

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifier**

Trade name/substance name **Cobiolube® Chain**  
Identification code  
REACH registration number **There is no registration number available for this substance as the substance or its use has been exempted from registration based on Article 2 of the REACH Regulation (EC) No. 1907/2006.**  
**Cobiolube® Chain has been awarded with European Union's Ecolabel emblem license FI/027/003**

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

Purpose of use expressed in writing Chain lubricant  
Standard industrial classification (SIC) A2 Forestry and logging  
Use categories (UC62) 35 Lubricants and additives  
The chemical can be used by the general public   
The chemical is used by the general public only

**1.3 Details of the supplier of the safety data sheet**

Manufacturer  
Address Jarmat Oy  
Ratapellonkatu 13  
Postcode and city/town FI-74120 IISALMI  
Post office box  
Postcode and city/town  
Telephone +358 10 229 3210 , +358 440 363 535  
E-mail address matti.kyllonen@jarmat.fi, website: <http://www.jarmat.fi>  
Business ID 1634526-5

**1.4 Emergency telephone number**

General emergency number 112  
Poison Information Centre +358 9 471 977/+358 9 4711 (exchange)

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

This substance is not classified as hazardous according to European Union legislation.

**2.2 Label elements**

Labelling (REGULATION (EC) No. 1272/2008)  
Not a hazardous substance according to the globally harmonized system (GHS) of classification and labelling.  
The product does not need to be labelled in accordance with EU directives or equivalent national regulations.

**2.3 Other hazards**

Unknown

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

<b>Name of ingredient</b>	Does not contain substances which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.	<b>CAS, EC or index number</b>	
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**3.2 Mixtures**

<b>Name of substance</b>	<b>CAS, EC or index number</b>	<b>REACH registration number</b>	<b>Concentration</b>	<b>Classification</b>
Does not contain substances which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.				

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures**

- Eye contact: Rinse your eyes immediately with plenty of water, also under the eyelids. Check for and remove any contact lenses. Seek medical attention if irritation develops.
- Inhalation: Move the exposed person to fresh air.
- Skin contact: Rinse with plenty of water. Remove contaminated clothing.
- Ingestion: Give water to the exposed person and have him/her drink it. Seek medical attention if symptoms appear.

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

Cyanosis, abdominal pain, drowsiness, diarrhoea, vomiting, headache, irritating effects

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

- Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments: No specific treatment.

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media**

- Suitable extinguishing medium: Use an extinguishing medium suitable for the surrounding fire: carbon dioxide, dry chemicals, foam or water fog.
- Unsuitable extinguishing medium: There are no restrictions on extinguishing media for this mixture.

**5.2 Special hazards arising from the substance or mixture**

- Combustibles: fumes are heavier than air and spread along the floor.  
Forms explosive mixtures with air when heated strongly.  
Harmful fumes may be formed in a fire.

**5.3 Advice for firefighters**

Special protective equipment for firefighters: Firefighters must wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode. Clothing for firefighters (boots, gloves and helmets) conforming to standard EN 469 will provide a basic level of protection for chemical incidents.

Additional information: Gases, fumes and fogs can be dispersed by spraying water.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

Instructions for non-emergency personnel: Do not inhale fumes. Evacuate the danger area, follow the emergency instructions and consult an expert.

For emergency responders: protective equipment (see section 8)

**6.2 Environmental precautions**

Dilute with plenty of water.

**6.3 Methods and material for containment and cleaning up**

Absorb with an inert material (see sections 7.2 and 10.5) and place in an appropriate waste disposal container.

**6.4 Reference to other sections**

Instructions for further treatment (see section 13).

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Instructions for general occupational hygiene: good hygiene practices

**7.2 Conditions for safe storage, including any incompatibilities**

Store in original container protected from direct sunlight.

**7.3 Specific end use(s)**

There are no other methods of use in addition to that specified in section 1.2.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

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**8.2 Exposure controls**

**Engineering controls**

Personal protection is based primarily on technical measures and proper working methods as well as on the use of personal protective equipment. See section 7.1.

**Eye/face protection**

Protective goggles

**Skin protection**

Protective clothing

**Hand protection**

Nitrile butadiene rubber

**Respiratory protection**

Necessary if fumes are formed.  
Recommended filter type A-(P2)

**Thermal hazards**

No information

**Environmental exposure controls**

Avoid dispersal of spilt material and runoff and contact with soil, natural waters and sewers.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid, clear
<b>Odour</b>	Mild
<b>Odour threshold</b>	No information
<b>pH</b>	about 8,4
<b>Pour point</b>	< - 42 °C Method ASTM D97
<b>Initial boiling point and boiling range</b>	about 100 °C
<b>Flash point</b>	>100 °C Method: ISO 2592
<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available
<b>Upper/lower flammability or explosive limits</b>	Not available
<b>Vapour pressure</b>	<0.0025 mm Hg/ 50 °C
<b>Vapour density</b>	Not available
<b>Relative density</b>	About 1.15
<b>Viscosity index-Procedure A</b>	115 Method ASTM 2270
<b>Partition coefficient: n-octanol/water</b>	log Po/w=-1.76 Method: (experimental) (Lit.) Low accumulation
<b>Auto-ignition temperature</b>	Information not available
<b>Decomposition temperature</b>	>290 °C
<b>Viscosity</b>	40°C ≈ 210 - 225 mm <sup>2</sup> /s Method ASTM D445 100°C ≈ 19,70 - 19,97 mm <sup>2</sup> /s Method ASTM D 445
<b>Explosive properties</b>	Not available
<b>Oxidising properties</b>	Not available

**9.2 Other information**

Ignition temperature >400 °C

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

Forms explosive mixtures with air when heated strongly (>290 °C).

