

**OXLUBE L9-TMP** 

11660

Version / Revision4.01Revision Date14-Sep-2021Supersedes Version4.00\*\*\*Issuing date14-Sep-2021

### **SECTION 1: Identification**

#### 1.1. Product identifier

Identification of the substance/preparation

**OXLUBE L9-TMP** 

**Chemical Name** 

2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate

**CAS-No** 126-57-8

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

Use of the Substance /

**lubricant** 

**Preparation** 

Uses advised against

None

### 1.3. Details of the supplier of the safety data sheet

Supplier OQ Chemicals Corporation

15375 Memorial Drive West Memorial Place I

Suite 300

Houston, TX 77079

USA

Phone +1 346 378 7300

Product Information Product Stewardship

FAX: +49 (0)208 693 2053 email: sc.psq@oq.com

### 1.4. Emergency telephone number

Emergency telephone number NCEC +1 202 464 2554

available 24/7

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

This substance is not hazardous in accordance with paragraph (d) of §1910.1200 (GHS-US classification).

OSHA Specified Hazards Not applicable.

### 2.2. Label elements



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Not required according to §1910.1200 (GHS-US labeling).

#### 2.3. Other hazards

None known

## **SECTION 3: Composition / information on ingredients**

#### 3.1. Substances

Component	CAS-No	Concentration (%)
2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl	126-57-8	> 85
dinonan-1-oate***		

## **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### Inhalation

Keep at rest. Aerate with fresh air. When symptoms persist or in all cases of doubt seek medical advice.

Wash off immediately with soap and plenty of water. When symptoms persist or in all cases of doubt seek medical advice.

#### **Eyes**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

#### Ingestion

Call a physician immediately. Do not induce vomiting without medical advice.

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

#### **Main symptoms**

None known.

#### Special hazard

None known.

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

#### General advice

Remove contaminated, soaked clothing immediately and dispose of safely. First aider needs to protect himself.

Treat symptomatically.



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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

foam, dry chemical, carbon dioxide (CO2), water spray

### **Unsuitable Extinguishing Media**

Do not use a solid water stream as it may scatter and spread fire.

### 5.2. Special hazards arising from the substance or mixture

Under conditions giving incomplete combustion, hazardous gases produced may consist of: carbon monoxide (CO)

carbon dioxide (CO2)

Combustion gases of organic materials must in principle be graded as inhalation poisons Vapours are heavier than air and may spread along floors

## 5.3. Advice for firefighters

### Special protective equipment for firefighters

Fire fighter protection should include a self-contained breathing apparatus (NIOSH-approved or EN 133) and full fire-fighting turn out gear.

#### Precautions for firefighting

Cool containers / tanks with water spray. Dike and collect water used to fight fire. Keep people away from and upwind of fire

### SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: For personal protective equipment see section 8. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas. Keep away from heat and sources of ignition. For emergency responders: Personal protection see section 8.

#### 6.2. Environmental precautions

Prevent further leakage or spillage. Do not discharge product into the aquatic environment without pretreatment (biological treatment plant).

### 6.3. Methods and material for containment and cleaning up

#### **Methods for containment**

Stop the flow of material, if possible without risk. Dike spilled material, where this is possible.

#### Methods for cleaning up



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Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Dispose of in accordance with local regulations. Take necessary

action to avoid static electricity discharge (which might cause ignition of organic vapours).

### 6.4. Reference to other sections

For personal protective equipment see section 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

### Advice on safe handling

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Provide sufficient air exchange and/or exhaust in work rooms.

### Hygiene measures

When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.

### Advice on the protection of the environment

See Section 8: Environmental exposure controls.

#### Incompatible products

strong oxidizing agents reducing agents strong acids bases

### 7.2. Conditions for safe storage, including any incompatibilities

#### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). In case of fire, emergency cooling with water spray should be available. Ground and bond containers when transferring material.

### Technical measures/Storage conditions

Keep containers tightly closed in a cool, well-ventilated place. Handle and open container with care.

## SECTION 8: Exposure controls / personal protection

### 8.1. Control parameters

#### **Exposure limits United States of America**

No exposure limits established.

