



Safety data sheet

According to Regulation (EU) No 453/2010

Bar's Leaks Radiator Stop Leaks

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : BAR'S LEAKS RADIATOR STOP LEAKS
Product code : BL

1.2. Relevant identified uses of the substance or mixture and uses advised against

Application : SU21 Consumer product. Car maintenance.

1.3. Details of the supplier of the safety data sheet

Supplier : Bar's Europe BV
Lage Brink 26
7317 BE Apeldoorn, The Netherlands
Telephone : +31 55 579 04 34
E-mail : Info@barseurope.com

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:

NL - Telephone : +31 55 579 04 34 (During office hours only)

EMERGENCY TELEPHONE NUMBER (for DOCTORS only):

National Poisons Information Service +44-844 892 0111 (24/7)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification : Not classified as dangerous according to Regulation (EC) No 1272/2008.
(1272/2008/EC)

Human health hazards : May produce an allergic reaction. Contains petroleum distillates, may be harmful when ingested.
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives.
Environmental hazards : Not classified as dangerous according to statutory EC-Directives.
Other information : Keep out of the reach of children.

2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms : None.

Signal word : Not applicable.

H- and P-phrases : EUH208 Contains ... May produce an allergic reaction. Reference is made to additional labelling for full text of EUH208*.
P101 If medical advice is needed, have product container or label at hand.

Additional labelling (99/45/EC and/or 1272/2008/EC)

: * Contains 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol May produce an allergic reaction.
: 2 % of the mixture consists of ingredient(s) of unknown toxicity.

2.3. Other hazards

Other information : Does not contain PBT or vPvB substances.



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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

| Substance name | Concentration (w/w) (%) | CAS nr. | EC number | Remark | REACH nr. |
|---|-------------------------|-----------|-----------|--------|-----------|
| Curcumin | 1 - < 5 | 458-37-7 | 207-280-5 | | |
| 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol | 0,01 - 0,1 | 4719-04-4 | 225-208-0 | | |

| Substance name | Hazard Class | H-phrases | Pictograms | |
|---|---|------------------------|---------------------|------------------|
| Curcumin | Skin Irrit. 2; Eye Irrit. 2; STOT SE 3 | H315; H319; H335 | GHS07 | |
| 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol | Acute Tox. 4; Acute Tox. 2; Skin Sens. 1; STOT RE 1 | H302; H330; H317; H372 | GHS06; GHS07; GHS08 | H317 : C ≥ 0.1 % |

Reference is made to chapter 16 for full text of each relevant H phrase.

SECTION 4 FIRST-AID MEASURES

4.1. Description of first aid measures

First aid measures

- Inhalation : Move victim into fresh air. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up. Consult a doctor if irritation occurs.
- Eye contact : Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Consult a doctor if irritation persists.
- Ingestion : Do not induce vomiting. Give nothing to drink. Do rinse the mouth. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

4.2. Most important symptoms and effects, both acute and delayed

Effects and symptoms

- Inhalation : May cause headache, dizziness and a feeling of sickness.
- Skin contact : May produce an allergic reaction. May cause dry skin and redness.
- Eye contact : May cause stinging of eyes and redness.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea. May cause lung damage, sore throat and lack of breath.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians : None known.

SECTION 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

- Suitable : Carbondioxide (CO2). Foam. Dry chemical. Water fog.
- Not suitable : Water jet.



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5.2. Special hazards arising from the substance or mixture

Special exposure hazards : None known.
Hazardous thermal decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.

5.3. Advice for firefighters

Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles.

6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. Large spills: contain with dike.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Absorb residues in sand or other inert material. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

Reference to other sections : See also section 8.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Do not breathe vapour. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool, dry and well-ventilated place (< 35 °C). Keep away from oxidizing agents.
Recommended packaging : Keep only in the original container.
Non recommended packaging : Steel (except stainless steel). PE and PP.

7.3. Specific end use(s)

Use : Use only as directed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.



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8.2. Exposure controls

Engineering measures : Use only in well-ventilated areas. Comply with standard precautionary measures for working with chemicals.

Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

Body protection : Use of specific protective industrial clothing is not required under normal conditions of use. In case of large scale exposure wear suitable protective clothing, overalls or suit, and similar boots. Suitable material: nitril. Indication of permeation breakthrough time: 6 hours.

Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.

Hand protection : Under normal conditions of use specific gloves are not required. Wear appropriate gloves in case of frequent or prolonged use and in case of large scale exposure. Suitable material: nitril. $\pm 0,5$ mm. Indication of permeation breakthrough time: 6 hours.

Eye protection : Wear appropriate safety glasses when there is danger of possible eye contact.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | | |
|---|-------------------|---|
| Appearance | : Liquid. | |
| Colour | : Brown. | |
| Odour | : Characteristic. | |
| Odour threshold | : Not known. | |
| pH | : Not applicable. | |
| Solubility in water | : Not known. | |
| Partition coefficient (n-octanol/water) | : Not applicable. | |
| Flash point | : > 100 °C | |
| Flammability (solid, gas) | : Not applicable. | Liquid. See flashpoint. |
| Auto ignition temperature | : Not known. | Does not contain substances with a known auto ignition temperature. |
| Boiling point/boiling range | : > 100 °C | |
| Melting point/melting range | : < 0 °C | |
| Explosive properties | : None known. | Does not contain explosives. |
| Explosion limits (in air) | : Not known. | |
| Oxidising properties | : Not applicable. | Does not contain oxidizing substances. |
| Decomposition temperature | : Not known. | |
| Viscosity (20°C) | : Not known. | |
| Viscosity (40°C) | : Not relevant. | The product contains $< 10\%$ substances having an aspiration hazard. |
| Vapour pressure (20°C) | : Not known. | |
| Vapour density (20°C) | : > 1 | (air = 1) |
| Relative density (20°C) | : 0,85 g/ml | |
| Evaporation rate | : < 1 | (n-butyl acetate = 1) |

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability



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Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : Keep away from oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No toxicological research has been carried out on this product.

