

**OXLUBE L7-NPG** 

11990A

**Version / Revision Revision Date** 1 28-Jul-2022 **Supersedes Version** Issuing date 28-Jul-2022

# **SECTION 1: Identification**

#### 1.1. Product identifier

Identification of the substance/preparation

# **OXLUBE L7-NPG**

**Chemical Name** 

Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol

CAS-No

68855-18-5

## 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

If the material is misted or if vapours are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract

# SECTION 3: Composition / information on ingredients

#### 3.1. Substances

Component	CAS-No	Concentration (%)
Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol	68855-18-5	> 98

# **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.

#### Skir

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

Prolonged skin contact may defat the skin and produce dermatitis.

## 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 acids strong bases oxidizing agents

## 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 Neoprene

Suitable material nitrile rubber

#### 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). Based on workplace contaminant levels and working limits of the respirator, use a respirator approved by 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.

# SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Appearance liquid colourless
Odour No data available
Odour threshold No data available

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Hq No data available

-124,6 °F (-87 °C) (Pour point) Melting point/range

ASTM D 97-02 Method Boiling point/range No data available Flash point 375,8 °F (191 °C) Method closed cup, ISO 2719 **Evaporation rate** No data available

Flammability (solid, gas) Does not apply, the substance is a liquid

No data available Lower explosion limit **Upper explosion limit** No data available

Vapour pressure

Values [hPa] Values [kPa] Values [atm] @ °C @ °F Method < 0.0001 **QSAR** <0,01 <0,001 20 68

Vapour density No data available

Relative density

Values @ °C @ °F Method 0.92 20 68 EU A.3 Solubility < 0,05 mg/l @ 68 °F (20 °C), in water, EU A.6

6,68 (calculated) KOW WIN log Pow

**Autoignition temperature** 355 °F (671 °C) DIN 51794 Method **Decomposition temperature** No data available

**Viscosity** 10 mm<sup>2</sup>/s @ 68 °F (20 °C)

9.2. Other information

Molecular weight 328,4924 Molecular formula C19 H36 O4

log Koc 3,69 - 4,49 @ 25°C (77 °F) calculated

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

associated with oxidizing properties

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

associated with explosive properties

# 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



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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 acids, strong bases, oxidizing agents.

# 10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

# SECTION 11: Toxicological information

# 11.1. Information on toxicological effects

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

Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol, CAS: 68855-18-5

**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				
Heptanoic acid, ester with 2	2,2-dimethyl-1,3-prop	anediol (68855-18-5)		
Routes of Exposure	Endpoint	Values	Species	Method
Oral	LD50	>2000 mg/kg	rat, male/female	OECD 401
Inhalative	LC50	>5,22 mg/l (4h)	rat, male/female	OECD 436

## Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol, CAS: 68855-18-5

#### **Assessment**

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

Acute oral toxicity

Acute inhalation toxicity

For acute dermal toxicity, no data are available

Irritation and corrosion					
Heptanoic acid, ester w	ith 2,2-dimethyl-1	,3-propanediol (68855-18	-5)		
Target Organ Effects	Species	Result	Method		
Skin	rabbit	not irritating	OECD 404	4h	
Eyes	rabbit	Mild eye irritation	OECD 405		

# Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol, CAS: 68855-18-5 Assessment

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

skin irritation/corrosion

eye irritation/corrosion

If the material is misted or if vapours are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract

Sensitization				
Heptanoic acid, ester w	ith 2,2-dimethyl-1,3	8-propanediol (68855-18	3-5)	
Target Organ Effects	Species	Evaluation	Method	
Skin	guinea pig	not sensitizing	OECD 406	

# Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol, CAS: 68855-18-5

#### 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					
Heptanoic acid, ester w	Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol (68855-18-5)				
Туре	Dose	Species	Method		
Subacute toxicity	NOAEL: >=1450 mg/kg/d (28d)	rat, male	OECD 407 Oral	read across	
Subchronic toxicity	NOAEL: >=1000 mg/kg/d (90d)	rat, male/female	OECD 408 Oral	read across	
Subchronic toxicity	NOAEC: 0,5 mg/l/d (13 weeks)	rat, male/female	OECD 413 Inhalation	read across	
Subchronic toxicity	NOAEL: >=2000 mg/kg/d (13 weeks)	rat, male/female	OECD 411 Dermal	read across	

## Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol, CAS: 68855-18-5

#### Assessment

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

STOT RE

Carcinogenicity, Mu	Carcinogenicity, Mutagenicity, Reproductive toxicity					
Heptanoic acid, est	Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol (68855-18-5)					
Туре	Dose	Species	Evaluation	Method		
Mutagenicity		Salmonella typhimurium	negative	OECD 471 (Ames)	read across	
Mutagenicity		human lymphocytes	negative	OECD 473 (Chromosomal Aberration)		
Mutagenicity		mouse lymphoma cells	negative	OECD 476 (Mammalian Gene Mutation)		
Developmental Toxic	NOAEL 2000 mg/kg/d			OECD 414, Dermal	read across systemic effects Maternal toxicity	



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Developmental Toxicity	NOAEL 200		OECD 414,	read across Local
	mg/kg/d		Dermal	effects Maternal
				toxicity

# Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol, CAS: 68855-18-5

**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

# Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol, CAS: 68855-18-5

**Aspiration toxicity** 

no data available

Note

Handle in accordance with good industrial hygiene and safety practice.

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Acute aquatic toxicity					
Heptanoic acid, ester with 2,2-d	Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol (68855-18-5)				
Species	Exposure time	Dose	Method		
Oncorhynchus mykiss (rainbow trout)	96h	LC50: >0,086 mg/l	OECD 203		
Pseudokirchneriella subcapitata	72h	EC50: >0,0065 mg/l (Growth rate)	OECD 201		
Activated sludge (domestic)	3 h	NOEC: >=1000 mg/l	OECD 209		

Long term toxicity				
Heptanoic acid, ester with	n 2,2-dimethyl-1,3-prop	panediol (68855-18-5)		
Туре	Species	Dose	Method	
Reproductive toxicity	Daphnia magna (Water flea)	NOEC: ≥ 0,0019 mg/l	OECD 211	
Aquatic toxicity	Pseudokirchneriella subcapitata	NOEC: ≥ 0,0065 mg/l Growth rate	OECD 201	

Terrestrial toxicity					
Heptanoic acid, ester with	Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol (68855-18-5)				
Species	Exposure time	Dose	Туре	Method	
Eisenia fetida	14 d	NOEC: ≥ 1000 mg/kg soil dw	Reproduction	OECD 207	
Eisenia fetida	56 d	NOEC: ≥ 1000 mg/kg soil dw	Reproduction	read across OECD 222	

# 12.2. Persistence and degradability

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Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol, CAS: 68855-18-5

**Biodegradation** 

89,3 % (28 d), activated sludge (domestic), aerobic, OECD 301 B.

Abiotic Degradation			
Heptanoic acid, ester with	2,2-dimethyl-1,3-propanediol (68855-18-5)		
Туре	Result	Method	
Hydrolysis	5,3 yr@25 °C, pH 7	calculated	
Photolysis	Half-life (DT50): 24,32 h	calculated	

# 12.3. Bioaccumulative potential

Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol (68855-18-5)			
Туре	Result	Method	
BCF	33,76 - 500	QSAR	
log Pow	6,68	calculated	

# 12.4. Mobility in soil

Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol (68855-18-5)		
Туре	Result	Method
Adsorption/Desorption	Koc: 4929 - 30820	calculated
Surface tension	not applicable	
Distribution to environmental compartments	no data available	

# 12.5. Results of PBT and vPvB assessment

Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol, CAS: 68855-18-5

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

Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol, CAS: 68855-18-5

No data available

# **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



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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

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

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**

## Heptanoic acid, ester with 2,2-dimethyl-1,3-propanediol, CAS: 68855-18-5

AICS (AU) NDSL (CA) IECSC (CN) EC-No. 2724691 (EU) KECI 2001-3-1721 (KR) PICCS (PH) TSCA (US) TCSI (TW)



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# **SECTION 16: Other information**

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## **Hazard Rating Systems**

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

Health Hazard Fire Hazard 1 Reactivity 0

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

Health Hazard 0 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.og.com).

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

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# **End of Safety Data Sheet**