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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 04.06.2024 / 0019

Replacing version dated / version: 17.01.2022 / 0018

Valid from: 04.06.2024 PDF print date: 05.06.2024 Synthoil Energy 0W-40

# Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

#### 1.1 Product identifier

## Synthoil Energy 0W-40

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

Motor oil

#### Uses advised against:

No information available at present.

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

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LIQUI MOLY GmbH Jerg-Wieland-Str. 4 89081 Ulm-Lehr Tel.: (+49) 0731-1420-0

Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

#### 1.4 Emergency telephone number

## Emergency information services / official advisory body:

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Landspitali- The National University Hospital of Iceland, tel. +354 543 2222 or 112 (valid only for Iceland)

#### Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)

+1 872 5888271 (LMR)

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) 1272/2008 (CLP)

The mixture is not classified as dangerous in the terms of the Regulation (EC) 1272/2008 (CLP).

#### 2.2 Label elements

### Labeling according to Regulation (EC) 1272/2008 (CLP)

EUH210-Safety data sheet available on request.

#### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).



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Dangerous vapours heavier than air. Product floats on the water surface. Product can re-ignite itself.

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

#### 3.1 Substances

# n.a. 3.2 Mixtures

1-Decene, homopolymer, hydrogenated	
Registration number (REACH)	01-2119486452-34-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	500-183-1
CAS	68037-01-4
content %	60-90
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304

Distillates (petroleum), hydrotreated light paraffinic	
Registration number (REACH)	01-2119487077-29-XXXX
Index	649-468-00-3
EINECS, ELINCS, NLP, REACH-IT List-No.	265-158-7
CAS	64742-55-8
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304

Distillates (petroleum), solvent-dewaxed heavy paraffinic	
Registration number (REACH)	01-2119471299-27-XXXX
Index	649-474-00-6
EINECS, ELINCS, NLP, REACH-IT List-No.	265-169-7
CAS	64742-65-0
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304

Impurities, test data and additional information may have been taken into account in classifying and labelling the product.

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

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

### 4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

#### Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

#### Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

## **Eve contact**

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

### Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting. Consult doctor immediately.



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

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

Drying of the skin.

Dermatitis (skin inflammation)

On vapour formation:

Irritation of the respiratory tract

Ingestion:

Gastrointestinal disturbances

Nausea Vomiting

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

Symptomatic treatment.

## **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media Suitable extinguishing media

CO2

Foam

Dry extinguisher

#### Unsuitable extinguishing media

High volume water jet

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

In case of fire the following can develop:

Oxides of carbon

Metal oxides

Fume

Toxic gases

#### 5.3 Advice for firefighters

For personal protective equipment see Section 8.

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary.

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

#### **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

## **6.1.1 For non-emergency personnel**

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.

Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Avoid formation of oil mist.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping.

#### 6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

#### 6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

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



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Soak up with absorbent material (e.g. universal binding agent) and dispose of according to Section 13.

Oil binder

Do not wash away with water or watery cleaning agents.

#### 6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## **SECTION 7: Handling and storage**

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

#### 7.1 Precautions for safe handling

#### 7.1.1 General recommendations

Ensure good ventilation.

Avoid formation of oil mist.

Keep away from sources of ignition - Do not smoke.

Take measures against electrostatic charging, if appropriate.

Do not heat to temperatures close to flash point.

Avoid contact with eyes or skin.

Do not carry cleaning cloths soaked in product in trouser pockets.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

#### 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

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

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Impermeable floor.

Protect from direct sunlight and warming.

Protect from humidity.

#### 7.3 Specific end use(s)

No information available at present.

## **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

Chemical Name	Oil mist, mineral			
WEL-TWA: 5 mg/m3 (Mineral oil,	excluding metal	WEL-STEL:		
working fluids, ACGIH)				
Monitoring procedures:	-	Draeger - Oil Mist 1/a (67 33 031)		
BMGV:			Other information:	-

Distillates (petroleum), hydrotreated light paraffinic							
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note	
	Environment - oral (animal feed)		PNEC	9,33	mg/kg feed		
Consumer	Human - inhalation	Long term, local effects	DNEL	1,19	mg/m3		
Consumer	Human - oral	Long term, systemic effects	DNEL	0,74	mg/kg bw/day		
Workers / employees	Human - inhalation	Long term, local effects	DNEL	5,58	mg/m3		
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,97	mg/kg bw/day		
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2,73	mg/m3		



