SAFETY DATA SHEET

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 New Zealand Ltd
- Address: 51 Aintree Avenue, Mangere, Auckland 2022
- Country: New Zealand
- Telephone: +64 9 920 2410
- e-mail: anthony.barry@husqvarnagroup.com
- Contact: Anthony Barry
- Emergency: Contact the Poisons Information Centre; Ph. 0800 764 766

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.
**Skin contact**
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**
  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.

**Environmental precautions**
Remove sources of ignition. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

**Methods and materials for containment and cleaning up**
- **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.

**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.
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>
</table>
| Oils, vegetable (CAS 68956-68-3) | TWA   | 10 mg/m³ | Inhalable mist.

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>
</table>
| Oils, vegetable (CAS 68956-68-3) | TWA   | 10 mg/m³ | Inspirable dust.

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>
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<tr>
<th>Product</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Skin corrosion/irritation | Not irritating |
| Serious eye damage/irritation | Not irritating |
| Respiratory or skin sensitisation | No data available. |
| Respiratory sensitisation | No data available. |
| Skin sensitisation | Not a skin sensitiser. |
| Germ cell mutagenicity | No data available. |
| Carcinogenicity | Not classified. |
| Reproductive toxicity | No data available. |
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.

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<tr>
<td>Husqvarna Bio Advanced Chain Oil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>&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
Revision date: -

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.