

## Section 1: Identification

<b>Product identifier</b>	<b>Husqvarna 2-Stroke Oil LS+</b>
<b>Other means of identification</b>	
<b>Product code</b>	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)
<b>Recommended use of the chemical and restrictions on use</b>	
<b>Recommended use</b>	Lubrication of 2-stroke engine.
<b>Restrictions on use</b>	All other uses.
<b>Details of manufacturer or importer</b>	
<b>Supplier</b>	Husqvarna New Zealand Ltd
<b>Address</b>	51 Aintree Avenue, Mangere, Auckland 2022
<b>Country</b>	New Zealand
<b>Telephone</b>	+64 9 920 2410
<b>Contact person</b>	Colin Stimpson
<b>E-mail</b>	colin.stimpson@husqvarnagroup.com
<b>Emergency</b>	Contact the Poisons Information Centre; phone 0800 764 766

## Section 2: Hazard identification

<b>Classification of the hazardous chemical</b>		
<b>Physical hazards</b>	Flammable liquids	Category 4
<b>Health hazards</b>	Not classified.	
<b>Environmental hazards</b>	Not classified.	
<b>Label elements, including precautionary statements</b>		
<b>Hazard symbol(s)</b>	None.	
<b>Signal word</b>	Warning	
<b>Hazard statement(s)</b>	Combustible liquid.	
<b>Precautionary statement(s)</b>		
<b>Prevention</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection.	
<b>Response</b>	In case of fire: Use appropriate media to extinguish.	
<b>Storage</b>	Store in a well-ventilated place.	
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.	
<b>Other hazards which do not result in classification</b>	None.	
<b>Supplemental information</b>	None.	

## Section 3: Composition/information on ingredients

<b>Substance or mixture</b>	Mixture
<b>Chemical property</b>	<b>CAS Number</b> <b>Concentration (%)</b>
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7                      ≥25 - ≤50
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	-                                      ≥10 - <20
Mineral oil	Various                              ≤5
<b>Composition comments</b>	All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.  IP346 method DMSO extract for base oil substances: <3.0%.

## Section 4: First-aid measures

<b>Description of necessary first aid measures</b>	
<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.

<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Personal protection for first-aid responders</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
<b>Symptoms caused by exposure</b>	Direct contact with eyes may cause temporary irritation.
<b>Medical attention and special treatment</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

## Section 5: Fire-fighting measures

<b>Extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Extinguishing media to avoid</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>HAZCHEM Code Number</b>	None.
<b>Specific hazards during fire fighting</b>	During fire, gases hazardous to health may be formed.
<b>Special fire fighting procedures</b>	Move containers from fire area if you can do so without risk.
<b>Protection of fire-fighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Hazards from combustion products</b>	Fumes, smoke, carbon monoxide and other products of incomplete combustion.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>For emergency responders</b>	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

**Methods and materials for containment and cleaning up** The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

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

## Section 7: Handling and storage

<b>Precautions for safe handling</b>	Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in original tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

## Section 8: Exposure controls/personal protection

**Control parameters** Follow standard monitoring procedures.

### Occupational exposure limits

#### New Zealand. WES. (Workplace Exposure Standards)

Product	Type	Value	Form
Oil mist, mineral	STEL	10 mg/m <sup>3</sup>	Mist.
	TWA	5 mg/m <sup>3</sup>	Mist.

#### US. ACGIH Threshold Limit Values

Product	Type	Value	Form
Oil mist, mineral	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.

#### Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Product	Type	Value
Oil mist, mineral	TWA	5 mg/m <sup>3</sup>

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Individual protection measures, for example personal protective equipment (PPE)</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves. Glove material: Nitrile rubber. Use gloves with breakthrough time of 60 minutes. Minimum glove thickness 0.17 mm.
<b>Other</b>	Wear appropriate chemical resistant clothing.
<b>Respiratory protection</b>	In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>Hygiene measures</b>	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. Contaminated work clothing should not be allowed out of the workplace.