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Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
	Environment - oral (animal		PNEC	9,33	mg/kg feed	
	feed)					
Consumer	Human - inhalation	Long term, local effects	DNEL	1,19	mg/m3	
Consumer	Human - oral	Long term, systemic	DNEL	0,74	mg/kg bw/d	
		effects				
Workers / employees	Human - inhalation	Long term, local effects	DNEL	5,58	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic	DNEL	2,73	mg/m3	
		effects				
Workers / employees	Human - dermal	Long term, systemic	DNEL	0,97	mg/kg bw/d	
		effects				

Distillates (petroleum), hydrotreated heavy paraffinic										
Area of application	Exposure route /	posure route / Effect on health Descriptor Value Unit Note								
	Environmental		-							
	compartment									
	Environment - oral (animal		PNEC	9,33	mg/kg feed					
	feed)									

- United Kingdom | WEL-TWA = Workplace Exposure Limit - Long-term exposure limit - 8-hour TWA (= time weighted average) reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:

(8) = Inhalable fraction (2004/37/CE, 2017/164/EU). (9) = Respirable fraction (2004/37/CE, 2017/164/EU). (11) = Inhalable fraction (2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (2004/37/CE).

| WEL-STEL = Workplace Exposure Limit - Short-term exposure limit - 15-minute reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:

(8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU).

| BMGV = Biological monitoring guidance value (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).

(EU) = Directive 98/24/EC or 2004/37/EC or SCOEL (Biological Limit Value - BLV, Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL)) |

| Other information (EH40/2005 Workplace exposure limits (Fourth Edition 2020)): Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:

(13) = The substance can cause sensitisation of the skin and of the respiratory tract (2004/37/CE), (14) = The substance can cause sensitisation of the skin (2004/37/CE).

#### 8.2 Exposure controls

## 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

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

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

#### Eve/face protection:

Tight fitting protective goggles (EN 166) with side protection, with danger of splashes.



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Skin protection - Hand protection:

Protective gloves, oil resistant (EN ISO 374).

Recommended

Protective nitrile gloves (EN ISO 374).

Minimum layer thickness in mm:

0.4

Permeation time (penetration time) in minutes:

> 480

Protective hand cream recommended.

The recommended maximum wearing time is 50% of breakthrough time.

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:

Normally not necessary.

With oil mist formation:

Filter A2 P2 (EN 14387), code colour brown, white

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

Not applicable

manufacturer

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

#### 8.2.3 Environmental exposure controls

No information available at present.

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

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

Physical state:

Colour: Odour:

Melting point/freezing point:

Boiling point or initial boiling point and boiling range:

Flammability:

Lower explosion limit: Upper explosion limit:

Flash point:

Auto-ignition temperature: Decomposition temperature:

pH:

Kinematic viscosity: Kinematic viscosity:

Solubility:

Partition coefficient n-octanol/water (log value):

Vapour pressure:

Density and/or relative density: Relative vapour density: Particle characteristics:

9.2 Other information

No information available at present.

Liquid Brown

There is no information available on this parameter. There is no information available on this parameter.

230 °C

There is no information available on this parameter. There is no information available on this parameter.

n.d.a.

80,0 mm2/s (40°C) 13,8 mm2/s (100°C)

Insoluble

Does not apply to mixtures.

There is no information available on this parameter.

0,845 g/cm3

There is no information available on this parameter.

Does not apply to liquids.



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## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

The product has not been tested.

#### 10.2 Chemical stability

Stable with proper storage and handling.

## 10.3 Possibility of hazardous reactions

No dangerous reactions are known.

#### 10.4 Conditions to avoid

Protect from humidity.

Heating, open flame, ignition sources

#### 10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

Avoid contact with strong acids.

#### 10.6 Hazardous decomposition products

No decomposition when used as directed.

## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Possibly more information on health effects, see Section 2.1 (classification).

Synthoil Energy 0W-40						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin						n.d.a.
sensitisation:						
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity -						n.d.a.
single exposure (STOT-SE):						
Specific target organ toxicity -						n.d.a.
repeated exposure (STOT-RE):						
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

1-Decene, homopolymer, hydrogenated								
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes		
Aspiration hazard:						Asp. Tox. 1		

Distillates (petroleum), hydrotreated light paraffinic							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes	
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	Analogous	
					Toxicity)	conclusion	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute	Analogous	
					Dermal Toxicity)	conclusion	
Acute toxicity, by inhalation:	LC50	>5,53	mg/l/4h	Rat	OECD 403 (Acute	Aerosol,	
					Inhalation Toxicity)	Analogous	
						conclusion	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant,	
					Dermal	Analogous	
					Irritation/Corrosion)	conclusion	
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant,	
					Irritation/Corrosion)	Analogous	
						conclusion	



