

**MATERIAL SAFETY DATA SHEET****1. IDENTIFICATION OF THE CHEMICAL AND OF THE CHEMICAL MANUFACTURER, IMPORTER OR OTHER UNDERTAKING****1.1 Identification of the chemical****Trade name**

EKO 100 Teräketjuöljy (EKO 100 Chain oil)

**Identification code**

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**1.2 Purpose of use of the chemical****1.2.1 Description of purpose of use**

Chain oil.

**1.2.2 Industrial code**

020. Forestry and related services

D. Industry

**1.2.3 Code for the purpose of use**

35 Lubricants and additives

**1.2.4 The chemical can be used by the general public X****1.3 Identification of the manufacturer, importer or other undertaking****1.3.1 Manufacturer, importer, other undertaking**

Ekosata,  
Teollisuuskatu 1,  
FI-32200 LOIMAA,  
tel: +358 (0)2 7621911,  
fax: +358 (0)2 7621942,  
Business code 1098870-2

**1.3.3 Information on foreign manufacturer**

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**1.4 Emergency telephone number****1.4.1 Number, name and address**

+358 (0)9 471 977 (+358 (0)9 4711 information desk)

Poison Information Centre, Haartmaninkatu 4, FI-00290 HELSINKI

**2. COMPOSITION AND INFORMATION ON INGREDIENTS****2.1 Hazardous components****2.1.1****CAS number  
or other  
code****2.1.2****Name of the ingredient****2.1.3****Concentration****2.1.4****Warning symbol, R phrases  
and other information on the  
ingredient**

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**2.1.7 Other information**

Product contains ca. 97% of pressed rapeseed/colza oil, ca. 3% of natural rubber/vegetable oil preparation.

**3. HAZARDS IDENTIFICATION**

Skin contact may cause drying of skin.

**4. FIRST AID MEASURES**

**4.1 Special instructions**

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**4.2 Inhalation**

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**4.3 Skin contact**

Wipe splashes with paper. Wash skin with soap and water.

**4.4 Eye contact**

Rinse eyes with water.

**4.5 Ingestion**

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**4.6 Information to doctor or other trained persons giving first aid**

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## **5. FIRE-FIGHTING MEASURES**

**5.1 Suitable extinguishing media**

Smothering, dry powder, carbon dioxide (CO<sub>2</sub>).

**5.2 Extinguishing media which must not be used for safety reasons**

Water. (Risk of spreading the fire.)

**5.3 Special exposure hazards in a fire**

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**5.4 Special protective equipment for fire fighters**

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**5.5 Other instructions**

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## **6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions**

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**6.2 Environmental precautions**

Keep the chemical out of the sewer system.

**6.3 Methods for cleaning up**

Absorb with peat, sawdust, paper towels, etc.

**6.4 Other instructions**

The product can be brought to a water-soluble state by soaping with e.g. an alkaline cleaning agent.

## **7. HANDLING AND STORAGE**

**7.1 Handling**

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**7.2 Storage**

Keep in a cool place in light-proof containers.

**7.3 Specific uses**

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## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 Exposure limit values**

**8.1.1 TWA concentration**

CAS number    Name of component

**8.1.2 Other limit values**

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**8.2 Exposure controls****8.2.1 Occupational exposure controls**

Sufficient ventilation.

**8.2.1.1 Respiratory protection**

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**8.2.1.2 Hand protection**

Use of protective gloves is recommended. Material must be checked with the protective glove supplier.

**8.2.1.3 Eye protection**

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**8.2.1.4 Skin protection**

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**8.2.2 Environmental exposure controls**

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**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 General information (physical state, colour, odour)**

Oily, greenish, nearly odourless liquid

**9.2 Important health, safety and environmental information****9.2.1 pH** Neutral**9.2.2 Boiling point/range** -**9.2.3 Flash point** ca 300° C**9.2.4 Flammability (solid substances, gases)** -**9.2.5 Explosive properties****9.2.5.1 Lower explosion limit** -**9.2.5.2 Upper explosion limit** -**9.2.7 Vapour pressure** -**9.2.8 Relative density** 921 kg/m<sup>3</sup>, (22°C)**9.2.9 Solubility****9.2.9.1 Water solubility** Insoluble**9.2.9.2 Liposolubility (solvent oil, to be specified)** In all respects**9.2.10 Partition coefficient: n-octanol/water** -**9.2.11 Viscosity** Product: 72 cP (25°C), 46 cP (40°C)**9.3 Other information**

Melting point: ca -30°C

Auto ignition temperature: &gt; 300°C

Risk of auto ignition e.g. if product gets into insulating material of hot machinery.

