

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

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|--|---|
| Trade name or designation of the mixture | Husqvarna Bio Chain Oil |
| Registration number | - |
| Synonyms | None. |
| Product code | 588 81 82-30 (200L); 588 81 82-02 (20L); 588 81 82-10 (5L); 588 81 82-01 (1L) |
| Issue date | 28-May-2015 |
| Version number | 01 |
| Revision date | - |
| Supersedes date | - |

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

| | |
|----------------------|--|
| Identified uses | Lubrication of saw chains. |
| Uses advised against | Use in accordance with supplier's recommendations. |

1.3. Details of the supplier of the safety data sheet

| | |
|---------------------------------|--------------------------------------|
| Manufacturer/Supplier | Husqvarna AB |
| Address | Drottninggatan 2 |
| Telephone | +46 (0)36-14 65 00 |
| Contact person | Accessory Department |
| E-mail | sds.info@husqvarna.se |
| 1.4. Emergency telephone number | +1-760-476-3961 (Access code 333721) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

This preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary

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|-----------------------|--|
| Physical hazards | Not classified for physical hazards. |
| Health hazards | Not classified for health hazards. |
| Environmental hazards | Not classified for hazards to the environment. |
| Specific hazards | May form vapours or oil mists during mechanical action or at elevated temperatures which may be irritating to respiratory tract. |
| Main symptoms | May cause discomfort if swallowed. In high concentrations, mists/vapors may irritate throat and respiratory system and cause coughing. |

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

| | |
|-------------------|---------------|
| Hazard pictograms | None. |
| Signal word | None. |
| Hazard statements | Not assigned. |

Precautionary statements

| | |
|------------|---------------|
| Prevention | Not assigned. |
| Response | Not assigned. |
| Storage | Not assigned. |
| Disposal | Not assigned. |

Supplemental label information None.

2.3. Other hazards

Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

The components are not hazardous or are below required disclosure limits.

SECTION 4: First aid measures

General information If you feel unwell, seek medical advice (show the label where possible).

4.1. Description of first aid measures

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| 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. 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. |

4.2. Most important symptoms and effects, both acute and delayed May cause discomfort if swallowed. In high concentrations, mists/vapors may irritate throat and respiratory system and cause coughing.

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

SECTION 5: Firefighting measures

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

5.1. Extinguishing media

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| Suitable extinguishing media | Foam. Dry powder. Carbon dioxide (CO ₂). Water fog. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |

5.2. Special hazards arising from the substance or mixture By heating and fire, irritating vapours/gases may be formed.

5.3. Advice for firefighters

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| Special protective equipment for firefighters | 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. |
| Special fire fighting procedures | 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. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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| 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. |

6.2. 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.

6.3. Methods and material 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.

6.4. Reference to other sections For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

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| 7.1. 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. |
| 7.2. 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. |
| 7.3. Specific end use(s) | Lubrication of saw chains. |

SECTION 8: Exposure controls/personal protection

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| 8.1. Control parameters | |
| Occupational exposure limits | No exposure limits noted for ingredient(s). |
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Recommended monitoring procedures | Follow standard monitoring procedures. |
| Derived no-effect level (DNEL) | Not available. |
| Predicted no effect concentrations (PNECs) | Not available. |
| 8.2. Exposure controls | |
| 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, such as personal protective equipment | |
| General information | Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. |
| 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 combination filter (type A2/P2) can be used. Wear air-supplied mask in confined areas. Seek advice from local supervisor. |
| 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. |
| Environmental exposure controls | Environmental manager must be informed of all major spillages. |

SECTION 9: Physical and chemical properties

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| 9.1. Information on basic physical and chemical properties | |
| Appearance | |
| Physical state | Liquid. |
| Form | Liquid. |
| Colour | Yellow. |
| Odour | Characteristic. |
| Odour threshold | Not available. |
| pH | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | > 250.0 °C (> 482.0 °F) (ISO 2592) |
| 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 Not available.

Solubility(ies) Insoluble in water.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity 70 mm²/s (40 °C) (DIN 51562)

Explosive properties Not available.

Oxidizing properties Not oxidizing.

9.2. Other information

Density 0.92 g/cm³ (DIN 51757)

Pour point < -24 °C (< -11.2 °F) (DIN ISO 3016)

SECTION 10: Stability and reactivity

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

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous reactions Hazardous polymerisation does not occur.

10.4. Conditions to avoid Heat, sparks, flames, elevated temperatures. Contact with incompatible materials.

10.5. Incompatible materials Strong oxidising agents.

10.6. Hazardous decomposition products By heating and fire, irritating vapours/gases may be formed. Carbon oxides.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

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

11.1. Information on toxicological effects

Acute toxicity May cause discomfort if swallowed.

Skin corrosion/irritation Not irritating

Serious eye damage/eye irritation Not irritating

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.

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| Mixture versus substance information | Not available. |
| Other information | No other specific acute or chronic health impact noted. |

SECTION 12: Ecological information

12.1. Toxicity 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.

| Product | Species | Test results |
|-------------------------|-----------|--------------|
| Husqvarna Bio Chain Oil | | |
| Aquatic | | |
| Fish | LC50 Fish | > 100 mg/l |

12.2. Persistence and degradability The product is readily biodegradable.

12.3. Bioaccumulative potential No data available.

Partition coefficient n-octanol/water (log Kow) Not available.

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

Mobility in general The product is insoluble in water and will spread on the water surface.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects Oil spills are generally hazardous to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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| Residual waste | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. |
| EU waste code | The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| Disposal methods/information | Dispose in accordance with all applicable regulations. This material and/or its container must be disposed of as hazardous waste. |

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended
Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended
Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended
Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended
Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended
Not listed.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding, as amended
Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances
Not listed.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work
Not listed.

Directive 94/33/EC on the protection of young people at work
Not listed.

Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

DNEL: Derived No-Effect Level.

PNEC: Predicted No-Effect Concentration.
PBT: Persistent, bioaccumulative and toxic.
vPvB: Very Persistent and very Bioaccumulative.

References

HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)
ESIS (European chemical Substances Information System)

Information on evaluation method leading to the classification of mixture

The mixture is classified based on test data for physical hazards. The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. For details, refer to Sections 9, 11 and 12.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

None.

Training information

Follow training instructions when handling this material.

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.