

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830Date of issue: 30-03-17Revision date: 30-03-17Supersedes: 26-09-16 Version: 1.0

| <b>SECTION 1</b>                              | : Identification of the substa  | nce/mixture and of the co                       | mpany/undertaking   |                            |  |
|---|---|---|---|----------------------------|--|
| 1.1. Pro                                      | duct identifier   |   |   |                            |  |
| Product form                                  | :   | Mixtures  |   |                            |  |
| Product name                                  | :   | ENGINE ANTIFREEZE BARDAHL                       |   |                            |  |
| Product code                                  | :   | 6113 # 733611VR1                                |   |                            |  |
| 1.2. Rele                                     | evant identified uses of the substan  | ce or mixture and uses advised a                | gainst  |                            |  |
| 1.2.1. Rele                                   | evant identified uses   |   |   |                            |  |
| Intended for g                                | eneral public   |   |   |                            |  |
| Main use cate                                 | Main use category : Consumer use,Professional use,Industrial use  |   |   |                            |  |
| 1.2.2. Use                                    | 2.2. Uses advised against   |   |   |                            |  |
| No additional i                               | nformation available  |   |   |                            |  |
| 1.3. Deta                                     | ails of the supplier of the safety dat  | a sheet   |   |                            |  |
| ZI TOURNAI (<br>7522 TOURNA<br>T +32 (0).69.5 | DAHL Additives & Lubricants<br>DUEST 2 - RUE DU MONT DES CAR<br>AI - BELGIQUE<br>9.03.60 - F +32 (0).69.59.03.61<br>Ifrance.com - www.bardahlfrance.con | LIERS, 3 ZI TOURNA<br>7522 TOUR<br>T +32 (0).69 | ARDAHL Additives & Lubrica<br>I OUEST 2 - RUE DU MON <sup></sup><br>NAI - BELGIQUE<br>9.59.03.60 - F +32 (0).69.59.1<br>Iahlfrance.com - www.bardał | T DES CARLIERS, 3<br>03.61 |  |
| 1.4. Eme                                      | ergency telephone number  |   |   |                            |  |
| Emergency nu                                  | mber :  | + 32 (0)70.245.245 / +33 (0)1.45.4              | 2.59.59   |                            |  |
| Country                                       | Organisation/Company  | Address   | Emergency number  | Comment                    |  |
| Malta   | Medicines & Poisons Info  | Mater Dei Hospital                              | +356 2545 6504  |                            |  |

| Country        | Organisation/Company  | Address                            | Emergency number | Comment |
|----------------|---|------------------------------------|------------------|---------|
| Malta          | Medicines & Poisons Info<br>Office  | Mater Dei Hospital<br>MSD Msida    | +356 2545 6504   |         |
| United Kingdom | National Poisons Information<br>Service (Belfast Centre)<br>Royal Victoria Hospital | Grosvenor Road<br>BT12 6BA Belfast | 0344 892 0111    |         |

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

# Classification according to Regulation (EC) No. 1272/2008 [CLP]

| Acute toxicity (oral), Category 4   | H302 |
|---|------|
| Serious eye damage/eye irritation,  | H319 |
| Category 2<br>Specific target organ toxicity —<br>Repeated exposure, Category 2 | H373 |

Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

| 2.2. Label elements                            |  |       |
|--|--|-------|
| Labelling according to Regulation (EC) No. 127 | 2/2008 [CLP]   |       |
| Hazard pictograms (CLP)                        |  |       |
| Signal word (CLP)                              | GHS07 GHS08  |       |
| •  | thylene glycol   |       |
| Hazard statements (CLP)                        | <ul> <li>H302 - Harmful if swallowed</li> <li>H319 - Causes serious eye irritation</li> <li>H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure swallowed)</li> </ul> | e (if |
| Precautionary statements (CLP)                 | <ul> <li>P101 - If medical advice is needed, have product container or label at hand</li> <li>P102 - Keep out of reach of children</li> <li>P260 - Do not breathe vapours</li> </ul>                 |       |
| 30-03-17                                       | EN (English)   | 1/7   |