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Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact),
						Analogous conclusion
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative, Analogous conclusion
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative, Analogous conclusionChines e hamster
Carcinogenicity:				Mouse	OECD 451 (Carcinogenicity Studies)	Negative, Analogous conclusiondermal
Reproductive toxicity:	NOAEL	1000	mg/kg bw/d	Rat	OECD 421 (Reproduction/Developm ental Toxicity Screening Test)	Analogous conclusiondermal
Reproductive toxicity (Developmental toxicity):				Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Negative, Analogous conclusion
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	125	mg/kg bw/d	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Analogous conclusion
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	<30	mg/kg bw/d	Rat	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	Analogous conclusion
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	1000	mg/kg	Rabbit	OECD 410 (Repeated Dose Dermal Toxicity - 90-Day)	Analogous conclusion
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	0,05	mg/l	Rat	OECD 412 (Subacute Inhalation Toxicity - 28- Day Study)	Aerosol, Analogous conclusion
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	0,15	mg/l	Rat		Aerosol, Analogous conclusion13 weeks
Aspiration hazard:						Yes

Distillates (petroleum), solvent	Distillates (petroleum), solvent-dewaxed heavy paraffinic							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes		
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral			
					Toxicity)			
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute			
					Dermal Toxicity)			
Acute toxicity, by inhalation:	LD50	>5,53	mg/l/4h	Rat	OECD 403 (Acute	Aerosol		
					Inhalation Toxicity)			
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant,		
					Dermal	Analogous		
					Irritation/Corrosion)	conclusion		
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant,		
					Irritation/Corrosion)	Analogous		
						conclusion		
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin		
sensitisation:					Sensitisation)	contact),		
						Analogous		
						conclusion		
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian	Negative,		
					Erythrocyte	Analogous		
					Micronucleus Test)	conclusion		



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Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro	Negative,
January Community					Mammalian	Analogous
					Chromosome	conclusion
					Aberration Test)	Chinese hamster
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative,
Cerni cen matagemeny.				typhimurium	Reverse Mutation Test)	Analogous
				тургііншинані	Reverse Mutation Test)	conclusion
Common cell monte maniaitus				Mouse	OFOD 470 (lp \//itma	
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro	Negative,
					Mammalian Cell Gene	Analogous
					Mutation Test)	conclusion
Carcinogenicity:				Mouse		Female, Negative
Carcinogenicity:				Mouse	OECD 451	Negative,
					(Carcinogenicity Studies)	Analogous
						conclusion 78
						weeks, dermal
Reproductive toxicity:				Rat		Negative
Reproductive toxicity				Rat	OECD 414 (Prenatal	Negative,
(Developmental toxicity):					Developmental Toxicity	Analogous
(					Study)	conclusion
					Olddy)	dermal
Reproductive toxicity (Effects				Rat	OECD 421	Negative,
on fertility):				- rac	(Reproduction/Developm	Analogous
on remity).					ental Toxicity Screening	conclusion oral,
					Test)	dermal
Considir toward array tovisity	NOAEL	20		Det		
Specific target organ toxicity -	NOAEL	30	mg/kg/d	Rat	OECD 411 (Subchronic	Analogous
repeated exposure (STOT-RE),					Dermal Toxicity - 90-day	conclusion
dermal:					Study)	
Specific target organ toxicity -	NOAEL	~1000	mg/kg	Rabbit	OECD 410 (Repeated	Analogous
repeated exposure (STOT-RE),			bw/d		Dose Dermal Toxicity -	conclusion
dermal:					90-Day)	
Specific target organ toxicity -	NOAEL	0,22	mg/l	Rat		Aerosol,
repeated exposure (STOT-RE),						Analogous
inhalat.:						conclusion 4
						weeks
Specific target organ toxicity -	NOAEL	0,15	mg/l	Rat		Aerosol,
repeated exposure (STOT-RE),	1.07.1	5,.5				Analogous
inhalat.:						conclusion 13
mindia						weeks
Aspiration hazard:	+					Yes
Symptoms:				+		mucous
Symptoms.						
						membrane
						irritation,
						dizziness,
						nausea

## 11.2. Information on other hazards

Synthoil Energy 0W-40	Synthoil Energy 0W-40									
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes				
Endocrine disrupting properties:						Does not apply				
						to mixtures.				
Other information:						No other				
						relevant				
						information				
						available on				
						adverse effects				
						on health.				

## **SECTION 12: Ecological information**

Possibly more information on environmental effects, see Section 2.1 (classification).

