SAFETY DATA SHEET

Section 1: Identification

Product identifier **Husqvarna X-Guard Bio Chain Oil**

Other means of identification

Product code 596 45 73-05 (200L), 596 45 73-04 (20L), 596 45 73-03 (10L), 596 45 73-02 (5L), 596 45 73-01 (1L), 537 65 76-01 (0.05L)

Recommended use of the chemical and restrictions on use

Recommended use Lubrication of saw chains.

Restrictions on use All other uses.

Details of manufacturer or importer

Supplier Husqvarna New Zealand Ltd

Address 51 Aintree Avenue, Mangere, Auckland 2022

Country New Zealand

Telephone +64 9 920 2410

Contact person Colin Stimpson

E-mail colin.stimpson@husqvarnagroup.com

Emergency Contact the Poisons Information Centre; phone 0800 764 766

Section 2: Hazard identification

Classification of the hazardous chemical

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

Label elements, including precautionary statements

Hazard symbol(s) None.

Signal word None.

Hazard statement(s) The mixture does not meet the criteria for classification.

Precautionary statement(s)

Prevention Not assigned.

Response Not assigned.

Storage Not assigned.

Disposal Not assigned.

Other hazards which do not result in classification None.

Supplemental information Safety data sheet available on request.

Section 3: Composition/information on ingredients

Substance or mixture Mixture

Chemical property	CAS Number	Concentration (%)
Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)	-	1 - 5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Section 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.

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	Direct contact with eyes may cause temporary irritation.
Medical attention and special treatment	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

Section 5: Fire-fighting measures

Extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.
HAZCHEM Code Number	None.
Specific hazards during fire fighting	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Protection of fire-fighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Hazards from combustion products	Fumes, smoke, carbon monoxide and other products of incomplete combustion.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Do not touch or walk through spilled material.
For emergency responders	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

Precautions for safe handling	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.
Conditions for safe storage, including any incompatibilities	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	No exposure limits noted for ingredient(s).
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.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
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. Contaminated work clothing should not be allowed out of the workplace.

Section 9: Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Colour	Brown.
Odour	Characteristic. Mild.
Odour threshold	Not available.
pH	Material is non soluble in water.
Melting point/freezing point	Not determined.
Initial boiling point and boiling range	Not determined.
Flash point	298 °C (568.4 °F)
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	Not determined.
Vapour density	Not determined.
Relative density	Not determined.

Solubility(ies)

Solubility (water)	Insoluble in water
Partition coefficient (n-octanol/water)	Not determined.
Auto-ignition temperature	Not determined.
Decomposition temperature	Not determined.
Kinematic viscosity	Not determined.

Section 10: Stability and reactivity

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

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

Product	Species	Test Results
Husqvarna X-Guard Bio Chain Oil (CAS Mixture)		
Acute		
Dermal		
		> 2000 mg/kg (ATEmix)

Product	Species	Test Results
Inhalation		
Vapour		
LC50		> 20 mg/kg, 4 hours (ATEmix)
Oral		
LD50		> 2000 mg/kg (ATEmix)

Components	Species	Test Results
Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %) (CAS -)		
Acute		
Dermal		
LD50	Rat	> 1700 mg/kg
Inhalation		
Aerosol		
LC50	Rat	> 5.28 mg/l, 4 hours
Oral		
LD50	Rat	> 4150 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

Not available.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

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 or repeated contact with used oil may cause serious skin diseases, such as dermatitis.

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.

Product		Species	Test Results
Husqvarna X-Guard Bio Chain Oil (CAS Mixture)			
Aquatic			
Acute			
Algae	IC50	Algae	> 100 mg/l, 72 hours
Crustacea	EC50	Daphnia	> 100 mg/l, 48 hours
Fish	LC50	Fish	> 100 mg/l, 96 hours

Components		Species	Test Results
Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %) (CAS -)			
Aquatic			
Crustacea	EL0	Daphnia magna	> 1000 mg/l, 48 hours
Fish	LL0	Oncorhynchus mykiss	> 1000 mg/l, 96 hours

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	HSNO: Non-hazardous according to the Hazardous Substances and New Organisms Act 1996 (HSNO 1996) New Zealand Code of Practice for the Preparation of Safety Data Sheets (SDS) [No. HSNO CoP 8-1 09-06].

Section 16: Other information

References	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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