1. Identification

Product identifier: Husqvarna Bio Advanced Chain Oil

Other means of identification:

- Product code: 831 00 80-42 (1000L); 588 81 83-30 (200L); 588 81 83-20 (20L); 588 81 83-10 (5L); 588 81 83-01 (1L)

Recommended use of the chemical and restrictions on use:

- Recommended use: Lubrication of saw chains.
- Restrictions on use: Use in accordance with supplier’s recommendations.

Details of manufacturer or importer:

Manufacturer:
- Supplier: Husqvarna Australia Pty Ltd
- Address: 4 Pioneer Avenue, Tuggerah NSW 2252
- Country: Australia
- Telephone: +61 2 4352 7400
- e-mail: mike.enderby@husqvarnagroup.com
- Contact: Mike Enderby
- Emergency: Contact Poisons Information Centre; phone 13 12 26

2. Hazard(s) identification

Classification of the hazardous chemical:

- Physical hazards: Not classified.
- Health hazards: Not classified.
- Environmental hazards: Not classified.

Label elements, including precautionary statements:

- Hazard symbol(s): None.
- Signal word: None.
- Hazard Statement(s): Not assigned.
- Precautionary Statement(s):
  - Prevention: Not assigned.
  - Response: Not assigned.
  - Storage: Not assigned.
  - Disposal: Not assigned.
- Other hazards which do not result in classification: None known.
- Supplemental information: None.

3. Composition/information on ingredients

Mixture:

<table>
<thead>
<tr>
<th>Identity of chemical ingredients</th>
<th>CAS number and other unique identifiers</th>
<th>Concentration of ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oils, vegetable</td>
<td>68956-68-3</td>
<td>&gt;90</td>
</tr>
</tbody>
</table>

4. First-aid measures

Description of necessary first aid measures:

- Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Call a physician if symptoms develop or persist.
Wash with soap and water. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions. If high pressure injection under the skin occurs, always seek medical attention.

**Eye contact**
Flush eyes immediately with large amounts of water. Remove any contact lenses and open eyelids wide apart. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get immediate medical attention.

**Personal protection for first-aid responders**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**Symptoms caused by exposure**
May cause discomfort if swallowed. In high concentrations, mists/vapors may irritate throat and respiratory system and cause coughing.

**Medical attention and special treatment**
Provide general supportive measures and treat symptomatically. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. Symptoms may be delayed. HIGH PRESSURE SKIN INJECTION: Physician must be familiar with local procedures for treatment of this type of wound; incision, irrigation, removal of all necrotic tissue and open wound dressing;

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### 5. Fire-fighting measures

**Extinguishing media**
- **Suitable extinguishing media**
  - Foam.
  - Dry powder.
  - Carbon dioxide (CO2).
  - Water fog.
- **Unsuitable extinguishing media**
  - Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
By heating and fire, irritating vapours/gases may be formed.

**Special protective equipment and precautions for fire fighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

**Fire fighting equipment/instructions**
Move container from fire area if it can be done without risk. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

**Hazchem Code**
None.

**General fire hazards**
Heating may generate vapours which may form explosive vapour/air mixtures. Material will float and can be re-ignited on surface of water.

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### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

- **For non-emergency personnel**
  - Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). In case of spills, beware of slippery floors and surfaces. Wear protective clothing as described in section 8 of this safety data sheet.

- **For emergency responders**
  - Wear protective clothing as described in Section 8 of this safety data sheet.

**Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not allow to enter drains, sewers or watercourses. Environmental manager must be informed of all major releases.

**Methods and materials for containment and cleaning up**
- Remove sources of ignition. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.
- Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Wash area with soap and water.
- Small Spills: Wipe up spilled material and place in a suitable container for disposal. Clean surface thoroughly to remove residual contamination.
- Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS.

**Other issues relating to spills and releases**
Clean up in accordance with all applicable regulations.

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### 7. Handling and storage

**Precautions for safe handling**
Use only in well-ventilated areas. Avoid inhalation of oil mist and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Do not eat, drink or smoke when using the product. Be aware of potential for surfaces to become slippery. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities
Keep away from ignition, flame and heat sources. Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Storage temperature: between -20°C and 40°C.

8. Exposure controls and personal protection
Control parameters
Follow standard monitoring procedures.

Occupational exposure limits

Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oils, vegetable (CAS 68956-68-3)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Inhalable mist.</td>
</tr>
</tbody>
</table>

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oils, vegetable (CAS 68956-68-3)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Inspirable dust.</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Exposure guidelines
Follow standard monitoring procedures.

Appropriate engineering controls
Provide adequate ventilation and minimise the risk of inhalation of vapours and oil mist. Use explosion-proof equipment. Provide easy access to water supply and eye wash facilities.

Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection
Risk of contact: Wear safety glasses with side shields (or goggles).

Skin protection
Hand protection
Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Other
Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protection
In case of inadequate ventilation or risk of inhalation of oil mist, suitable respiratory equipment with particulate filter and organic vapor cartridges can be used. Wear air-supplied mask in confined areas.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

Hygiene measures
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using, do not eat, drink or smoke. Launder contaminated clothing before reuse. Private clothes and working clothes should be kept separately.

9. Physical and chemical properties

Appearance

Physical state
Liquid.

Form
Liquid.

Colour
Yellow.

Odour
Slight.

Odour threshold
Not available.

pH
Not available.

Melting point/freezing point
Not available.

Initial boiling point and boiling range
Not available.

Flash point
> 200.0 °C (> 392.0 °F)

Evaporation rate
Not available.

