

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name or designation of the mixture	Husqvarna 2-Stroke Oil LS+
Registration number	-
Synonyms	None.
Product code	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)
Issue date	05-March-2018
Version number	03
Revision date	17-October-2025
Supersedes date	25-January-2022

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Lubrication of 2-stroke engine.
Uses advised against	All other uses.

1.3. Details of the supplier of the safety data sheet

Company name	Husqvarna UK Ltd Preston Road, Aycliffe Industrial Park Newton Aycliffe, County Durham, DL5 6UP
Telephone	+46 (0)36-14 65 00
Contact person	Accessory Department
E-mail	sds.info@husqvarnagroup.com

1.4. Emergency telephone number +1-760-476-3961 (Access code 333721)

General emergency	112 or 999 SDS/Product information may not be available for the Emergency Service.
Non-emergency medical helpline	111 SDS/Product information may not be available for the Emergency Service.

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

2.2. Label elements**Label according to Regulation (EC) No. 1272/2008 as amended**

Hazard pictograms	None.
Signal word	None.
Hazard statements	The mixture does not meet the criteria for classification.

Precautionary statements

Prevention	Not assigned.
Response	Not assigned.
Storage	Not assigned.
Disposal	Not assigned.

Supplemental information on the label EUH210 - Safety data sheet available on request.

2.3. Other hazards

This mixture does not contain any substances that meet the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of Regulation (EC) No 1907/2006 at a concentration of equal to or greater than 0.1% w/w.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Highly refined mineral oil	25 - =<50	- **	**	-	
Classification: -					
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	10 - <20		01-2119457273-39	-	
Classification: Asp. Tox. 1;H304					

Composition comments

The full text for all H-statements is displayed in section 16.

** Base oils:

CAS-No. 64742-54-7 , EC: 265-157-1, REACH registration No. 01-2119484627-25

CAS-No. 64742-55-8 , EC: 265-158-7, REACH registration No. 01-2119487077-29

CAS-No. 64742-56-9 , EC: 265-159-2, REACH registration No. 01-2119480132-48

CAS-No. 64741-88-4. EC: 265-169-7, REACH registration No. 01-2119471299-27

Note L: The classification as a carcinogen does not apply as it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.

All concentrations are in percent by weight.

SECTION 4: First aid measures

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of 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.

Eye contact

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

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed

Exposure may cause temporary irritation, redness, or discomfort.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards

Combustible liquid.

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters

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

Special fire fighting procedures

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

Specific methods

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

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

6.3. Methods and material 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.

6.4. Reference to other sections For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Avoid prolonged exposure. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

7.3. Specific end use(s) Lubrication of 2-stroke engine. Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits No exposure limits noted for ingredient(s).

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

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs)

General population

Components	Value	Assessment factor	Notes
Highly refined mineral oil (CAS -) Long-term, Local, Inhalation	1.19 mg/m3	75	Repeated dose toxicity

Workers

Components	Value	Assessment factor	Notes
Highly refined mineral oil (CAS -) Long-term, Local, Inhalation	5.58 mg/m3	45	Repeated dose toxicity

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
Highly refined mineral oil (CAS -) Secondary poisoning	9.33 mg/kg		

8.2. Exposure controls

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, such as personal protective equipment

General information Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Wear safety glasses with side shields (or goggles). Eye protection should meet standard EN 166.

Skin protection

- Hand protection	Wear appropriate chemical resistant gloves. Wear suitable gloves tested to EN374. 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 insufficient ventilation, wear suitable respiratory equipment. Follow guidance on selection, use, care and maintenance in accordance with EN 529. In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P2).
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.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic 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	Not determined.
Initial boiling point and boiling range	> 300 °C (> 572 °F)
Flash point	80 °C (176 °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	0.1 - < 0.3 kPa Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Vapour density	Not determined.
Relative density	Not determined.
Solubility(ies)	
Solubility (water)	Insoluble in water.
Partition coefficient (n-octanol/water)	Not applicable, product is a mixture.
Auto-ignition temperature	> 300 °C (> 572 °F)
Decomposition temperature	> 300 °C (> 572 °F)
Viscosity	53.9 cSt (40 °C (104 °F)) 8.9 cSt (100 °C (212 °F))
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2. Other information	
Density	0.87 g/cm³ ASTM D4052
Pour point	-48 °C (-54.4 °F) ASTM D97

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
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10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

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

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	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms Exposure may cause temporary irritation, redness, or discomfort.