### 8.2. Exposure controls



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### **Appropriate Engineering controls**

General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Explosion-proof equipment (for example fans, switches, and grounded ducts) should be used in mechanical ventilation systems.

### Individual protection measures, such as personal protective equipment

### General industrial hygiene practice

Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Ensure that eyewash stations and safety showers are close to the workstation location.

### Hygiene measures

When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.

#### Eye protection

Tightly fitting safety goggles. In addition to goggles, wear a face shield if there is a reasonable chance for splash to the face.

#### **Hand protection**

Wear protective gloves. Recommendations are listed below. Other protective material may be used, depending on the situation, if adequate degradation and permeation data is available. If other chemicals are used in conjunction with this chemical, material selection should be based on protection for all chemicals present.

Suitable material nitrile rubber

**Reference substance** Di-(2-ethylhexyl)-phthalate according to EN 374: level 6

Glove thickness approx 0,55 mm Break through time > 480 min

Suitable materialpolyvinylchloride / nitrile rubberReference substanceDi-(2-ethylhexyl)-phthalateEvaluationaccording to EN 374: level 6

Glove thickness approx 0,9 mm Break through time > 480 min

### Skin and body protection

Impervious clothing. Wear face-shield and protective suit for abnormal processing problems.

### Respiratory protection

Respirator with filter for organic vapour. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Equipment should conform to NIOSH.

### **Environmental exposure controls**

If possible use in closed systems. If leakage can not be prevented, the substance needs to be suck off at the emersion point, if possible without danger. Observe the exposure limits, clean exhaust air if needed. If recycling is not practicable, dispose of in compliance with local regulations. Inform the responsible authorities in case of leakage into the atmosphere, or of entry into waterways, soil or drains.

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## **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Appearance liquid
Colour light yellow
Odour weak

Odour threshold No data available No data available

Melting point/range -3,8 °F (-19,9 °C) (Freezing Point) -54,4 °F (-48 °C) (Pour point)

Method DIN ISO 3016\*\*\*
Boiling point/range 383,9 °F (195,5 °C)

Methodinitial boiling point, ASTM D86Flash point406,4 °F (208 °C) @ 1000 hPaMethodclosed cup, EN ISO 3680

Evaporation rate

Flammability (solid, gas)

Lower explosion limit

Upper explosion limit

No data available
No data available
No data available

Vapour pressure

 Values [hPa]
 Values [kPa]
 Values [atm]
 @ °C
 @ °F
 Method

 0,0000028\*\*\*
 0,00000028\*\*
 <0,001\*\*\*</td>
 20\*\*\*
 68\*\*\*
 OECD 104\*\*\*

0.00011\*\*\* 0.000011\*\*\* <0.001\*\*\* 100\*\*\* 212\*\*\* OECD 104\*\*\*

Vapour density No data available

Relative density

Values @ °C @ °F Method 0,948 20 68 EN ISO 12185

**Solubility** 0,078 μg/l @ 71,6 °F (22 °C), in water, OECD 105\*\*\*

log Pow > 6,2 @ 25 °C (77 °F) OECD 117\*\*\*
Autoignition temperature 732,2 °F (389 °C) @ 1010 hPa

Method ASTM E 659

Decomposition temperature No data available

Viscosity 46,07 mm²/s @ 68 °F (20 °C) Method kinematic, EN ISO 3104

### 9.2. Other information

Molecular weight554,85Molecular formulaC33 H62 O6log Koc7,68 calculated\*\*\*

Oxidizing properties Does not apply, substance is not oxidising. There are no chemical groups

associated with oxidizing properties

**Refractive Index** 1,454 @ 68 °F (20 °C)\*\*\*

**Explosive properties** Does not apply, substance is not explosive. There are no chemical groups

associated with explosive properties

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29,6 mN/m @ 20 °C, ISO 304 **Surface tension** 

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

The reactivity of the product corresponds to the typical reactivity shown by the substance group as described in any text book on organic chemistry.

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

#### 10.4. Conditions to avoid

Avoid contact with heat, sparks, open flame and static discharge. Avoid any source of ignition.