Flammability (solid, gas)
Not applicable.

Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.
**Flammability limit - upper**

Not available.

**Vapour pressure**

Not available.

**Vapour density**

Not available.

**Relative density**

0.918 (20°C) (Water = 1)

**Solubility(ies)**

- **Solubility (water)**
  Insoluble in water.

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

Not available.

**Auto-ignition temperature**

Not available.

**Decomposition temperature**

Not available.

**Viscosity**

51 cSt (40 °C)

**Other physical and chemical parameters**

- **Explosive properties**
  Not available.

- **Oxidising properties**
  Not oxidising.

- **Pour point**
  -36 °C (-32.8 °F)

**10. Stability and reactivity**

**Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

**Chemical stability**

Material is stable under normal conditions.

**Possibility of hazardous reactions**

Hazardous polymerisation does not occur.

**Conditions to avoid**

Heat, sparks, flames, elevated temperatures. Contact with incompatible materials.

**Incompatible materials**

Strong oxidising agents.

**Hazardous decomposition products**

By heating and fire, irritating vapours/gases may be formed. Carbon oxides.

**11. Toxicological information**

**Information on possible routes of exposure**

- **Inhalation**
  In high concentrations, mists/vapors may irritate throat and respiratory system and cause coughing.

- **Skin contact**
  Health injuries are not known or expected under normal use.

- **Eye contact**
  Health injuries are not known or expected under normal use.

- **Ingestion**
  May cause discomfort if swallowed. Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis.

**Symptoms related to exposure**

May cause discomfort if swallowed. In high concentrations, mists/vapors may irritate throat and respiratory system and cause coughing.

**Acute toxicity**

May cause discomfort if swallowed.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Husqvarna Bio Advanced Chain Oil (CAS -)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td>Oral</td>
<td>Rat</td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td>Not irritating</td>
<td></td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td>Not irritating</td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory or skin sensitisation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory sensitisation</strong></td>
<td>No data available.</td>
<td></td>
</tr>
<tr>
<td><strong>Skin sensitisation</strong></td>
<td>Not a skin sensitiser.</td>
<td></td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td>No data available.</td>
<td></td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td>Not classified.</td>
<td></td>
</tr>
<tr>
<td><strong>Reproductive toxicity</strong></td>
<td>No data available.</td>
<td></td>
</tr>
</tbody>
</table>
Specific target organ toxicity - single exposure: No data available.
Specific target organ toxicity - repeated exposure: No data available.
Aspiration hazard: Not classified, however droplets of the product may be aspirated into the lungs through ingestion or vomiting and may cause a serious chemical pneumonia.
Chronic effects: Prolonged contact may cause dryness of the skin. Prolonged or repeated inhalation may cause respiratory tract irritation.
Other information: No other specific acute or chronic health impact noted.

12. Ecological information
Ecotoxicity: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
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<tr>
<th>Product</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husqvarna Bio Advanced Chain Oil</td>
<td>Aquatic Fish</td>
<td>LC50 Fish &gt; 100 mg/l</td>
</tr>
</tbody>
</table>

Persistence and degradability: The product is readily biodegradable.
Bioaccumulative potential: No data available.
Mobility in soil: The product is insoluble in water and will spread on the water surface.
Other adverse effects: Oil spills are generally hazardous to the environment.

13. Disposal considerations
Disposal methods: This material and/or its container must be disposed of as hazardous waste. Dispose in accordance with all applicable regulations.
Residual waste: Dispose in accordance with all applicable regulations.
Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information
ADG: Not regulated as dangerous goods.
RID: Not regulated as dangerous goods.
IATA: Not regulated as dangerous goods.
IMDG: Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

15. Regulatory information
Safety, health and environmental regulations
National regulations: This Safety Data Sheet was prepared in accordance with the Australia National Code of Practice for the Preparation of Material Safety Data Sheets (NOHSC: 2011.) No poison schedule number allocated.

Australia Medicines & Poisons Appendix A: Poisons schedule number not allocated.
Australia Medicines & Poisons Appendix B: Poisons schedule number not allocated.
Australia Medicines & Poisons Appendix C: Poisons schedule number not allocated.
Australia Medicines & Poisons Appendix D: Poisons schedule number not allocated.
Australia Medicines & Poisons Appendix E: Poisons schedule number not allocated.
Australia Medicines & Poisons Appendix F
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix G
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix H
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 3
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 5
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 6
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 7
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 8
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9
Poisons schedule number not allocated.

High Volume Industrial Chemicals (HVIC)
Not listed.

Importation of Ozone Deleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)
Not listed.

National Pollutant Inventory (NPI) substance reporting list
Not listed.

Prohibited Carcinogenic Substances
Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)
Not listed.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)
Not listed.

Restricted Carcinogenic Substances
Not regulated.

International regulations

Stockholm Convention
Not applicable.

Rotterdam Convention
Not applicable.

Kyoto protocol
Not applicable.

Montreal Protocol
Not applicable.

Basel Convention
Not applicable.

16. Other information

Issue date 05-February-2016

Material name: Husqvarna Bio Advanced Chain Oil
926926
Material name: Husqvarna Bio Advanced Chain Oil

<table>
<thead>
<tr>
<th>Revision date</th>
<th>-</th>
</tr>
</thead>
</table>
| References    | HSDB® - Hazardous Substances Data Bank  
Registry of Toxic Effects of Chemical Substances (RTECS)  
ESIS (European chemical Substances Information System) |
| Disclaimer     | The information in the sheet was written based on the best knowledge and experience currently available. |