Issue date: 28-March-2018 Revision date: 25-January-2022 Supersedes date: 28-March-2018 Version number: 02

# **尚Husqvarna**

## SAFETY DATA SHEET

#### 1. Identification

Product identifier Husqvarna 2-Stroke Oil LS+

Other means of identification

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)

Recommended use of the chemical and restrictions on use

**Recommended use** Lubrication of 2-stroke engine.

**Restrictions on use** All other uses.

Details of manufacturer or importer

Supplier Husqvarna Australia Pty Ltd

Address 4 Pioneer Avenue, Tuggerah NSW 2252

**Country** Australia

Telephone +61 2 4352 7400
Contact person Mike Enderby

**E-mail** mike.enderby@husqvarnagroup.com

Emergency Contact Poisons Information Centre; phone 13 12 26

## 2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards Flammable liquids Category 4

Health 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/protective

clothing/eye protection/face protection.

**Response** In case of fire: Use appropriate media for extinction.

**Storage** Store in a well-ventilated place. Keep cool.

None.

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

Supplemental information
Other hazards which do not

Other hazards which do not None known.

result in classification

## 3. Composition/information on ingredients

#### Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
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

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**Composition comments** 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%.

#### 4. First-aid measures

Description of necessary first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Direct contact with eyes may cause temporary irritation.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

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

Medical attention and special

Treat symptomatically.

treatment

## 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for fire

fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting

equipment/instructions

Move containers from fire area if you can do so without risk.

Hazchem code None.

General fire hazards No unusual fire or explosion hazards noted.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

## 6. Accidental release measures

For emergency responders

Personal precautions, protective equipment and emergency procedures

For non-emergency

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

personnel

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.

7. Handling and storage

Precautions for safe handling Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources

of ignition. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

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## 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)

Product Type Value

Oil mist, mineral TWA 5 mg/m3

**US. ACGIH Threshold Limit Values** 

ProductTypeValueFormOil mist, mineralTWA5 mg/m3Inhalable fraction.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds

in the Work Area (DFG)

ProductTypeValueFormOil mist, mineralTWA5 mg/m3Respirable fraction.

**Biological limit values**No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

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.

Individual protection measures, for example personal protective equipment (PPE)

**Eye/face protection** Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Glove material: Nitrile rubber. Use gloves with

breakthrough time of 60 minutes. Minimum glove thickness 0.17 mm.

**Other** Wear suitable protective clothing.

Respiratory protection In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory

equipment with combination filter.

**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.

#### 9. Physical and chemical properties

**Appearance** 

Physical state Liquid.
Form Oily liquid.
Colour Blue. Clear.
Odour Slight.

Odour threshold Not available.

**pH** Material is non soluble in water.

Melting point/freezing point  $-48 \, ^{\circ}\text{C} \, (-54.4 \, ^{\circ}\text{F})$ Initial boiling point and boiling  $> 300 \, ^{\circ}\text{C} \, (> 572 \, ^{\circ}\text{F})$ 

range

Flash point > 70 °C (> 158 °F) Closed cup ASTM D93

Evaporation rate Not determined.
Flammability (solid, gas) Not applicable.
Upper/lower flammability or explosive limits
Explosive limit - lower (%) Not determined.

Explosive limit – upper

Not determined.

(%)

Vapour pressure < 0.01 kPa
Vapour density Not determined.

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Not determined. Relative density

Solubility(ies)

Insoluble in water. Solubility (water) Partition coefficient Not determined.

(n-octanol/water)

> 300 °C (> 572 °F) **Auto-ignition temperature Decomposition temperature** > 300 °C (> 572 °F) **Viscosity** 53.9 cSt (40 °C (104 °F)) 8.9 cSt (100 °C (212 °F))

Other physical and chemical parameters 0.87 g/cm<sup>3</sup> Density

## 10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

**Chemical stability** Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidising agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

## 11. Toxicological information

Information on possible 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.

Direct contact with eyes may cause temporary irritation. Eve contact

Expected to be a low ingestion hazard. Ingestion

Direct contact with eyes may cause temporary irritation. Symptoms related to exposure

**Acute toxicity** 

**Test Results** Components **Species** 

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)

**Acute Dermal** 

LD50 Rabbit > 5000 mg/kg

Inhalation

Aerosol

LC50 Rat > 5 mg/l, 4 Hours

Oral

LD50 Rat > 5000 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Serious eye damage/irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin

sensitisation

Respiratory sensitisation Not a respiratory sensitiser.

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

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

mutagenic or genotoxic.

Not classifiable as to carcinogenicity to humans. Carcinogenicity

**ACGIH Carcinogens** 

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

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#### 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.

**Chronic effects** 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.

Components Species Test Results

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)

Aquatic

Acute

Algae NOEL Pseudokirchneriella subcapitata > 100 mg/l, 72 hours

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 > 1000 mg/l, 3 days

capricornutum)

LC50 Green algae (Selenastrum > 1000 mg/l, 3 days

capricornutum)

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.

#### 13. Disposal considerations

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

**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.

#### 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.

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

## 15. Regulatory information

#### Safety, health and environmental regulations

**National 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.

#### Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix B

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix D

Poisons schedule number not allocated.

### Australia Medicines & Poisons Appendix E

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)

#### 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 10

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

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)

#### 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)**

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)

1000 - 9999 TONNES See the regulation for additional information.

# Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10, as amended)

#### National Pollutant Inventory (NPI) substance reporting list

Not listed.

### **Prohibited Carcinogenic Substances**

Not regulated.

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#### Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

#### **Restricted Carcinogenic Substances**

Not regulated.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

#### 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

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Key abbreviations or acronyms

used

ADG: Australian Dangerous Goods. EC50: Effective Concentration 50%.

IATA: International Air Transport Association.

IC50: Inhibition Concentration 50%.

IMDG Code: International Maritime Dangerous Goods Code.

LC50: Lethal Concentration 50%.

LD50: Lethal Dose, 50%.

MARPOL: International Convention for the Prevention of Pollution from Ships. RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

References

IARC Monographs. Overall Evaluation of Carcinogenicity

ECHA: European Chemical Agency.

Husqvarna AB cannot anticipate all conditions under which this information and its product, or the Disclaimer

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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