<th>Long-term value: 10 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 10* 3** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust; **respirable fraction; IARC 2B</td>
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<tr>
<td>EV (Canada)</td>
<td>Long-term value: 10 mg/m³</td>
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<tr>
<td></td>
<td>total dust</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Long-term value: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>A4</td>
</tr>
</tbody>
</table>

- **Exposure controls**
  - **General protective and hygienic measures:**
    The usual precautionary measures for handling chemicals should be followed.
    Keep away from foodstuffs, beverages and feed.
    Immediately remove all soiled and contaminated clothing.
    Wash hands before breaks and at the end of work.
    Do not inhale gases / fumes / aerosols.
    Avoid contact with the eyes and skin.
  - **Engineering controls:** No relevant information available.
  - **Breathing equipment:**
    Not required under normal conditions of use.
    Use suitable respiratory protective device when aerosol or mist is formed.
    For spills, respiratory protection may be advisable.
  - **Protection of hands:**
    ![Protective gloves](image)
    The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - **Eye protection:**
    ![Safety glasses](image)
  - **Body protection:** Protective work clothing
  - **Limitation and supervision of exposure into the environment**
    No relevant information available.
  - **Risk management measures** No relevant information available.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **Appearance:**
    - **Form:** Viscous
    - **Color:** Dark grey
    - **Odor:** Mild
    - **Odor threshold:** Not determined.
  - **pH-value at 20 °C (68 °F):** <12
  - **Melting point/Melting range:** Not determined.

(Cont'd. on page 5)
Trade name: Bar's Leaks® Head Seal™ Blown Head Gasket Repair

Boiling point/Boiling range: 104 °C (219.2 °F)
Flash point: Not applicable.
Flammability (solid, gaseous): Product is not flammable.
Auto-ignition temperature: Not determined.
Decomposition temperature: Not determined.
Danger of explosion: Product does not present an explosion hazard.

Explosion limits
  Lower: Not determined.
  Upper: Not determined.
Oxidizing properties: Non-oxidizing.

Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)

Density:
  Relative density: 1.03
  Vapor 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.

Other information No relevant information available.

10 Stability and reactivity

Reactivity: No relevant information available.
Chemical stability:
Thermal decomposition / conditions to be avoided:
No decomposition if used and stored according to specifications.
Possibility of hazardous reactions
Reacts with strong acids and oxidizing agents.
Toxic fumes may be released if heated above the decomposition point.
Conditions to avoid Store away from oxidizing agents.
Incompatible materials No relevant information available.
Hazardous decomposition products Carbon monoxide and carbon dioxide

11 Toxicological information

Information on toxicological effects
Acute toxicity: Based on available data, the classification criteria are not met.
LD/LC50 values that are relevant for classification: None.
Trade name: Bar's Leaks® Head Seal™ Blown Head Gasket Repair

- Primary irritant effect:
  - On the skin: Slight irritant effect on skin and mucous membranes.
  - On the eye: Slight irritant effect on eyes.
  - Sensitization: Sensitization possible through skin contact.
- Carcinogenic categories
  - IARC (International Agency for Research on Cancer):
    Reference to titanium dioxide is based on unbound respirable particles and is not applicable to the product as supplied.
- NTP (National Toxicology Program):
  None of the ingredients are listed.
- OSHA-Ca (Occupational Safety & Health Administration):
  None of the ingredients are listed.
- Probable route(s) of exposure:
  Ingestion.
  Inhalation.
  Eye contact.
  Skin contact.
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity:
  Contains known or suspect carcinogens when inhaled. Product is in non-inhalable form and is nonclassifiable as a carcinogen.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- Toxicity
  - Aquatic toxicity The product contains materials that are harmful to the environment.
  - Persistence and degradability No relevant information available.
  - Bioaccumulative potential: No relevant information available.
  - Mobility in soil: No relevant information available.
- Additional ecological information
  - General notes:
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - Other adverse effects No relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    Smaller quantities can be disposed of with household waste.
    Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in
accordance with Local Authority requirements. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- **Uncleaned packagings**
  - **Recommendation:** Disposal must be made according to official regulations.
  - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>Not regulated.</th>
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<tbody>
<tr>
<td>UN proper shipping name</td>
<td>DOT, ADR, IMDG, IATA</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>DOT, ADR, IMDG, IATA</td>
<td>Class Not regulated.</td>
</tr>
<tr>
<td>Packing group</td>
<td>DOT, ADR, IMDG, IATA</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</td>
<td>Not applicable.</td>
<td></td>
</tr>
</tbody>
</table>

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **United States (USA)**
  - **SARA**
    - **Section 302 (extremely hazardous substances):**
      None of the ingredients are listed.
    - **Section 355 (extremely hazardous substances):**
      None of the ingredients are listed.
    - **Section 313 (Specific toxic chemical listings):**
      None of the ingredients are listed.
    - **TSCA (Toxic Substances Control Act)**
      All ingredients are listed.
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.

- **Date of preparation / last revision** August 03, 2018 / -

- **Abbreviations and acronyms:**
  - ADR: 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
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - OSHA: Occupational Safety & Health Administration
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
  - Met. Corr. 1: Corrosive to metals – Category 1
  - Acute Tox. 4: Acute toxicity – Category 4
  - Acute Tox. 2: Acute toxicity – Category 2
  - Skin Corr. 1B: Skin corrosion/irritation – Category 1B
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
  - Skin Sens. 1: Skin sensitisation – Category 1
  - STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

- **Sources**
  - Website, European Chemicals Agency (echa.europa.eu)
  - Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
  - Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

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Trade name: Bar's Leaks® Head Seal™ Blown Head Gasket Repair

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:
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Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtelinc.com

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