

Page 1 of 15

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

Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-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 High Tech 5W-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

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:

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 %).



Page 2 of 15

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

Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

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 %	10-<25
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.



Page 3 of 15

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

Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

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.

The following may occur:

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

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



Page 4 of 15

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

Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

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

Avoid formation of oil mist.

Ensure good ventilation.

Keep away from sources of ignition - Do not smoke.

Do not heat to temperatures close to flash point.

Take measures against electrostatic charging, if appropriate.

Avoid contact with eyes.

Avoid long lasting or intensive contact with skin.

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

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

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.

Under all circumstances prevent penetration into the soil.

Protect from direct sunlight and warming.

Store in a dry place.

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, mir	eral	
WEL-TWA: 5 mg/m3 (Mineral oil, excluding meta	al 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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Page 5 of 15

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

Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

Distillates (petroleum), solve	ent-dewaxed heavy 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/d	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	5,58	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2,73	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,97	mg/kg bw/d	

Distillates (petroleum), hydrotreated heavy paraffinic							
Area of application	Exposure 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.

Eye/face protection:



Page 6 of 15

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

Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Protective gloves, oil resistant (EN ISO 374).

If applicable

Protective nitrile gloves (EN ISO 374).

Protective Neoprene® / polychloroprene gloves (EN ISO 374).

Minimum layer thickness in mm:

0.5

Permeation time (penetration time) in minutes:

480

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

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

Protective hand cream recommended.

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

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 manufacturer.

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

Characteristic

230 °C

n.d.a.

Insoluble

94,0 mm2/s (40°C)

14,8 mm2/s (100°C)

9.1 Information on basic physical and chemical properties

Physical state: Liquid Colour: Brown

Odour:

Melting point/freezing point: There is no information available on this parameter. There is no information available on this parameter.

Boiling point or initial boiling point and boiling range:

Flammability:

Lower explosion limit:

Upper explosion limit: Flash point:

Auto-ignition temperature:

Decomposition temperature:

Kinematic viscosity:

Kinematic viscosity:

Solubility:

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

Vapour pressure:

Density and/or relative density: Relative vapour density:

Particle characteristics:

There is no information available on this parameter.

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

Does not apply to liquids.

Does not apply to mixtures. There is no information available on this parameter.

9.2 Other information



Page 7 of 15

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

Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

No information available at present.

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 High Tech 5W-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, hydro	genated					
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	



Page 8 of 15

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant, Analogous
					· ·	conclusion
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin
sensitisation:					Sensitisation)	contact),
						Analogous
						conclusion
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative,
				typhimurium	Reverse Mutation Test)	Analogous
					, i	conclusion
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro	Negative,
					Mammalian `	Analogous
					Chromosome	conclusionChines
					Aberration Test)	e hamster
Carcinogenicity:				Mouse	OECD 451	Negative,
					(Carcinogenicity Studies)	Analogous
						conclusiondermal
Reproductive toxicity:	NOAEL	1000	mg/kg	Rat	OECD 421	Analogous
			bw/d		(Reproduction/Developm	conclusiondermal
					ental Toxicity Screening	
					Test)	
Reproductive toxicity				Rat	OECD 414 (Prenatal	Negative,
(Developmental toxicity):					Developmental Toxicity	Analogous
					Study)	conclusion
Specific target organ toxicity -	NOAEL	125	mg/kg	Rat	OECD 408 (Repeated	Analogous
repeated exposure (STOT-RE),			bw/d		Dose 90-Day Oral	conclusion
oral:					Toxicity Study in	
					Rodents)	
Specific target organ toxicity -	NOAEL	<30	mg/kg	Rat	OECD 411 (Subchronic	Analogous
repeated exposure (STOT-RE),			bw/d		Dermal Toxicity - 90-day	conclusion
dermal:					Study)	
Specific target organ toxicity -	NOAEL	1000	mg/kg	Rabbit	OECD 410 (Repeated	Analogous
repeated exposure (STOT-RE),					Dose Dermal Toxicity -	conclusion
dermal:					90-Day)	
Specific target organ toxicity -	NOAEL	0,05	mg/l	Rat	OECD 412 (Subacute	Aerosol,
repeated exposure (STOT-RE),					Inhalation Toxicity - 28-	Analogous
inhalat.:					Day Study)	conclusion
Specific target organ toxicity -	NOAEL	0,15	mg/l	Rat		Aerosol,
repeated exposure (STOT-RE),						Analogous
inhalat.:						conclusion13
						weeks
Aspiration hazard:						Yes