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|                                    | <ul> <li>P264 - Wash hands thoroughly after handling</li> <li>P270 - Do not eat, drink or smoke when using this product</li> <li>P280 - Wear eye protection/face protection.</li> <li>P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</li> <li>P314 - Get medical advice/attention if you feel unwell</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention</li> <li>P501 - Dispose of contents/container in accordance with local regulations.</li> </ul> |
|------------------------------------|---|
| Extra phrases                      | : Embittering agent.  |
| Security closing plug for children | : Not applicable  |
| Tactile warning                    | : Applicable  |

| 2.3. | Other hazards |  |
|------|---------------|--|
|      |               |  |

No additional information available

# **SECTION 3: Composition/information on ingredients**

# 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name                       | Product identifier   | %   | Classification according to<br>Regulation (EC) No.<br>1272/2008 [CLP] |
|----------------------------|--|-----|---|
| ethylene glycol            | (CAS-No.) 107-21-1<br>(EC-No.) 203-473-3<br>(EC Index-No.) 603-027-00-1<br>(REACH-no) 01-2119456816-28 | >80 | Acute Tox. 4 (Oral), H302<br>STOT RE 2, H373                          |
| Potassium 2-ethylhexanoate | (CAS-No.) 3164-85-0<br>(EC-No.) 221-625-7  | <5  | Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Repr. 2, H361fd            |

### Full text of H-statements: see section 16

| SECTION 4: First aid measures                              |  |  |  |
|--|--|--|--|
| 4.1. Description of first aid measures                     |  |  |  |
| First-aid measures general                                 | : Never give anything by mouth to an unconscious person. If medical advice is needed, have product container or label at hand.       |  |  |
| First-aid measures after inhalation                        | : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.                    |  |  |
| First-aid measures after skin contact                      | : Remove contaminated clothes. Wash skin with plenty of water. Wash contaminated clothing before reuse.                              |  |  |
| First-aid measures after eye contact                       | : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if preser<br>and easy to do. Continue rinsing. |  |  |
| First-aid measures after ingestion                         | : Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.  |  |  |
| 4.2. Most important symptoms and effe                      | ects, both acute and delayed   |  |  |
| Symptoms/effects after inhalation                          | : May cause respiratory irritation.  |  |  |
| Symptoms/effects after eye contact                         | : Causes serious eye irritation.   |  |  |
| Symptoms/effects after ingestion                           | : Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure.   |  |  |
| 4.3. Indication of any immediate medic                     | al attention and special treatment needed  |  |  |
| Antidote. Ethanol.   |  |  |  |
| SECTION 5: Fire-fighting measures                          |  |  |  |
| 5.1. Extinguishing media                                   |  |  |  |
| Suitable extinguishing media                               | : Carbon dioxide. Water spray. Dry powder. Sand.   |  |  |
| Unsuitable extinguishing media                             | : Do not use a heavy water stream.   |  |  |
| 5.2. Special hazards arising from the substance or mixture |  |  |  |
| Hazardous decomposition products in case of fire           | : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.                                    |  |  |
| 5.3. Advice for firefighters                               |  |  |  |
| Firefighting instructions                                  | : Exercise caution when fighting any chemical fire.  |  |  |

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| Protection during firefighting               | : Do not enter fire area without proper protective equipment, including respiratory protection.  |
|--|--|
| Other information                            | : Prevent liquid from entering sewers, watercourses, underground or low areas.   |
| <b>SECTION 6: Accidental rele</b>            | ase measures   |
| 6.1. Personal precautions, pr                | otective equipment and emergency procedures  |
| General measures                             | : Evacuate area. Eliminate every possible source of ignition. Ensure adequate ventilation, especially in confined areas. Keep public away from danger area. Equip cleanup crew with proper protection. |
| 6.1.1. For non-emergency pers                | onnel  |
| No additional information available          |  |
| 6.1.2. For emergency responde                | rs   |
| No additional information available          |  |
| 6.2. Environmental precautio                 | ns   |
| Dike for recovery or absorb with app waters. | ropriate material. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public   |
| 6.3. Methods and material for                | containment and cleaning up  |
| For containment                              | : Recover the product with absorbent material.   |

### Methods for cleaning up

: Clean up any spills as soon as possible, using an absorbent material to collect it.