Synthoil Energy 0W-40							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes



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12.1. Toxicity to fish:						n.d.a.
12.1. Toxicity to daphnia:						n.d.a.
12.1. Toxicity to algae:						n.d.a.
12.2. Persistence and						n.d.a.
degradability:						
12.3. Bioaccumulative						n.d.a.
potential:						
12.4. Mobility in soil:						n.d.a.
12.5. Results of PBT						n.d.a.
and vPvB assessment						
12.6. Endocrine						Does not apply
disrupting properties:						to mixtures.
12.7. Other adverse						No information
effects:						available on
						other adverse
						effects on the
						environment.
Other information:						DOC-elimination
						degree(complexi
						ng organic
						substance)>=
						80%/28d: No
Other information:	AOX	0	)	%		According to the
						recipe, contains
						no AOX.

1-Decene, homopolymer	1-Decene, homopolymer, hydrogenated										
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes				
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna						
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	125	mg/l	Daphnia magna						
12.1. Toxicity to algae:	LC50	72h	>1000	mg/l	Scenedesmus						
					quadricauda						
12.2. Persistence and		28d	2	%		OECD 301 D					
degradability:						(Ready					
						Biodegradability -					
						Closed Bottle Test)					
12.3. Bioaccumulative	Log Kow		>6,5				measured				
potential:											

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOEC/NOEL	28d	>1000	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to fish:	LL50	96h	>100	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	Analogous conclusion
12.1. Toxicity to fish:	NOEC/NOEL	14d	1000	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	10	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	Analogous conclusion
12.1. Toxicity to daphnia:	EL50	48h	> 10000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	Analogous conclusion
12.1. Toxicity to algae:	NOEC/NOEL	72h	>=100	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	Analogous conclusion
12.1. Toxicity to algae:	EC50	72h	>100	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	Analogous conclusion



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12.2. Persistence and		28d	31	%	activated sludge	OECD 301 F	Not readily
degradability:						(Ready	biodegradable,
						Biodegradability -	Analogous
						Manometric	conclusion
						Respirometry Test)	
12.3. Bioaccumulative potential:	Log Pow		>6				@20°C
12.3. Bioaccumulative							Not to be
potential:							expected
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
							vPvB substance
Other information:							The product can
							be extensively
							eliminated from
							water via abiotic
							processes (e.g.
							adsorption on
							activated sludge).

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Salmo gairdneri		
12.1. Toxicity to fish:	LC50	96h	>5000	mg/l	Oncorhynchus	OECD 203 (Fish,	
					mykiss	Acute Toxicity	
						Test)	
12.1. Toxicity to fish:	NOEC/NOEL	21d	1000	mg/l	Oncorhynchus	QSAR	
					mykiss		
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Pimephales	OECD 203 (Fish,	Analogous
					promelas	Acute Toxicity	conclusion
						Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	10	mg/l	Daphnia magna	OECD 211	Analogous
						(Daphnia magna	conclusion
10.1 <del>-</del>	5050	401	1000		<u> </u>	Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna	OECD 202	Analogous
						(Daphnia sp.	conclusion
						Acute	
						Immobilisation	
10.1 <del>-</del> 1.11.1		001	1000			Test)	
12.1. Toxicity to algae:	EC50	96h	>1000	mg/l	Scenedesmus		
40.0 Dansistanas and		00-1	1	0/	subspicatus	OFOD 004 D	A I
12.2. Persistence and		28d	6	%		OECD 301 B	Analogous
degradability:						(Ready	conclusion
						Biodegradability -	
						Co2 Evolution Test)	
12.2. Persistence and		28d	31	%	activated sludge	OECD 301 F	Not readily
degradability:		20U	31	70	activated studge	(Ready	biodegradable
degradability.						Biodegradability -	(Analogous
						Manometric	conclusion)
						Respirometry Test)	conclusion)
12.3. Bioaccumulative	Log Pow		>3			(Copilottietty Test)	Low
potential:	Logiow		-0				LOVV
12.5. Results of PBT			+				No PBT
and vPvB assessment							substance, No
and it is accommon							vPvB substance
Toxicity to bacteria:	EC20	6h	>1000	mg/l	Pseudomonas		
roxiony to bactoria.			1 1 1 1 1 1	13	fluorescens		

## **SECTION 13: Disposal considerations**

## 13.1 Waste treatment methods



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#### For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of. EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

13 02 05 mineral-based non-chlorinated engine, gear and lubricating oils

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

Implement substance recycling.

E.g. suitable incineration plant.