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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Page 9 of 15

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

		Г	1			
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro	Negative,
					Mammalian	Analogous
					Chromosome	conclusion
					Aberration Test)	Chinese hamster
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative,
				typhimurium	Reverse Mutation Test)	Analogous
						conclusion
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
					,	dermal
Reproductive toxicity (Effects				Rat	OECD 421	Negative,
on fertility):					(Reproduction/Developm	Analogous
, ,.					ental Toxicity Screening	conclusion oral,
					Test)	dermal
Specific target organ toxicity -	NOAEL	30	mg/kg/d	Rat	OECD 411 (Subchronic	Analogous
repeated exposure (STOT-RE),	110/122		mg/ng/a	- Tut	Dermal Toxicity - 90-day	conclusion
dermal:					Study)	CONTOIGGION
Specific target organ toxicity -	NOAEL	~1000	mg/kg	Rabbit	OECD 410 (Repeated	Analogous
repeated exposure (STOT-RE),	INOMEL	1000	bw/d	Rabbit	Dose Dermal Toxicity -	conclusion
dermal:			DW/G		90-Day)	CONTOIGGION
Specific target organ toxicity -	NOAEL	0,22	mg/l	Rat	30 Day)	Aerosol,
repeated exposure (STOT-RE),	NOALL	0,22	1119/1	T Cat		Analogous
inhalat.:						conclusion 4
IIIIdidi						weeks
Charific target argen toyicity	NOAEL	0.15	ma/l	Rat		
Specific target organ toxicity -	INUAEL	0,15	mg/l	Rai		Aerosol,
repeated exposure (STOT-RE),						Analogous
inhalat.:						conclusion 13
Assiration homes-				-		weeks
Aspiration hazard:						Yes
Symptoms:						mucous
						membrane
						irritation,
						dizziness,
						nausea

11.2. Information on other hazards

Synthoil High Tech 5W-40	Synthoil High Tech 5W-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 High Tech 5W-40									
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		



Page 10 of 15

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

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, 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



Page 11 of 15

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

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 mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	21d	1000	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	Analogous conclusion
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	10	mg/l	Daphnia magna	OEĆD 211 (Daphnia magna Reproduction Test)	Analogous conclusion
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	Analogous conclusion
12.1. Toxicity to algae:	EC50	96h	>1000	mg/l	Scenedesmus subspicatus		
12.2. Persistence and degradability:		28d	6	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Analogous conclusion
12.2. Persistence and degradability:		28d	31	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Not readily biodegradable (Analogous conclusion)
12.3. Bioaccumulative potential:	Log Pow		>3				Low
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC20	6h	>1000	mg/l	Pseudomonas fluorescens		

SECTION 13: Disposal considerations

13.1 Waste treatment methods



Page 12 of 15

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

Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

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 06 synthetic 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.

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

15 01 04 metallic packaging

Empty container completely.

Uncontaminated packaging can be recycled.

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

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):

14.4. Packing group:

14.5. Environmental hazards:

14.6. Environmental hazards:

14.7. Not applicable

14.8. Environmental hazards:

15. Environmental hazards:

16. Environmental hazards:

17. Not applicable

18. Classification code:

18. Not applicable

18. Not applicable

19. 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):
14.4. Packing group:
14.5. Environmental hazards:

Not applicable
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



Page 13 of 15

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

Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

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):

~ 1,3 %

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 amended.

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:

acc., acc. to 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



Page 14 of 15

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

Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

e.g. 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

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

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

ErCx, EµCx, 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. Fax number

gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

Koc Adsorption coefficient of organic carbon in the soil

Kow octanol-water partition coefficient

IARC International Agency for Research on Cancer IATA International Air Transport Association IBC (Code) International Bulk Chemical (Code)

IMDG-code International Maritime Code for Dangerous Goods

incl. 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

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

n.a. not applicablen.av. not availablen.c. not checkedn.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

PE Polyethylene

PNEC Predicted No Effect Concentration

ppm parts per million PVC Polyvinylchloride

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

Evaluation, Authorisation and Restriction of Chemicals)

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

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International 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



Page 15 of 15

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

Revision date / version: 04.06.2024 / 0022

Replacing version dated / version: 17.01.2022 / 0021

Valid from: 04.06.2024 PDF print date: 04.06.2024 Synthoil High Tech 5W-40

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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