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13: "Disposal considerations".

| SECTION 7: Handling and storage                                   |  |  |  |
|---|--|--|--|
| 7.1. Precautions for safe handling                                |  |  |  |
| Precautions for safe handling                                     | : Do not eat, drink or smoke when using this product.  |  |  |
| Hygiene measures  | : Wash contaminated clothing before reuse. Always wash hands after handling the product.           |  |  |
| 7.2. Conditions for safe storage, including any incompatibilities |  |  |  |
| Storage conditions  | : Store in a dry place. Store in a closed container. Store in a well-ventilated place. Keep out of |  |  |

frost. Keep away from heat.

### 7.3. Specific end use(s)

No additional information available

# **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

| ethylene glycol (107-21-1) |                                  |                           |
|----------------------------|----------------------------------|---------------------------|
| EU                         | IOELV TWA (mg/m <sup>3</sup> )   | 52 mg/m <sup>3</sup>      |
| EU                         | IOELV TWA (ppm)                  | 20 ppm                    |
| EU                         | IOELV STEL (mg/m <sup>3</sup> )  | 104 mg/m <sup>3</sup>     |
| EU                         | IOELV STEL (ppm)                 | 40 ppm                    |
| Belgium                    | Limit value (mg/m <sup>3</sup> ) | 52 fibers/cm <sup>3</sup> |
| Belgium                    | Limit value (ppm)                | 20 ppm                    |
| Belgium                    | Short time value (mg/m³)         | 104 mg/m <sup>3</sup>     |
| Belgium                    | Short time value (ppm)           | 40 ppm                    |
| France                     | VME (mg/m <sup>3</sup> )         | 52 mg/m <sup>3</sup>      |
| France                     | VME (ppm)                        | 20 ppm                    |
| France                     | VLE (mg/m <sup>3</sup> )         | 104 mg/m <sup>3</sup>     |
| France                     | VLE (ppm)                        | 40 ppm                    |
| Netherlands                | MAC C (mg/m <sup>3</sup> )       | 104 mg/m <sup>3</sup>     |
| Netherlands                | MAC C (ppm)                      | 40 ppm                    |

# 8.2. Exposure controls

### Hand protection:

In case of repeated or prolonged contact wear gloves

### Eye protection:

Safety glasses

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| Туре           | Use | Characteristics   | Standard |
|----------------|-----|-------------------|----------|
| Safety glasses |     | With side shields | EN 166   |

### Skin and body protection:

Wear suitable protective clothing

## Respiratory protection:

Good ventilation of the workplace required. In case of inadequate ventilation wear respiratory protection



| <b>SECTION 9: Physical and chemica</b>     | Il properties         |
|--|-----------------------|
| 9.1. Information on basic physical and     | d chemical properties |
| Physical state                             | : Liquid              |
| Appearance                                 | : clear.              |
| Colour                                     | : Blue.               |
| Odour                                      | : No data available   |
| Odour threshold                            | : No data available   |
| рН   | : 7,5 - 9             |
| Relative evaporation rate (butylacetate=1) | : No data available   |
| Melting point                              | : No data available   |
| Freezing point                             | : No data available   |
| Boiling point                              | : No data available   |
| Flash point                                | : No data available   |
| Auto-ignition temperature                  | : No data available   |
| Decomposition temperature                  | : No data available   |
| Flammability (solid, gas)                  | : No data available   |
| Vapour pressure                            | : No data available   |
| Relative vapour density at 20 °C           | : No data available   |
| Relative density                           | : 1,11 - 1,13         |
| Solubility                                 | : No data available   |
| Log Pow                                    | : No data available   |
| Viscosity, kinematic                       | : No data available   |
| Viscosity, dynamic                         | : No data available   |
| Explosive properties                       | : No data available   |
| Oxidising properties                       | : No data available   |
| Explosive limits                           | : No data available   |
| 9.2. Other information                     |                       |
| No additional information available        |                       |
| SECTION 10: Stability and reactivi         | ty                    |
| 10.1. Reactivity                           |                       |
| Stable under normal conditions of use.     |                       |
| 10.2. Chemical stability                   |                       |
| Stable under normal conditions.            |                       |
| 10.3. Possibility of hazardous reactions   | S                     |
| Not established                            |                       |

Not established.