## For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

15 01 04 metallic packaging

## **SECTION 14: Transport information**

#### **General statements**

Transport by road/by rail (ADR/RID)

14.1. UN number or ID number:

Not applicable

14.2. UN proper shipping name:

Not applicable

14.3. Transport hazard class(es):Not applicable14.4. Packing group:Not applicable14.5. Environmental hazards:Not applicableTunnel restriction code:Not applicableClassification code:Not applicableLQ:Not applicableTransport category:Not applicable

Transport by sea (IMDG-code)

14.1. UN number or ID number:

Not applicable

14.2. UN proper shipping name:

Not applicable

14.3. Transport hazard class(es):Not applicable14.4. Packing group:Not applicable14.5. Environmental hazards:Not applicableMarine Pollutant:Not applicableEmS:Not applicable

Transport by air (IATA)

14.1. UN number or ID number: Not applicable

14.2. UN proper shipping name:

Not applicable

14.3. Transport hazard class(es):Not applicable14.4. Packing group:Not applicable14.5. Environmental hazards:Not applicable

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

#### 14.7. Maritime transport in bulk according to IMO instruments

Non-dangerous material according to Transport Regulations.

#### **SECTION 15: Regulatory information**

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



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Observe restrictions:

General hygiene measures for the handling of chemicals are applicable.

Regulation (EU) No 649/2012 'concerning the export and import of hazardous chemicals' must be adhered to, as the product contains a substance that falls within the scope of this Regulation.

Directive 2010/75/EU (VOC):

1,25 %

National requirements/regulations on safety and health protection must be applied when using work equipment.

#### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

#### **SECTION 16: Other information**

Revised sections:

2, 3, 4, 8, 9, 11, 12, 15, 16

## Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Not applicable

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents. H304 May be fatal if swallowed and enters airways.

Asp. Tox. — Aspiration hazard

#### **Key literature references and sources for data:**

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.

Guidelines for the preparation of safety data sheets as amended (ECHA).

Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).

EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as

National Lists of Occupational Exposure Limits for each country as amended.

Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

## Any abbreviations and acronyms used in this document:

according, according to

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ASTM ASTM International (American Society for Testing and Materials)

ATE Acute Toxicity Estimate

BAM Bundesanstalt für Materialforschung und -prüfung (= Federal Institute for Materials Research and Testing, Germany) BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BSEF The International Bromine Council

CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

DMEL Derived Minimum Effect Level DNEL Derived No Effect Level

DOC Dissolved organic carbon



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for example (abbreviation of Latin 'exempli gratia'), for instance

EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)

EC **European Community** ECHA European Chemicals Agency

ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect

**European Economic Community** EEC

**EINECS** European Inventory of Existing Commercial Chemical Substances

**ELINCS** European List of Notified Chemical Substances

**Furopean Norms** FN

**EPA** United States Environmental Protection Agency (United States of America)

ErCx,  $E\mu Cx$ , ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)

etc. et cetera EU European Union

EVAL Ethylene-vinyl alcohol copolymer

Fax number Fax. general aen.

GHS Globally Harmonized System of Classification and Labelling of Chemicals **GWP** Global warming potential

Adsorption coefficient of organic carbon in the soil Koc

octanol-water partition coefficient Kow

IARC International Agency for Research on Cancer

IATA International Air Transport Association IBC (Code) International Bulk Chemical (Code)

International Maritime Code for Dangerous Goods IMDG-code

including, inclusive

**IUCLID International Uniform Chemical Information Database** IUPAC International Union for Pure Applied Chemistry LC50 Lethal Concentration to 50 % of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)

Log Koc Logarithm of adsorption coefficient of organic carbon in the soil

Log Kow, Log Pow Logarithm of octanol-water partition coefficient

**Limited Quantities** 

MARPOL International Convention for the Prevention of Marine Pollution from Ships

mg/kg bw mg/kg body weight

mg/kg bw/d, mg/kg bw/day mg/kg body weight/day

mg/kg dry weight mg/kg dw mg/kg wwt mg/kg wet weight

not applicable n.a. not available n.av. not checked n.c. n.d.a. no data available

NIOSH National Institute for Occupational Safety and Health (USA)

NLP No-longer-Polymer

NOEC, NOEL No Observed Effect Concentration/Level

OECD Organisation for Economic Co-operation and Development

org. organic

OSHA Occupational Safety and Health Administration (USA)

PBT persistent, bioaccumulative and toxic

PΕ Polyethylene

PNEC Predicted No Effect Concentration

parts per million ppm Polyvinylchloride

REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration,

Evaluation, Authorisation and Restriction of Chemicals)

6/7/8/9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical REACH-IT List-No. identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-

Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International RID Carriage of Dangerous Goods by Rail)

SVHC Substances of Very High Concern

Tel. Telephone

TOC Total organic carbon

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC Volatile organic compounds



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vPvB very persistent and very bioaccumulative

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

## These statements were made by: Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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