

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.09.2021

Version number 7

Revision: 15.09.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** *KAJO-2-Takt-Motorenöl*
- **Article number:** 11901000
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Lubricant for Industrial use
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
KAJO GmbH

Boschstr. 13
59609 Anröchte
Germany
- **Further information obtainable from:**
Department of Environmental Health and Safety:
sds@kajo.de
- **1.4 Emergency telephone number:**
During normal opening times: 0049 - 2947 - 881 - 0
Business hours: Monday -Friday: 8.00 h to 16.00 h

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS08

- **Signal word** Warning
- **Hazard-determining components of labelling:**
Kohlenwasserstoffe, C10-C13,n-Alkane,Isoalkane,cyclische Verbindungen, Aromaten (2-25%)
- **Hazard statements**
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.

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- P102 Keep out of reach of children.
- P103 Read carefully and follow all instructions.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P273 Avoid release to the environment.
- P314 Get medical advice/attention if you feel unwell.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

When placing the product on the market for the general public, it is also necessary to attach a tactile warning in accordance with ISO EN 11683.

2.3 Other hazards**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures** Mixture of refined mineral oils and additives
- **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:

EC number: 919-164-8 Reg.nr.: 01-2119473977-17	Kohlenwasserstoffe, C10 - C13, n-Alkane, Isoalkane, cyclische Verbindungen, Aromaten (2-25%) STOT RE 1, H372; Asp. Tox. 1, H304 Aquatic Chronic 3, H412	<2.5%
CAS: 128-39-2 EINECS: 204-884-0 RTECS: SK 8265000 Reg.nr.: 01-2119490822-33	2,6-di-tert-butylphenol Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Irrit. 2, H315	≥0.25-<1%
CAS: 74499-35-7 Index number: 604-092-00-9	phenol, 2-dodecyl-, branched Repr. 1B, H360F Skin Corr. 1C, H314; Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10)	≥0.025-<0.25%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures**General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

After skin contact:

Wash with water and soap.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Do not induce vomiting.

If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

Gastric or intestinal disorders

No further relevant information available.

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- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.3 Advice for firefighters**
Cool endangered containers with water spray from a safe distance.
Do not inhale explosion and combustion gases.
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Particular danger of slipping on leaked/spilled product.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **Storage class:** 10
- **7.3 Specific end use(s)** See product information sheet !

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**

· **DNELs****CAS: 128-39-2 2,6-di-tert-butylphenol**

Oral	DNEL Long-term, systemic effects	6.75 mg/kg bw/Tag (Population)
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Dermal	DNEL Long-term, systemic effects	11.25 mg/kg bw/Tag (worker)
Inhalative	DNEL Long-term, systemic effects	70.61 mg/m ³ (worker) 20.9 mg/m ³ (Population)
PNECs		
CAS: 128-39-2 2,6-di-tert-butylphenol		
PNEC Fresh water	0.00045 mg/L (-)	
PNEC Sea water	0.000045 mg/L (-)	

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not inhale dust / smoke / mist.

· **Respiratory protection:**

Exceeding the recommended exposure limits:

Use multi-purpose combination (U.S.) or type of filter ABEK (EN 14387).

Respirators and components must be tested and approved under appropriate government standards such as NIOSH. (U.S.) or CEN (EU).



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Recommendation: Chemical resistant protective gloves (EN 374)

· **Material of gloves**

Nitrile rubber, NBR

Chloroprene rubber, CR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

Value for the permeation: Level 6 = >480

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Supplementary note: The specifications are based on own tests, literature data and information of glove manufacturers, or is derived by analogy with similar substances. It should be noted, that the practical usage of a chemical-protective glove can in practice due to many influencing factors (eg temperature) may be considerably shorter than the permeation time determined through testing. Due to the large variety the instructions of the manufacturer must be observed.

· **Eye protection:**



Use safety glasses according to EN 166 : 2001.

· **Body protection:**

Impervious protective clothing

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Non-slip shoes recommended

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Liquid
Colour:	Red
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
· Flash point:	>150 °C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	>350 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	The product is not explosive, however, the formation of explosive vapor / air mixtures on heating above the flash point and / or nebulization can not be ruled out.
· Vapour pressure at 20 °C:	0.1 hPa
· Density at 20 °C:	0.88 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic at 40 °C:	110 mm ² /s
· Solvent content:	
Organic solvents:	2.5 %
VOC (EC)	2.51 %
VOC (EU)	22.1 g/l
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.

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- **10.4 Conditions to avoid**
Avoid open flames.
No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

Kohlenwasserstoffe, C10-C13,n-Alkane,Isoalkane,cyclische Verbindungen, Aromaten (2-25%)

Oral	LD50	>6,300 mg/kg (rat)
Dermal	LD50	>3,150 mg/kg (rabbit)

CAS: 128-39-2 2,6-di-tert-butylphenol

Oral	LD50	8,697 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

Kohlenwasserstoffe, C10-C13,n-Alkane,Isoalkane,cyclische Verbindungen, Aromaten (2-25%)

EL50 akut (72h)	10-100 mg/L (Pseudokirchneriella subcapitata (Algae))
EL50 (48h)	10-22 mg/L (Daphnia magna (Großer Wasserfloh))
NOEC chronisch (21d)	0.097 mg/L (Daphnia magna (Großer Wasserfloh))
LOEC (21 d)	0.203 mg/l (Daphnia magna (Großer Wasserfloh))
LL50 Akute Toxizität (96 h)	10-100 mg/L (Oncorhynchus mykiss (Regenbogenforelle))

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Harmful to aquatic organisms
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must be specially treated adhering to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Waste disposal key:**
The waste disposal keys mentioned show recommendations based on the intended use of this product. Due to the special use and disposal conditions of the user, other waste codes can also be assigned. (2014/955/EU)

· European waste catalogue
13 02 05* mineral-based non-chlorinated engine, gear and lubricating oils

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number	-
· ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name	-
· ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	-
· ADR, ADN, IMDG, IATA	-
· Class	Void
· 14.4 Packing group	-
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



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- **Signal word** Warning
- **Hazard-determining components of labelling:**
Kohlenwasserstoffe, C10-C13,n-Alkane,Isoalkane,cyclische Verbindungen, Aromaten (2-25%)
- **Hazard statements**
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS
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None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

* SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
H304 May be fatal if swallowed and enters airways.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H360F May damage fertility.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
- **Department issuing SDS:** Department of product safety
- **Contact:** Dr. John, Mail: sds@kajo.de
- **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOC: Volatile Organic Compounds (USA, EU)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Skin Corr. 1C: Skin corrosion/irritation – Category 1C
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Repr. 1B: Reproductive toxicity – Category 1B
 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 Asp. Tox. 1: Aspiration hazard – Category 1
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· **Sources**

Regulations:

Ordinance on facilities for the handling of water-endangering substances of 21.04.2017 (WGK classification)

REACH Regulation (EC) No 1907/2006 as last amended by Regulation (EU) No 2018/35

Regulation (EC) No 1272/2008, as last amended by Regulation (EC) No 2017/776

Internet:

<http://www.baua.de>

<http://www.arbeitssicherheit.de>

<http://www.dguv.de/ifa/de/gestis/stoffdb>

<http://logkow.cisti.nrc.ca>

<https://echa.europa.eu>

REGULATION (EU) 2015/830 of May, 28th 2015

· * **Data compared to the previous version altered.**