1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Material name: Husqvarna 2-Stroke Oil LS+
Recommended use: Lubrication of 2-stroke engine.
Version No.: 01
CAS No.: Mixture
Product code: 576 74 17-02 (1L), 578 03 70-02 (1L), 578 03 71-02 (4L), 578 18 00-02 (10L), 578 18 03-02 (0.1L), 578 18 04-02 (208L)
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. HAZARDS IDENTIFICATION

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. Material is not hazardous as defined by the Approved Criteria for Classifying Hazardous Substances NOHSC:1008.
Risk phrase(s): None.
Safety phrase(s): None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), solvent-dewaxed heavy paraffinic</td>
<td>64742-65-0</td>
<td>&gt; 60</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>64742-48-9</td>
<td>10-&lt;30</td>
</tr>
<tr>
<td>Polyoilefin polyamine succinimide</td>
<td>-</td>
<td>10-&lt;30</td>
</tr>
<tr>
<td>Highly refined mineral oil (DMSO-extract &lt; 3% IP 346)</td>
<td>-</td>
<td>&lt; 10</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

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.
General advice: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Notes to physician: 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 which must not be used for safety reasons

Do not use water jet as an extinguisher, as this will spread the fire.

Unusual fire & explosion hazards

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

Specific hazards

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

Special protective equipment 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.

Specific methods

Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out.

Hazchem Code

None

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

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.

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.

Containment procedures

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

Methods for 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.

Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

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.

Storage

Keep away from ignition, flame and heat sources. Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Incompatible materials: Strong oxidising agents.

8. EXPOSURE CONTROLS/PERSO NAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

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>

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>OIL MIST (MINERAL) (CASTWAS mg/m3 -)</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td></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>

Recommended monitoring procedures

Additional exposure data Not available.

Engineering measures

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.

Personal protective equipment

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.

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.
9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Blue liquid.

Physical state
Liquid.

Form
Liquid.

Colour
Blue.

Odour
Slight.

Odour threshold
Not available.

pH
8

Vapour pressure
< 0.01 kPa (20 °C)

Vapour density
Not available.

Boiling point
> 300 °C (> 572 °F)

Melting point/freezing point
-39 °C (-38.2 °F)

Solubility (water)
Insoluble in water.

Flash point
> 70.0 °C (> 158.0 °F) Pensky-Martens Closed Cup (ASTM D 93)

Flammability limits in air, upper, % by volume
Not available.

Flammability limits in air, lower, % by volume
Not available.

Auto-ignition temperature
> 300 °C (> 572 °F)

Evaporation rate
Not available.

Viscosity
8.5 cSt (100 °C (212 °F))
53 cSt (40 °C (104 °F))

Other data

Decomposition temperature
> 300 °C (> 572 °F)

Explosive properties
Not available.

Flammability (solid, gas)
Not applicable.

Oxidizing properties
Not oxidizing.

Relative density
0.872 (Water = 1)

10. STABILITY AND REACTIVITY

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

Materials to avoid
Strong oxidising agents.

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

Hazardous polymerisation
Hazardous polymerisation does not occur.

11. TOXICOLOGICAL INFORMATION

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.

Routes of exposure
Inhalation. Eyes. Skin. Ingestion.

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

Chronic toxicity
Prolonged contact may cause dryness of the skin. Prolonged or repeated inhalation may cause respiratory tract irritation.

Sensitisation
No data available.
Carcinogenicity Not classified.
Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductivity No data available.
Symptoms and target organs
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.
Further information Prolonged and repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.

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.
Mobility 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.
Bioaccumulation The product contains potentially bioaccumulating substances.
Other adverse effects Oil spills are generally hazardous to the environment.

13. DISPOSAL CONSIDERATIONS
Disposal instructions Dispose in accordance with all applicable regulations. This material and/or its container must be disposed of as hazardous waste.
Waste from residues / unused products Dispose of in accordance with local 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.
IATA Not regulated as dangerous goods.
IMDG Not regulated as dangerous goods.
Hazchem Code None

15. REGULATORY INFORMATION
National regulations This Material 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 HVIC: Listed substance Distillates (petroleum), solvent-dewaxed heavy paraffinic Listed. (CAS 64742-65-0) Highly refined mineral oil (DMSO-extract < 3% IP 346) Listed. (CAS -) Naphtha (petroleum), hydrotreated heavy (CAS Listed. 64742-48-9)

16. OTHER INFORMATION
Recommended use Lubrication of 2-stroke engine.
Recommended restrictions Use in accordance with supplier's recommendations.
Bibliography HSDB® - Hazardous Substances Data Bank Registry of Toxic Effects of Chemical Substances (RTECS)
Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.
Prepared by Husqvarna AB
Issue date 15-November-2013
Revision date -