10.4. Conditions to avoid

Heat. Open flame. Sparks. Water, humidity. Freezing.

10.5. Incompatible materials

Oxidizing agent.

**10.6.** Hazardous decomposition products

Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

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| SECTION 11: Toxicological information   | bn   |  |  |
|---|--|--|--|
| 11.1. Information on toxicological effects                                    | - · · · · · · · · · · · · · · · · · · ·  |  |  |
| Acute toxicity  | : Oral: Harmful if swallowed.  |  |  |
| ATE CLP (oral)  | 543,500 mg/kg bodyweight   |  |  |
| ethylene glycol (107-21-1)  |  |  |  |
| LD50 oral rat   | 7712 mg/kg bodyweight  |  |  |
| LD50 dermal rat   | 3500 mg/kg bodyweight  |  |  |
| LC50 inhalation rat (mg/l)  | > 2,5 mg/l   |  |  |
| kin corrosion/irritation  | : Not classified   |  |  |
|   | pH: 7,5 - 9  |  |  |
| Serious eye damage/irritation   | : Causes serious eye irritation.   |  |  |
|   | pH: 7,5 - 9  |  |  |
| Respiratory or skin sensitisation   | Not classified   |  |  |
| Germ cell mutagenicity  | : Not classified   |  |  |
| arcinogenicity  | : Not classified   |  |  |
|   |  |  |  |
| ethylene glycol (107-21-1)<br>NOAEL (chronic, oral, animal/male, 2 years)     | 1000 ma/ka bodywoiabt  |  |  |
| NOAEL (chronic, oral, animal/male, 2 years)                                   | 1000 mg/kg bodyweight       1000 mg/kg bodyweight  |  |  |
|   |  |  |  |
| Reproductive toxicity   | : Not classified   |  |  |
| TOT-single exposure   | : Not classified   |  |  |
| ethylene glycol (107-21-1)  |  |  |  |
| NOAEL (oral, rat)   | 200 mg/kg bodyweight   |  |  |
| TOT-repeated exposure   | : May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed).      |  |  |
| spiration hazard  | : Not classified   |  |  |
| 2.1. Toxicity<br>ethylene glycol (107-21-1)                                   |  |  |  |
| LC50 fish 1   | 72860 mg/l LC 50 (Fish) / 96 h :   |  |  |
| EC50 Daphnia 1  | > 100 mg/l EC 50 (Daphnia)/ 48 h :   |  |  |
| EC50 Daprina 1<br>EC50 other aquatic organisms 1                              | > 6500 EC50 96h Algae [mg/l]   |  |  |
| NOEC chronic fish   | 15380 mg/l   |  |  |
| NOEC chronic algae  | 8590 mg/l  |  |  |
|   |  |  |  |
| 2.2. Persistence and degradability  |  |  |  |
| ethylene glycol (107-21-1)  |  |  |  |
| Biodegradation  | 90 % (OECD 301D method)  |  |  |
| 2.3. Bioaccumulative potential  |  |  |  |
| ethylene glycol (107-21-1)  |  |  |  |
| Log Kow   | -1,36  |  |  |
| 2.4. Mobility in soil   |  |  |  |
| lo additional information available   |  |  |  |
|   |  |  |  |
| 2.5. Results of PBT and vPvB assessmen<br>lo additional information available | ι.   |  |  |
|   |  |  |  |
| 2.6. Other adverse effects  |  |  |  |
| No additional information available   |  |  |  |
| ECTION 13: Disposal consideration   | s  |  |  |
| 3.1. Waste treatment methods  |  |  |  |
| Sewage disposal recommendations   | : Do not discharge into drains or the environment.   |  |  |
| Product/Packaging disposal recommendations                                    | : Collect all waste in suitable and labelled containers and dispose according to local legislation |  |  |
| •   |  |  |  |

