SAFETY DATA SHEET

1. Identification

Product identifier: Husqvarna XP® Synthetic

Other means of identification:
- Product code:
  - 578 18 03-03 (0.1L)
  - 578 18 03-07 (0.1L)
  - 578 03 70-03 (1L)
  - 578 03 71-03 (4L)
  - 578 18 00-03 (10L)
  - 578 18 04-03 (208L)

Recommended use of the chemical and restrictions on use:
- Recommended use:
  - Lubrication of 2-stroke engine.
- 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: Flammable liquids
- Health hazards: Not classified.
- Environmental hazards: Not classified.

Label elements, including precautionary statements:

- Hazard symbol(s): None.
- Signal word: Warning
- Hazard Statement(s): Combustible liquid.
- Precautionary Statement(s):
  - Prevention: Keep away from flames and hot surfaces-No smoking. Wear protective gloves/eye protection/face protection.
  - Response: In case of fire: Use appropriate media for extinction.
  - Storage: Store in a well-ventilated place. Keep cool.
  - Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.
- 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>Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</td>
<td>-</td>
<td>10 - 25</td>
</tr>
<tr>
<td>Hydrotreated light paraffinic distillate</td>
<td>64742-55-8</td>
<td>2 - 5</td>
</tr>
<tr>
<td>Phenol, butenylated aminated polymer</td>
<td>-</td>
<td>0 - &lt;2.5</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
Immediately remove contaminated clothing. Wash with soap and water. Continue to rinse for at least 15 minutes. 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
Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids wide apart. If irritation persists: Continue flushing during transport to hospital. Take along these instructions.

Ingestion
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
If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Symptoms caused by exposure
May cause redness and pain. Defatting of the skin. Dermatitis. May cause eye irritation on direct contact. Ingestion may cause irritation and malaise. Vapours may cause drowsiness and dizziness. 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
Foam. Dry powder. Carbon dioxide (CO2). Water fog.

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

Unsuitable extinguishing media
The product is combustible, and heating may generate vapours which may form explosive vapour/air mixtures. By heating and fire, irritating vapours/gases may be formed.

Specific hazards arising from the chemical
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 protective equipment and precautions for fire fighters
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.

Fire fighting equipment/instructions
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. Combustible liquid.

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. Avoid breathing mist or vapour. Avoid contact with skin and eyes. Wear protective clothing as described in section 8 of this safety data sheet.

For emergency responders
Keep unnecessary personnel away. 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: Absorb spillage with non-combustible, absorbent material. 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.

Other issues relating to spills and releases

Clean up in accordance with all applicable regulations.

7. Handling and storage

Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. The product is combustible. Heating will generate vapours which may form explosive vapour/air mixtures. Ground container and transfer equipment to eliminate static electric sparks. Use only in well-ventilated areas. Avoid breathing mists or vapours. Avoid contact with skin, eyes and clothing. Wear protective clothing as described in Section 8 of this safety data sheet. Wash contaminated clothing before reuse. Be aware of potential for surfaces to become slippery. Do not eat, drink or smoke when using the product. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Keep away from ignition, flame and heat sources. Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Store locked up.

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>Mineral oil mist (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>Mineral oil mist (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>Mineral oil mist (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. 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: Blue.

Odour
- No data available.

Odour threshold
- Not available.

pH
- Not available.

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

Initial boiling point and boiling range
- Not available.

Flash point
- 88.0 °C (190.4 °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
- < 110 kPa

Vapour density
- Not available.

Relative density
- 0.896 (20 °C) (Water = 1)

Solubility(ies)
- Insoluble in water.

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

Auto-ignition temperature
- Not available.

Decomposition temperature
- Not available.

Viscosity
- 39 mm²/s (40 °C)

Other physical and chemical parameters
- Explosive properties: Not explosive.
- Oxidising properties: Not oxidising.

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. Strong acids.

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
- Vapours may cause drowsiness and dizziness. Breathing of high concentrations may cause dizziness, light-headedness, headache, nausea and loss of co-ordination. Continued inhalation may result in unconsciousness.

Skin contact
- May be irritating to the skin. 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 redness and pain. Defatting of the skin. Dermatitis. May cause eye irritation on direct contact. Ingestion may cause irritation and malaise. Vapours may cause drowsiness and dizziness. In high concentrations, mists/vapors may irritate throat and respiratory system and cause coughing.

Acute toxicity

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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Test results</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husqvarna XP® Synthetic (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50  Rabbits</td>
<td>&gt; 5000 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50  Rat</td>
<td>&gt; 5 mg/l/4h</td>
<td></td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50  Rat</td>
<td>&gt; 5000 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. May be irritating to the skin.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct contact with eyes may cause temporary irritation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory or skin sensitisation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respiratory sensitisation</td>
<td>Not classified.</td>
<td></td>
</tr>
<tr>
<td>Skin sensitisation</td>
<td>Not classified.</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified.</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified.</td>
<td></td>
</tr>
<tr>
<td><strong>ACGIH Carcinogens</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics (CAS -)</td>
<td>A4 Not classifiable as a human carcinogen.</td>
<td></td>
</tr>
<tr>
<td><strong>IARC Monographs. Overall Evaluation of Carcinogenicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics (CAS -)</td>
<td>3 Not classifiable as to its carcinogenicity to humans.</td>
<td></td>
</tr>
<tr>
<td><strong>Reproductive toxicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not classified.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - single exposure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not classified.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - repeated exposure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not classified.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aspiration hazard</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<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>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prolonged and repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.</td>
<td></td>
<td></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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Test results</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husqvarna XP® Synthetic</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>EC50</td>
<td>Oncorhynchus mykiss</td>
</tr>
<tr>
<td><strong>Persistence and degradability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No data available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bioaccumulative potential</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The product contains potentially bioaccumulating substances.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mobility in soil</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No data available.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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
Dispose in accordance with all applicable regulations. This material and/or its container must be disposed of as hazardous waste.

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.

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
This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals (23/12/2011). 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 01-March-2016
Revision date -
Key abbreviations or acronyms used
  LD50: Lethal Dose, 50%.
  LC50: Lethal Concentration, 50%.
  EC50: Effective Concentration, 50%.
  TWA: Time weighted average.
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.