### 10.5. Incompatible materials

strong oxidizing agents, reducing agents, strong acids, bases.

### 10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Ingestion, Inhalation, Eye contact, Skin contact Likely routes of exposure

#### 2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate\*\*\*, CAS: 126-57-8

Target Organ Systemic Toxicant - Single exposure

Based on available data, the classification criteria are not met for:

STOT SE

### Target Organ Systemic Toxicant - Repeated exposure

Based on available data, the classification criteria are not met for:

STOT RE

Acute toxicity				
2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate (126-57-8)				
Routes of Exposure	Endpoint	Values	Species	Method
Oral	LD50	> 2000 mg/kg	rat, female	OECD 423
Dermal	LD50	> 2000 mg/kg	rat, male/female	OECD 402



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## 2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate\*\*\*, CAS: 126-57-8

#### **Assessment**

Based on available data, the classification criteria are not met for:

Acute oral toxicity

Acute dermal toxicity

STOT SE

For acute inhalation toxicity, a study is scientifically unjustified

Irritation and corrosion				
2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate (126-57-8)				
Target Organ Effects	Species	Result	Method	
Skin	human skin model	No skin irritation	OECD 431	in vitro***
Eyes	rabbit	No eye irritation	OECD 405	in vitro***

## 2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate\*\*\*, CAS: 126-57-8

Assessment

Based on available data, the classification criteria are not met for:

skin irritation/corrosion

eye irritation/corrosion

For skin irritation, no data are available

Sensitization				
2-Ethyl-2-[[(1-oxononyl)ox	/]methyl]propane-1,3	-diyl dinonan-1-oate	(126-57-8)	
Target Organ Effects	Species	Evaluation	Method	
Skin	guinea pig female***	not sensitizing	OECD 406	

## 2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate\*\*\*, CAS: 126-57-8

#### Assessment

Based on available data, the classification criteria are not met for:

Skin sensitization

For respiratory sensitization, no data are available

Subacute, subchronic and prolonged toxicity				
2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate (126-57-8)				
Туре	Dose	Species	Method	
Subacute toxicity	NOAEL: 1000 mg/kg/d	rat, male/female	OECD 422 Oral***	

## 2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate\*\*\*, CAS: 126-57-8

#### **Assessment**

Based on available data, the classification criteria are not met for:

STOT RE

Carcinogenicity, Mutagenicity, Reproductive toxicity					
2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate (126-57-8)					
Туре	Dose	Species	Evaluation	Method	
Mutagenicity		Salmonella typhimurium	negative	OECD 471 (Ames)	In vitro study



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		Escherichia coli***			
Mutagenicity		human lymphocytes	negative	OECD 487	In vitro study
Mutagenicity		mouse lymphoma cells	negative	OECD 476 (Mammalian Gene Mutation)	In vitro study
Reproductive toxicity	NOAEL > 1000 mg/kg/d	rat, parental rat, 1. Generation, male/female***		OECD 422, Oral	
Developmental Toxicity	NOAEL > 2000 mg/kg/d	rat			Developmental toxicity read across
Developmental Toxicity	NOAEL 2000 mg/kg/d	rat		· ·	Maternal toxicity read across

## 2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate\*\*\*, CAS: 126-57-8

#### **CMR Classification**

The available data on CMR properties are summarized in the table above. They do not indicate a classification into categories 1A or 1B

#### **Evaluation**

In vitro tests did not show mutagenic effects

### 2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate\*\*\*, CAS: 126-57-8

### **Aspiration toxicity**

no data available

#### Note

Handle in accordance with good industrial hygiene and safety practice. Further details on substance data can be found in the registration dossier under the following link:

http://echa.europa.eu/information-on-chemicals/registered-substances.