Acid number 2.73 mg/g

Water content 438 ppm.

Surface tension: 33.35 (23°C) , 32.45 (40°C)

**10. STABILITY AND REACTIVITY**

**10.1 Conditions to avoid**

No information is available on rapeseed oil. Natural rubber/vegetable oil preparation may decompose at temperatures above 290°C.

**10.2 Materials to avoid**

No information is available on rapeseed oil. As far as additives are concerned, contact with strong oxidising agents should be avoided.

**10.3 Dangerous decomposition products**

No information is available on rapeseed oil. Decomposition of natural rubber/vegetable oil preparation produces carbon dioxide and carbon monoxide.

**11. TOXICOLOGICAL INFORMATION**

**11.1 Acute toxicity**

The product does not contain constituents classified as hazardous to health. Natural rubber/vegetable oil: LD50 value > 5 g/kg, orally, rat, on the basis of similar products.

**11.2 Irritation and corrosivity**

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**11.3 Sensitisation**

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**11.4 Subacute, subchronic and prolonged toxicity**

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**11.5 Empirical data on effects on humans**

Rapeseed/colza oil: no adverse effects observed.  
Skin contact defats the skin and may cause drying of the skin.  
Natural rubber/vegetable oil preparation does not cause irritation.

**11.6 Additional toxicological information**

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**12. ECOLOGICAL INFORMATION**

**12.1 Ecotoxicity**

**12.1.1 Aquatic toxicity**

Rapeseed/colza oil is non-toxic, but dissolves grease from e.g. the feathers of aquatic birds.

**12.1.2 Toxicity to other organisms**

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**12.2 Mobility**

The product does not dissolve in water.

**12.3 Persistence and degradability**

**12.3.1 Biological degradability**

Rapeseed/colza oil is biodegradable, 95% (1). Natural rubber/vegetable oil preparation is biodegradable: 100%; within 21 days.  
Oxygen consumption (BOD) of the product compared to oxygen consumption of groundwater has been analysed. BOD5 of the product = 26 mg O<sub>2</sub>, the oxygen consumption of groundwater being 7.5 mg O<sub>2</sub>. (2)

**12.3.2 Chemical degradability**

Rapeseed/colza oil hydrolyses.

**12.4 Bioaccumulative potential**

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**12.5 Other adverse effects**

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**13. DISPOSAL CONSIDERATIONS**

Disposal according to local regulations. Risk of auto ignition shall be considered when disposing of oil-bearing waste.

## 14. TRANSPORT INFORMATION

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|--------|-----------------------------------|------------------------------|
| 14.1   | UN number                         | -                            |
| 14.2   | Packing group                     | -                            |
| 14.3   | Land transport                    |                              |
| 14.3.1 | Transport class                   | Not classified for transport |
| 14.3.2 | Risk code                         | -                            |
| 14.3.3 | Name according to bill of freight | -                            |
| 14.3.4 | Other information                 | -                            |
| 14.4   | Sea transport                     |                              |
| 14.4.1 | IMDG class                        | -                            |
| 14.4.2 | Correct technical name            | -                            |
| 14.4.3 | Other information                 | -                            |
| 14.5   | Air transport                     |                              |
| 14.5.1 | ICAO/IATA class                   | -                            |
| 14.5.2 | Correct technical name            | -                            |
| 14.5.3 | Other information                 | -                            |

## 15. REGULATORY INFORMATION

|        |   |                                      |
|--------|---|--------------------------------------|
| 15.1   | Information on the warning label  |                                      |
|        | EC number   | -                                    |
| 15.1.1 | Letter code of the warning symbol and indications of danger for the preparation | -                                    |
| 15.1.2 | Names of the ingredients given on the warning label                             | -                                    |
| 15.1.3 | R phrases   | -                                    |
| 15.1.4 | S phrases   | -                                    |
| 15.2   | National regulations  | The product has not been classified. |

## 16. OTHER INFORMATION

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|------|--|--|
| 16.1 | List of the relevant R phrases                       |  |
| 16.4 | Further information                                  | Ekosata, Lauri Turpeinen +358 (0) 400 - 577459   |
| 16.5 | Sources of data used                                 | Fact sheet provided by rapeseed oil manufacturer.<br>1) Fat sci. Technol. 91 Jahrgang, Nr 9, 1989<br>2) Study by the University of Oulu  |
| 16.6 | Information which has been added, deleted or revised | The name has changed. The former name was Eko 100 +. Amendments to Decree 372/2002 have been incorporated in items 1, 7, 8, 12 and 16.<br>Composition changed (beginning 2007). Points 2, 8, 10, 11, and 16 are updated. |

Date 15.12.2008