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

1.1. Product identifier

Trade name or designation of the mixture: Husqvarna 4-Stroke Oil 10W-50

Registration number: -

Synonyms: None.

Product code: 578 03 71-04 (4L), 578 03 71-05 (10L)

Issue date: 23-December-2014

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 4-stroke engine.

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

Health hazards

- Serious eye damage/eye irritation: Category 2
  - H319 - Causes serious eye irritation.

Environmental hazards

- Hazardous to the aquatic environment, long-term aquatic hazard: Category 4
  - H413 - May cause long lasting harmful effects to aquatic life.

Hazard summary

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 cause eye irritation on direct contact. May form vapours or oil mists during mechanical action or at elevated temperatures which may be irritating to respiratory tract. Prolonged exposure to oil mist may cause pulmonary disease such as chronic inflammation. Prolonged and repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer. The product contains a small amount of sensitising substance which may provoke an allergic reaction among sensitive individuals.

Main symptoms: Irritation of eyes and mucous membranes. Defatting of the skin. Dermatitis. Ingestion may cause irritation and malaise. 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

Contains: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts
**Hazard pictograms**

**Signal word**
Warning

**Hazard statements**
H319 Causes serious eye irritation.
H413 May cause long lasting harmful effects to aquatic life.

**Precautionary statements**

**Prevention**
P264 Wash thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye/face protection.

**Response**
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.

**Storage**
Not assigned.

**Disposal**
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Supplemental label information**
Contains: Calcium long chain alkaryl sulphonate May produce an allergic reaction.

**2.3. Other hazards**
Not a PBT or vPvB substance or mixture.

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

**3.2. Mixtures**

**General information**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>%</th>
<th>CAS-No. / EC No.</th>
<th>REACH Registration No.</th>
<th>INDEX No.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</td>
<td>50 - 75</td>
<td>72623-87-1 276-738-4</td>
<td>-</td>
<td>649-483-00-5</td>
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<td>Classification: DSD: - CLP: -</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased</td>
<td>&lt; 25</td>
<td>90480-91-4 291-829-9</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Classification: DSD: R53 CLP: Aquatic Chronic 4;H413</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyolefin polyamine succinimide, polyol</td>
<td>&lt; 25</td>
<td>- - -</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Classification: DSD: R53 CLP: Aquatic Chronic 4;H413</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts</td>
<td>1 - &lt; 2.5</td>
<td>68649-42-3 272-028-3</td>
<td>-</td>
<td>-</td>
<td></td>
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<tr>
<td>Classification: DSD: Xi;R38-41, N;R51/53 CLP: Skin Irrit. 2;H315, Eye Dam. 1;H318, Aquatic Chronic 2;H411</td>
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<tr>
<td>Calcium long chain alkaryl sulphonate</td>
<td>&lt;1</td>
<td>722503-68-6</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Classification: DSD: R43, R53 CLP: Skin Sens. 1;H317, Aquatic Chronic 4;H413</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chemical name: Branched alkylphenol and Calcium branched alkylphenol  

Classification:  
DSD: Repr. Cat. 3;R62, Xi;R36/38, N;R50/53  
CLP: Skin Irrit. 2;H315, Eye Irrit. 2;H319, Rep. 2;H361, Aquatic Acute 1;H400, Aquatic Chronic 1;H410  

List of abbreviations and symbols that may be used above  
DSD: Directive 67/548/EEC.  
#: This substance has been assigned Community workplace exposure limit(s).  

Composition comments: The full text for all R- and H-phrases is displayed in section 16. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures  
General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of 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. 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 eye irritation on direct contact. Defatting of the skin. Dermatitis. Ingestion may cause irritation and malaise. 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  
Suitable extinguishing media: Alcohol-resistant 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.

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  
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 exposed to flames with water until well after the fire is out.

SECTION 6: Accidental release measures  
6.1. 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.
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

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. "Empty" containers retain product residue (liquid or vapour) and can be dangerous. Do not cut or weld on empty drums unless they are thoroughly cleaned.

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.

7.3. Specific end use(s)

Lubrication of 4-stroke engine.

SECTION 8: Exposure controls/personal protection

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

Wear safety glasses with side shields (or goggles).

Skin protection

- Hand protection

Wear protective gloves. Viton or nitrile rubber gloves are recommended. 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

9.1. Information on basic physical and chemical properties

Appearance

Brown liquid.

Physical state

Liquid.
Form: Liquid.
Colour: Brown.
Odour: Slight.
Odour threshold: Not available.
pH: 8
Melting point/freezing point: < -33 °C (< -27.4 °F)
Initial boiling point and boiling range: > 300 °C (> 572 °F)
Flash point: > 210.0 °C (> 410.0 °F) Open cup (ASTM D 92)
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: < 0.01 kPa (20 °C)
Vapour density: Not available.
Relative density: 0.86 ( Water = 1)
Solubility(ies): Immiscible in water.
Partition coefficient (n-octanol/water): Not available.
Auto-ignition temperature: > 300 °C (> 572 °F)
Decomposition temperature: > 300 °C (> 572 °F)
Viscosity: 17.6 cSt (20 °C) (100 °C (212 °F))
  119 cSt (40 °C (104 °F))
Explosive properties: Not available.
Oxidizing properties: Not oxidizing.

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
Inhalation of oil mist or vapours formed during heating of the product will irritate the respiratory system and provoke coughing.
Skin contact
Prolonged or repeated contact may dry skin and cause dermatitis.
Eye contact
Causes serious eye irritation.
Ingestion
Ingestion may cause irritation and malaise. Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis.
Symptoms
Irritation of eyes and mucous membranes. Defatting of the skin. Dermatitis. Ingestion may cause irritation and malaise. In high concentrations, mists/vapors may irritate throat and respiratory system and cause coughing.
11.1. Information on toxicological effects
Acute toxicity
May irritate and cause stomach pain, vomiting, diarrhoea and nausea. Human evidence indicates that the product has very low acute oral, dermal or inhalation toxicity. However, it can produce severe injury if taken into the lung as a liquid, and there may be profound central nervous system depression following prolonged exposure to high levels of vapour.
Skin corrosion/irritation
Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory sensitisation
No data available.

Skin sensitisation
The product contains a small amount of sensitising substance which may provoke an allergic reaction among sensitive individuals.

Germ cell mutagenicity
Based on available data, the classification criteria are not met.

Carcinogenicity
Not classified.

Reproductive toxicity
Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure
High concentrations: May cause respiratory irritation.

Specific target organ toxicity - repeated exposure
Based on available data, the classification criteria are not met.

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.

Mixture versus substance information
Not available.

Other information
Prolonged and repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.

SECTION 12: Ecological information

12.1. Toxicity
May cause long-term adverse effects in the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branched alkylphenol and Calcium branched alkylphenol</td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td>EC50</td>
</tr>
<tr>
<td></td>
<td>Crustacea</td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
Expected to biodegrade slowly.

12.3. Bioaccumulative potential
The product contains potentially bioaccumulating substances.

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. It will spread on the water surface while some of the components will eventually sediment in water systems. The volatile components of the product will spread in the atmosphere.

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
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
Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

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
  Not listed.
- Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II
  Not listed.
  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
  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 authorisation, 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
  Not listed.
- Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding
  Not listed.

Other EU regulations
- Directive 96/82/EC (Seveso II) on the control of 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
- R36/38 Irritating to eyes and skin.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R53 May cause long-term adverse effects in the aquatic environment.
- R62 Possible risk of impaired fertility.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H361 Suspected of damaging fertility or the unborn child.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H413 May cause long lasting harmful effects to aquatic life.

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.