## **SECTION 12: Ecological information**

### 12.1. Toxicity

Acute aquatic toxicity				
2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate (126-57-8)				
Species	Exposure time	Dose	Method	
Danio rerio (Zebra fish)***	96h	LC50: > 124 mg/l	OECD 203***	
Daphnia magna (Water flea)***	48h***	EC50: > 9,3 mg/l***	OECD 202***	
Desmodesmus subspicatus***	72h***	EC50: > 4,4 mg/l (Growth	OECD 201***	
		rate)***		

Long term toxicity				
2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate (126-57-8)				
Туре	Species	Dose	Method	
		NOEC: ≥ 0,00006 mg/l (34d)***	OECD 210***	



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Reproductive toxicity***	, ,	NOEC: ≥ 0,00016 mg/l (21d)***	OECD 211***	
Aquatic toxicity***	Desmodesmus subspicatus***	LC50: > 4,4 mg/l/3d***	OECD 201***	

### 12.2. Persistence and degradability

### 2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate\*\*\*, CAS: 126-57-8 **Biodegradation**

75,98 % (28 d), OECD 301 B, activated sludge (domestic), adapted, aerobic.

Abiotic Degradation			
2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate (126-57-8)			
Туре	Result	Method	
Hydrolysis***	The Substance is highly insoluble in		
	water***		
Photolysis***	No data available***		

### 12.3. Bioaccumulative potential

2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate (126-57-8)			
Туре	Result	Method	
log Pow	> 6,2 @ 25 °C (77 °F)***	measured, OECD 117	
BCF	41,6 l/kg	QSAR	

### 12.4. Mobility in soil

2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate (126-57-8)		
Туре	Result	Method
Surface tension	29,6 mN/m @ 20 °C (68 °F)	ISO 304
Adsorption/Desorption	log Koc: 7,68	calculated***
Distribution to environmental	no data available***	
compartments***		

### 12.5. Results of PBT and vPvB assessment

## 2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate\*\*\*, CAS: 126-57-8

PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT), nor very persistent nor very bioaccumulating (vPvB)

#### 12.6. Other adverse effects

### 2-Ethyl-2-[[(1-oxononyl)oxy]methyl]propane-1,3-diyl dinonan-1-oate\*\*\*, CAS: 126-57-8

No data available



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## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

#### **Product Information**

Disposal required in compliance with all waste management related state and local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and possibilities for disposal.

#### Uncleaned empty packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

## **SECTION 14: Transport information**

Section 14.1 - 14.6

D.O.T. (49CFR) Not restricted

ICAO-TI / IATA-DGR Not restricted

IMDG Not restricted

# 14.7. Transport in bulk according to Annex II not applicable of MARPOL and the IBC Code

## **SECTION 15: Regulatory information**

### **Federal and State Regulations**

Components of the product are listed in the quoted regulations. For details please refer to the regulations directly. This list is not exhaustive, please check for other applicable regulations.

### **Federal Regulations**

This product is listed on the TSCA inventory

### **International Inventories**



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AICS (AU)
DSL (CA)
IECSC (CN)
EC-No. 2047936 (EU)

ENCS (2)-2491 (JP) ISHL (2)-2491 (JP) KECI KE-26174 (KR)

PICCS (PH) TSCA (US)

NZIoC-NZ with note\*\*\*

TCSI (TW)

## SECTION 16: Other information

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#### **Hazard Rating Systems**

### **NFPA (National Fire Protection Association)**

Health Hazard 1
Fire Hazard 1
Reactivity 0

### **HMIS (Hazardous Material Information System)**

Health Hazard 1
Flammability 1
Physical Hazard 0

### Training advice

For effective first-aid, special training / education is needed.

#### Sources of key data used to compile the datasheet

Information contained in this safety data sheet is based on OQ owned data and public sources deemed valid or acceptable. The absence of data elements required by OSHA, ANSI or Annex II, Regulation 1907/2006/EC indicates, that no data meeting these requirements is available.

### Further information for the safety data sheet

Changes against the previous version are marked by \*\*\*. Observe national and local legal requirements. For more information, other material safety data sheets or technical data sheets please consult the OQ homepage (www.chemicals.oq.com).

The use of a comma in section 3 and section 7 to 12 is the same as a period.

#### **Disclaimer**

**For industrial use only.** The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. OQ makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.

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**End of Safety Data Sheet**