11.1. Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Highly refined mineral oil (CAS -)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Inhalation		
<i>Aerosol</i>		
LC50	Rat	> 5 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg
<u>Subacute</u>		
Inhalation		
<i>Aerosol</i>		
NOAEL	Rat	> 980 mg/m ³ , 28 days (OECD 412)
<u>Subchronic</u>		
Dermal		
NOAEL	Rat	> 2000 mg/kg, 90 days (OECD 411)
Oral		
LOAEL	Rat	125 mg/kg bw/day, 90 days (OECD 408)
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg (OECD 402)
Inhalation		
<i>Vapour</i>		
LC50	Rat	8300 mg/m ³ , 4 hours
Oral		
LD50	Rat	> 5000 mg/kg (OECD 401)

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Irritation Corrosion - Skin

Highly refined mineral oil

Result: Non-irritant
Species: Rabbit
Test Duration: 72 hours
Observation Period: 7 days
Notes: Erythema

Irritation Corrosion - Skin

Highly refined mineral oil

Result: Non-irritant

Species: Rabbit

Test Duration: 72 hours

Observation Period: 7 days

Notes: Oedema

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Eye

Highly refined mineral oil

Result: Non-irritant

Species: Rabbit

Test Duration: 48 hours

Observation Period: 72 hours

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Sensitisation

Highly refined mineral oil

Result: Negative

Species: Guinea pig

Germ cell mutagenicity

Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity: Micronucleus

Highly refined mineral oil

Result: Negative

Species: Mammal

Carcinogenicity

Due to partial or complete lack of data the classification is not possible.

Highly refined mineral oil

(OECD 453)

Result: Negative

Species: Mouse

Organ: Skin

Test Duration: 78 weeks

IARC Monographs. Overall Evaluation of Carcinogenicity

Highly refined mineral oil (CAS -)

3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity

Due to partial or complete lack of data the classification is not possible.

Reproductivity

Highly refined mineral oil

1000 mg/kg

Result: NOEL

Species: Rat

Specific target organ toxicity - single exposure

Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard

Not available.

Mixture versus substance information

No information available.

Other information

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

SECTION 12: Ecological information**12.1. Toxicity****Components****Species****Test Results**

Highly refined mineral oil (CAS -)

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

Components		Species	Test Results
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics			
Aquatic			
Acute			
Algae	IC50	Algae	> 1000 mg/l, 72 hours
Crustacea	EC50	Daphnia	> 1000 mg/l, 48 hours
Fish	LC50	Fish	> 1000 mg/l, 96 hours

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

Biodegradability

Percent Degradation (Aerobic Biodegradation)

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics 89.8 %

12.3. Bioaccumulative potential No data available.

Partition coefficient n-octanol/water (log Kow)

Bioconcentration factor (BCF)

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics 44 - 5362

12.4. Mobility in soil No data available.

Mobility in general

Distribution

Octanol/water distribution coefficient log DOW

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics > 3

12.5. Results of PBT and vPvB assessment This mixture does not contain any substances that meet the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of Regulation (EC) No 1907/2006 at a concentration of equal to or greater than 0.1% w/w.

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

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

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Retained direct EU regulations

Regulation (EU) No. 2024/590 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended - Conditions of restriction given for the associated entry number should be considered

Not listed.

Other regulations

This Safety Data Sheet is compiled in accordance with REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758. This product is classified and labelled in accordance with the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

Follow the requirements of the Control of Substances Hazardous to Health Regulations 2002 [SI 2002/2677], as amended, when using this material.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
EC50: Effective Concentration 50%.
EL50: Effective level, 50%.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IC50: Inhibition Concentration 50%.
IMDG Code: International Maritime Dangerous Goods Code.
LC50: Lethal Concentration 50%.
LD50: Lethal Dose, 50%.
LL50: Lethal level, 50%.
LOAEL: Lowest observed adverse effect level.
MARPOL: International Convention for the Prevention of Pollution from Ships.
NOAEL: No observed adverse effect level.
NOEL: No Observed Effect Level.
PBT: Persistent, bioaccumulative, toxic.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
vPvB: very Persistent, very Bioaccumulative.

References	ECHA: European Chemical Agency. IARC Monographs. Overall Evaluation of Carcinogenicity
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any statements, which are not written out in full under sections 2 to 15	H304 May be fatal if swallowed and enters airways.
This SDS contains revisions in the following section(s):	3, 9, 11, 12
Training information	Follow training instructions when handling this material.
Disclaimer	Husqvarna 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.