SAFETY DATA SHEET

1. Identification
Product identifier: Husqvarna Chain Oil
Other means of identification:
- Product code: 579 39 60-01 (1L), 579 39 61-01 (5L), 579 39 62-01 (20L), 579 39 63-01 (200L)

Recommended use of the chemical and restrictions on use
- Recommended use: Lubricant.
- Restrictions on use: Use in accordance with supplier's recommendations.

Details of manufacturer or importer
Manufacturer: Husqvarna Australia Pty Ltd
Address: 4 Pioneer Avenue, Tuggerah, NSW 2259
Country: Australia
Telephone: 02 4352 7400
e-mail: stephen.clark@husqvarnagroup.com
Contact: Stephen Clark
Emergency: Contact the Poisons Information Centre; Ph. 13 11 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): None.
- Precautionary Statement(s):
  - Prevention: Observe good industrial hygiene practices.
  - Response: Wash hands after handling.
  - Storage: Store away from incompatible materials.
  - Disposal: Dispose of waste and residues in accordance with local authority requirements.

Other hazards which do not result in classification: None known.

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>Highly refined mineral oil (DMSO-extract &lt; 3% IP 346)</td>
<td>-</td>
<td>&gt; 60</td>
</tr>
</tbody>
</table>

Composition comments: All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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. 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 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.

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.

5. Fire-fighting measures

Extinguishing media
- 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 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.

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

Hazchem Code: Not available.

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.

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.

Other issues relating to spills and releases: Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS. Clean up in accordance with all applicable regulations.
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. "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.

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.

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>
</tr>
</thead>
<tbody>
<tr>
<td>oil mist (Mineral) (CAS -)</td>
<td>TWA</td>
<td>5 mg/m³</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>oil mist (Mineral) (CAS -)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Mist.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>oil mist (Mineral) (CAS -)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>

Biological limit values

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

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

Wear safety glasses with side shields (or goggles). Risk of contact:

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. 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.

9. Physical and chemical properties

Appearance

Brown liquid.

Physical state

Liquid.

Form

Liquid.

Colour

Brown.

Odour

Organic solvents.

Odour threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

Not available.
Flash point > 150.0 °C (> 302.0 °F)
Evaporation rate Not available.
Flammability (solid, gas) Not applicable.
Upper/lower flammability or explosive limits
   Flammability limit - lower (%)
       0.6 % v/v
   Flammability limit - upper (%)
       6.5 % v/v
Vapour pressure < 0.01 kPa (20 °C)
Vapour density Not available.
Relative density 0.91 (Water = 1) (DIN 51757) (15 °C (59 °F))
Solubility(ies) Immiscible in water.
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature Not available.
Decomposition temperature Not available.
Viscosity 103 mm²/s (DIN 51562) (40 °C (104 °F))
Other physical and chemical parameters
   Explosive properties Not available.
   Oxidizing properties Not oxidizing.
   Pour point < -30 °C (< -22 °F)
10. Stability and reactivity
Reactivity The product is stable and 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 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 Direct contact with eyes may cause temporary 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 related to exposure 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.
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/irritation Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitisation
   Respiratory sensitisation Based on available data, the classification criteria are not met.
   Skin sensitisation Based on available data, the classification criteria are not met.
<table>
<thead>
<tr>
<th>Germ cell mutagenicity</th>
<th>No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Specific target organ toxicity -</td>
<td>High concentrations: May cause respiratory irritation.</td>
</tr>
<tr>
<td>single exposure</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity -</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>repeated exposure</td>
<td></td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified, however droplets of the product may be aspirated into the lungs through ingestion or vomiting and may cause a serious chemical pneumonia.</td>
</tr>
<tr>
<td>Chronic effects</td>
<td>Prolonged contact may cause dryness of the skin. Prolonged or repeated inhalation may cause respiratory tract irritation.</td>
</tr>
<tr>
<td>Other information</td>
<td>Prolonged and repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.</td>
</tr>
</tbody>
</table>

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. |
| Persistence and degradability          | Expected to biodegrade slowly.                                                                                      |
| Bioaccumulative potential               | No data available.                                                                                                  |
| Mobility in soil                        | 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. |
| Other adverse effects                   | Oil spills are generally hazardous to the environment.                                                             |

13. Disposal considerations

| Disposal methods                        | Collect and reclaim or dispose in sealed containers at licensed waste disposal site.                                |
| Residual waste                          | Dispose in accordance with all applicable regulations. 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.                     |

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          | Not applicable.                                                                                                    |
| Annex II of MARPOL 73/78 and            |                                                                                                                     |
| the IBC Code                            |                                                                                                                     |

15. Regulatory information

| Safety, health and environmental regulations | This Safety Data Sheet was prepared in accordance with the Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals. |
| National regulations                      |                                                                                                                     |
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)
Highly refined mineral oil (DMSO-extract < 3% IP 346) 1000 - 9999 TONNES See the regulation for additional information.

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: 06-November-2014
Revision date: -
References:
- HSDB® - Hazardous Substances Data Bank
- IARC Monographs. Overall Evaluation of Carcinogenicity
- ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

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