Inhalation

- Acute toxicity : Calculated LC50: > 6,432 mg/l. Ingredients of unknown toxicity: 12 %. ATE: > 5 mg/l. May cause headache, dizziness and a feeling of sickness.
- Corrosion/irritation : Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain respiratory sensitisers. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Skin contact

- Acute toxicity : Calculated LD50: > 2658 mg/kg.bw. Ingredients of unknown toxicity: 4 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Slight irritation possible. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : May produce an allergic reaction.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Eye contact

- Corrosion/irritation : Slight irritation possible. Not classified - based on available data, the classification criteria are not met.

Ingestion

- Acute toxicity : Calculated LD50: > 2172 mg/kg.bw. Ingredients of unknown toxicity: 2 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met. After ingestion, at vomiting, risk of aspiration in the lungs.
- Corrosion/irritation : May cause a feeling of sickness, stomachache, vomiting and diarrhoea. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.



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Toxicological information:

| Chemical name | Property | | Method | Test animal |
|---|-----------------------------------|-----------------------|----------|-------------|
| 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol | NOAEL (development, oral) | 750 mg/kg bw/d | | Rat |
| | Genotoxicity - in vivo | Not genotoxic | OECD 486 | Rat |
| | NOAEL (inhalation) | 30 mg/m ³ | OECD 412 | Rat |
| | NOAEL (oral) | 64,1 mg/kg bw/d | OECD 408 | Rat |
| | Eye irritation | Slightly irritant | OECD 405 | Rabbit |
| | Skin irritation | Non-irritant | OECD 404 | Rabbit |
| | LD50 (dermal) | > 4000 mg/kg bw | OECD 402 | Rat |
| | LC50 (inhalation) | 371 mg/m ³ | OECD 403 | Rat |
| | Skin sensitisation | Sensitizing. | ----- | Guinea pig |
| | NOEL (carcinogenicity) - estimate | Not carcinogenic | ----- | Mouse |
| | LD50 (oral) | 1000 mg/kg bw | OECD 401 | Rat |

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Calculated LC50 (fish): 4 mg/l. Calculated EC50 (waterflea): 1561 mg/l. Contains 12 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence – degradability : No specific information known. The surfactants contained in this preparation do not comply with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents. This product shall not be used in cleaners.

12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

12.4. Mobility in soil

Mobility : No specific information known.

12.5. Results of PBT and vPvB ass

PBT/vPvB assessment : Does not contain PBT or vPvB substances.

12.6. Other adverse effects

Other information : Not applicable.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as chemical waste. Dispose waste to an official chemical waste depot.

Additional warning : None.

Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.



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SECTION 14 TRANSPORT INFORMATION

14.1. UN number

UN nr. : None.

14.2. UN proper shipping name

Transport name : Not regulated.

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID (road / railway)

Class : This product is not classified according to ADR/RID.

IMDG (sea)

Class : This product is not classified according to IMDG.

Marine pollutant : No

IATA (air)

Class : This product is not classified according to IATA.

14.6. Special precautions for user

Other information : Country specific variations may apply.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Community regulations : Regulation (EC) No 453/2010 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

SECTION 16 OTHER INFORMATION

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EC) No 453/2010 dated 20 May 2010 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

Full text of H-phrases mentioned in section 3:



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| | |
|------|-----------------------------------|
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

Full text of hazard classes mentioned in section 3:

| | |
|---------------|---|
| Skin Irrit. 2 | : Skin irritation, category 2. |
| Eye Irrit. 2 | : Eye irritation, category 2. |
| STOT SE 3 | : Specific target organ toxicity after single exposure, category 3. |

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

| | |
|---------------|---|
| ADR | : European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | : Acute Toxicity Estimate |
| CLP | : Classification, Labeling & Packaging |
| CMR | : Carcinogenic, Mutagenic or toxic for Reproduction |
| EEC | : European Economic Community |
| IATA | : International Air Transport Association |
| IBC code | : International Bulk Chemical Code |
| IMDG | : International Maritime Dangerous Goods Code |
| LD50/LC50 | : Lethal Dose/Concentration for 50% of a population |
| MAC | : Maximum Allowable Concentration |
| MARPOL | : International Convention for the Prevention of Pollution From Ships |
| NO(A)EL | : No Observed (Adverse) Effect Level |
| OECD | : Organisation for Economic Co-operation and Development |
| PBT | : Persistent, Bioaccumulative and Toxic |
| PC | : Chemical product category |
| PT | : Product type |
| REACH | : Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | : Regulations concerning the International Carriage of Dangerous Goods by Rail |
| STP | : Sewage Treatment Plant |
| SU | : Sector of Use |
| TWA/STEL | : Time-Weighted Average/Short Term Exposure Limit |
| UN | : United Nations |
| VOC | : Volatile Organic Compounds |
| vPvB | : Very Persistent and Very Bioaccumulative |
| Number format | : "," used as decimal separator. |

History

Date of first issue : 03-04-2015