Ecology - waste materials

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European List of Waste (LoW) code

: 07 07 01\* - aqueous washing liquids and mother liquors

07 06 01\* - aqueous washing liquids and mother liquors

## SECTION 14: Transport information In accordance with ADR / RID / IMDG / IATA / ADN

| In accordance with ADR / RID / IMDG / IATA / ADN |                |                |                |  |  |  |
|--|----------------|----------------|----------------|--|--|--|
| ADR  | IMDG           | ΙΑΤΑ           | RID            |  |  |  |
| 14.1. UN number                                  |                |                |                |  |  |  |
| Not applicable                                   | Not applicable | Not applicable | Not applicable |  |  |  |
| 14.2. UN proper shipping name                    |                |                |                |  |  |  |
| Not applicable                                   | Not applicable | Not applicable | Not applicable |  |  |  |
| Not applicable                                   | Not applicable | Not applicable | Not applicable |  |  |  |
| 14.3. Transport hazard class(es)                 |                |                |                |  |  |  |
| Not applicable                                   | Not applicable | Not applicable | Not applicable |  |  |  |
| Not applicable                                   | Not applicable | Not applicable | Not applicable |  |  |  |
| 14.4. Packing group                              |                |                |                |  |  |  |
| Not applicable                                   | Not applicable | Not applicable | Not applicable |  |  |  |
| 14.5. Environmental hazards                      |                |                |                |  |  |  |
| Not applicable                                   | Not applicable | Not applicable | Not applicable |  |  |  |
| No supplementary information available           |                |                |                |  |  |  |

### 14.6. Special precautions for user

### - Overland transport

Not applicable

# - Transport by sea

Not applicable

# - Air transport

Not applicable

### - Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

# SECTION 15: Regulatory information

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

### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

### 15.1.2. National regulations

### Germany

| VwVwS Annex reference  | : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 4) |
|--|---|
| 12th Ordinance Implementing the Federal<br>Immission Control Act - 12.BImSchV        | : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)                              |
| Netherlands  |   |
| SZW-lijst van kankerverwekkende stoffen  | : None of the components are listed   |
| SZW-lijst van mutagene stoffen   | : None of the components are listed   |
| NIET-limitatieve lijst van voor de voortplanting<br>giftige stoffen – Borstvoeding   | : None of the components are listed   |
| NIET-limitatieve lijst van voor de voortplanting<br>giftige stoffen – Vruchtbaarheid | : None of the components are listed   |
| NIET-limitatieve lijst van voor de voortplanting<br>giftige stoffen – Ontwikkeling   | : None of the components are listed   |

#### Denmark

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| Recommendations Danish Regulation | : | Young people below the age of 18 years are not allowed to use the product  |
|-----------------------------------|---|--|
|                                   |   | Pregnant/breastfeeding women working with the product must not be in direct contact with the product   |
|                                   |   | The requirements from the Danish Working Environment Authorities regarding work with<br>carcinogens must be followed during use and disposal |

# 15.2. Chemical safety assessment

No additional information available

# **SECTION 16: Other information**

## Full text of H- and EUH-statements:

| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4                                       |  |
|---------------------|---|--|
| Eye Dam. 1          | Serious eye damage/eye irritation, Category 1                           |  |
| Repr. 2             | Reproductive toxicity, Category 2                                       |  |
| Skin Irrit. 2       | Skin corrosion/irritation, Category 2                                   |  |
| STOT RE 2           | Specific target organ toxicity — Repeated exposure, Category 2          |  |
| H302                | Harmful if swallowed  |  |
| H315                | Causes skin irritation  |  |
| H318                | Causes serious eye damage   |  |
| H319                | Causes serious eye irritation   |  |
| H361fd              | Suspected of damaging fertility. Suspected of damaging the unborn child |  |
| H373                | May cause damage to organs through prolonged or repeated exposure       |  |

### SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product