### 10.2 Chemical stability

The product is stable.

### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4 Conditions to avoid

Strong heating

### 10.5 Incompatible materials

Information not available

### 10.6 Hazardous decomposition products

In case of fire: see section 5.2.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Orally: LD50 rat Dose: >12,600 mg/kg (IUCLID)  
Symptoms: vomiting, abdominal pain, diarrhoea  
Cutaneously: LD50 rabbit Dose: >18,700 mg/kg (IUCLID)

#### Skin corrosion/irritation

Rabbit No irritation (IUCLID)

#### Serious eye damage/irritation

Rabbit Does not cause eye irritation (OECD TG 405)

#### Respiratory or skin sensitisation

Patch test Human being: negative (IUCLID)

#### Germ cell mutagenicity

No known significant effects or critical hazards

#### Carcinogenicity

No known significant effects or critical hazards

#### Reproductive toxicity

No known significant effects or critical hazards

#### STOT-single exposure

No known significant effects or critical hazards

#### STOT-repeated exposure

No known significant effects or critical hazards

#### Aspiration hazard

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

#### Other information

Effect on the body: ingestion of large amounts may cause cyanosis, headache and drowsiness.  
Handle in accordance with good occupational hygiene and safety practices.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity: fish LC50 Carassius auratus (goldfish) Dose: >5,000 mg/l Exposure time 24 h (Lit.)

Trade name: Cobiolube Chain

Date: 30.03.2017

Former date: 23.04.2016

Daphnia and other water invertebrates (E. sulcatum) EC5 Dose 3,200 mg/l 72 h (Lit.)  
EC50 Daphnia magna (water flea) Dose >10,000 mg/l (IUCLID)  
IC5 Scenedesmus quadricauda (green alga) Dose >10,000 mg/l 7 d (Lit.)  
EC5 Pseudomonas putida Dose >10,000 mg/l 16 h (Lit.)

<b>12.2</b>	<b>Persistence and degradability</b>
	The substance is 100% biodegradable (28D) and readily biodegradable (OECD 301 F) Biological oxygen demand (BOD) 870 mg/g (5 d) Chemical oxygen demand (COD) 1,160 mg/g Theoretical oxygen demand (ThOD) 1,217 mg/g Ratio BOD/ThBOD BOD5 71% Ratio COD/ThBOD 95%
<b>12.3</b>	<b>Bioaccumulative potential</b>
	Log Po/w=-1.76 (experimental); low accumulation.
<b>12.4</b>	<b>Mobility in soil</b>
	Not available
<b>12.5</b>	<b>Results of PBT and vPvB assessment</b>
	The assessment has not been carried out as a chemical safety assessment is not required/has not been implemented.
<b>12.6</b>	<b>Other adverse effects</b>
	- Cobiolube® Chain has been awarded with European Union's Ecolabel emblem license FI/027/003. This emblem is given only to products that are able to lighten the environmental footprint throughout their lifecycle – from raw materials all the way to manufacturing, usage and disposal. The high quality is ensured with independent tests, where the candidate products have to be able to meet the performance level of the respective market leader.
<b>SECTION 13: DISPOSAL CONSIDERATIONS</b>	
<b>13.1</b>	<b>Waste treatment methods</b>
	Dispose of in accordance with the instructions of local or national waste management authorities or deliver to an authorised waste management company. Waste packaging should be recycled. Avoid dispersal of spilled material and runoff and contact with natural waters and soil.
<b>SECTION 14: TRANSPORT INFORMATION</b>	
<b>14.1</b>	<b>UN number</b>
	None
<b>14.2</b>	<b>UN proper shipping name</b>
	None
<b>14.3</b>	<b>Transport hazard class(es)</b>
	No hazard classification according to transport regulations.
<b>14.4</b>	<b>Packing group</b>
	-
<b>14.5</b>	<b>Environmental hazards</b>
	-
<b>14.6</b>	<b>Special precautions for user</b>
	Not available
<b>14.7</b>	<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>
	Not available

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**SECTION 15: REGULATORY INFORMATION**

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

EU regulations

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Legislation Directive 96/82/EC does not apply

**15.2 Chemical safety assessment**

A chemical safety assessment has not been carried out for this product.

**15.3 Environmental regulations**

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**SECTION 16: OTHER INFORMATION**

**Changes to the previous version: 9.1 melting and freezing point, boiling point and boiling area, flash point, vapour pressure and viscosity**

**Key or legend to abbreviations and acronyms**

**Sources for data**

Material safety data sheets of manufacturers

**Classification method**

**List of relevant R and S phrases and/or hazard and precautionary statements**

None

**Staff training**