## Section 9: Physical and chemical properties

### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Oily liquid.
<b>Colour</b>	Blue. Clear.
<b>Odour</b>	Slight.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Material is non soluble in water.
<b>Melting point/freezing point</b>	-48 °C (-54.4 °F)
<b>Initial boiling point and boiling range</b>	> 300 °C (> 572 °F)
<b>Flash point</b>	> 70 °C (> 158 °F) Closed cup ASTM D93
<b>Evaporation rate</b>	Not determined.
<b>Flammability (solid, gas)</b>	Not applicable.

### Upper/lower flammability or explosive limits

<b>Explosive limit - lower (%)</b>	Not determined.
<b>Explosive limit – upper (%)</b>	Not determined.
<b>Vapour pressure</b>	< 0.01 kPa
<b>Vapour density</b>	Not determined.
<b>Relative density</b>	Not determined.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble in water
<b>Partition coefficient (n-octanol/water)</b>	Not determined.
<b>Auto-ignition temperature</b>	> 300 °C (> 572 °F)
<b>Decomposition temperature</b>	> 300 °C (> 572 °F)
<b>Kinematic viscosity</b>	53.9 mm <sup>2</sup> /s (40 °C (104 °F)) 8.9 mm <sup>2</sup> /s (100 °C (212 °F))

### Other physical and chemical parameters

<b>Density</b>	0.89 g/cm <sup>3</sup>
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## Section 10: Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidising agents.

**Hazardous decomposition products** No hazardous decomposition products are known.

## Section 11: Toxicological information

### Information on likely routes of exposure

**Inhalation** Prolonged inhalation may be harmful.  
**Skin contact** Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.  
**Eye contact** Direct contact with eyes may cause temporary irritation.  
**Ingestion** Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

#### Acute toxicity

Components	Species	Test Results
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 5000 mg/kg
<b>Inhalation</b>		
<i>Aerosol</i>		
LC50	Rat	> 5 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

**Respiratory irritation** High mist concentrations may cause irritation of respiratory tract.

#### Respiratory or skin sensitisation

**Respiratory sensitisation** Not a respiratory sensitiser.

**Skin sensitisation** This product is not expected to cause skin sensitisation.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Not classifiable as to carcinogenicity to humans.

#### ACGIH Carcinogens

Mineral oil (CAS Various) A4 Not classifiable as a human carcinogen.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Mineral oil (CAS Various) 3 Not classifiable as to carcinogenicity to humans.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

**Narcotic effects** No data available.

**Chronic effects** Prolonged and repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.

## Section 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.

Components	Species	Test Results
Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	NOEL Pseudokirchneriella subcapitata	> 100 mg/l, 72 hours

Components		Species	Test Results
Crustacea	EL50	Daphnia magna	> 10000 mg/l, 48 hours
Fish	LL50	Pimephales promelas	> 100 mg/l, 96 hours

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (CAS -)

**Aquatic**

*Acute*

Algae	EC50	Green algae (Selenastrum capricornutum)	> 1000 mg/l, 3 days
	LC50	Green algae (Selenastrum capricornutum)	> 1000 mg/l, 3 days
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 2 days
Fish	LC50	Rainbow trout	> 1000 mg/l, 4 days

**Persistence and degradability** The product is expected to be biodegradable.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

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

### Section 13: Disposal considerations

**Disposal methods** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Residual waste** Dispose 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** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**Special precautions to be taken during disposal** Dispose in accordance with all applicable regulations.

**Method of disposal that should not be used** None known.

### Section 14: Transport information

#### 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 established.

### Section 15: Regulatory information

**Applicable regulations** New Zealand Code of Practice for the Preparation of Safety Data Sheets (SDS) [No. HSNO CoP 8-1 09-06].  
HSNO - Lubricants (Combustible) Group Standard 2017 [HSR002602]

#### New Zealand Inventory of Chemicals (NZIoC): Registration status

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	May be used as a single component chemical under an appropriate group standard
Mineral oil (CAS Various)	May be used as a single component chemical under an appropriate group standard

### Section 16: Other information

**References** ECHA CHEM  
IARC Monographs. Overall Evaluation of Carcinogenicity  
ECHA: European Chemical Agency.

#### Issued by

Not available.

#### Prepared by

Not available.

**Disclaimer**

Husqvarna AB cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

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