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1 Identification

[•] Product identifier

· Trade name: Bar's Leaks® Liquid Aluminum

• Product code: 1186

· Recommended use and restriction on use

- · Recommended use: Aluminum Radiator & Cooling System Stop Leak.
- · 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, +1 (813)248-0585

2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

[·] Label elements

· GHS label elements None.

- · Hazard pictograms: Not regulated.
- · Signal word: Not regulated.
- · Hazard statements: None.
- · Precautionary statements: Not regulated.

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

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components: None in reportable quantities.

4 First-aid measures

[•] Description of first aid measures

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

• After skin contact:

Clean with water and soap.

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.

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• **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:

May cause gastro-intestinal irritation if ingested.

Indication of any immediate medical attention and special treatment needed:

No relevant information available.

5 Fire-fighting measures

· Extinguishing media

· Suitable extinguishing agents:

The product is not flammable.

Use fire fighting measures that suit the environment.

- · For safety reasons unsuitable extinguishing agents: None.
- Special hazards arising from the substance or mixture No relevant information available.
- Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Use personal protective equipment as required.

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). Dispose of the collected material according to regulations.

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: Use only in well ventilated areas.
- · Information about protection against explosions and fires: No special measures required.

· Conditions for safe storage, including any incompatibilities

· Storage

• Requirements to be met by storerooms and receptacles: No special requirements.

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Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

• Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles. • Specific end use(s): No relevant information available.

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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

• Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· 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 large spills, respiratory protection may be advisable.

Protection of hands:

Wear protective gloves to handle contents of damaged or leaking units.

Gloves are advised for repeated or prolonged contact.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

Body protection:

Not required under normal conditions of use.

Protection may be required for spills.

· Limitation and supervision of exposure into the environment No special requirements.

[•] Risk management measures No special requirements.

9 Physical and chemical properties

[.] Information on basic physical and chemical properties

· Appearance: Form:

Viscous

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| | | (Cont'd. of page |
|--|---|------------------|
| Color: | Gray | |
| · Odor: | Slight | |
| · Odor threshold: | Not determined. | |
| · pH-value at 20 °C (68 °F): | 8.5 - 9.5 | |
| Melting point/Melting range: | Not determined. | |
| · Boiling point/Boiling range: | Not determined. | |
| · Flash point: | Not applicable. | |
| · Flammability (solid, gaseous): | Not applicable. | |
| · 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: | Not determined. | |
| · Vapor pressure: | Not determined. | |
| · Density: | | |
| Relative density at 25 °C (77 °F): | 0.995 - 1.020 g/cm³ (8.303 - 8.512 lbs/gal) | |
| Vapor density: | Not determined. | |
| Evaporation rate: | Not determined. | |
| · Solubility in / Miscibility with | | |
| Water: | Fully miscible. | |
| · Partition coefficient (n-octanol/water |): Not determined. | |
| ·Viscosity | | |
| Dynamic at 25 °C (77 °F): | 1100 - 1700 mPas | |
| Kinematic: | Not determined. | |
| [•] Other information | No relevant information available. | |

10 Stability and reactivity

· Reactivity: No relevant information available.

· Chemical stability: Stable under normal temperatures and pressures.

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.

· Conditions to avoid: Excessive heat.

· Incompatible materials: No relevant information available.

· Hazardous decomposition products: Possible in traces.

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11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification: None.

· Primary irritant effect:

· On the skin: Based on available data, the classification criteria are not met.

· On the eye: Based on available data, the classification criteria are not met.

• Sensitization: Based on available data, the classification criteria are not met.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

• 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.

· Repeated dose toxicity: No relevant information available.

- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- **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 No relevant information available.

- · 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.

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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.

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

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.

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Printing date: 07/18/2016 Revision: 07/18/2016 Trade name: Bar's Leaks® Liquid Aluminum (Cont'd. of page 6) Section 304 (emergency release notification): 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. · Proposition 65 (California) Chemicals known to cause cancer: None of the ingredients are listed. Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed. Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed. Chemicals known to cause developmental toxicity: None of the ingredients are listed. · Carcinogenic categories • EPA (Environmental Protection Agency): None of the ingredients are listed. · IARC (International Agency for Research on Cancer): None of the ingredients are listed. · NIOSH-Ca (National Institute for Occupational Safety and Health): None of the ingredients are listed. · Chemical safety assessment A Chemical Safety Assesment 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.

· Date of preparation / last revision 07/18/2016 / -

· 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 NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

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Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

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Website: www.chemtelinc.com

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LDLo: Lowest Lethal Dose Observed **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) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902