



# WOLF LDS FLUID

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 14/08/2012 Revision date: 20/11/2024 Supersedes version of: 19/03/2024 Version: 3.1

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : WOLF LDS FLUID  
UFI : 61TQ-GNM5-1F02-01KR  
Product code : 5090  
Type of product : WOLF  
Product group : Blend

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

##### Relevant identified uses

Intended for general public  
Main use category : Industrial use, Professional use, Consumer use  
Industrial/Professional use spec : Non-dispersive use  
Used in closed systems  
Function or use category : Lubricants and additives

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

WOLF OIL CORPORATION N.V.  
Georges Gilliotstraat, 52  
2620 Hemiksem, Antwerpen  
België  
T 0032 (0)3 870 00 00, F 0032 (0)3 870 00 99  
[msds@wolfoil.com](mailto:msds@wolfoil.com), <https://www.wolflubes.com/>

#### 1.4. Emergency telephone number

Emergency number : 0032 (0)3 870 00 00

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Israel	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096	+972 4 854 1900	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090 Msida	112 +356 2545 6508	
Sweden	Giftinformationscentralen	Box 60 500 171 76 Stockholm	112 – begär Giftinformation +46 10 456 6700 (Från utlandet)	

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (inhalation:dust,mist) Category 4 H332  
Aspiration hazard, Category 1 H304  
Full text of H- and EUH-statements: see section 16

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### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS07 GHS08

Signal word (CLP)

: Danger

Contains

: Hydrogenated dimerization products of 1-decene and reaction products of hydrogenated 1-decene; Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene; 1-Dodecene dimer with 1-Decene, hydrogenated; Petroleum distillates, hydrotreated middle; 1-Decene, homopolymer, hydrogenated

Hazard statements (CLP)

: H304 - May be fatal if swallowed and enters airways.  
H332 - Harmful if inhaled.

Precautionary statements (CLP)

: P102 - Keep out of reach of children.  
P271 - Use only outdoors or in a well-ventilated area.  
P301+P310+P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.  
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrogenated dimerization products of 1-decene and reaction products of hydrogenated 1-decene	EC-No.: 931-652-2	25 – 38	Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=1.17 mg/l/4h) Asp. Tox. 1, H304
Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene	EC-No.: 700-308-1 REACH-no: 01-2119411393-49	25 – 38	Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=1.4 mg/l/4h) Asp. Tox. 1, H304
1-Dodecene dimer with 1-Decene, hydrogenated	CAS-No.: 151006-58-5 EC-No.: 604-766-2 EC Index-No.: 601-070-00-0	10 – 15	Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Asp. Tox. 1, H304
Petroleum distillates, hydrotreated middle	EC-No.: 265-148-2	$\leq 4$	Asp. Tox. 1, H304
1-Decene, homopolymer, hydrogenated	CAS-No.: 68037-01-4 EC-No.: 500-183-1 REACH-no: 01-2119486452-34	$\leq 4$	Asp. Tox. 1, H304

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	CAS-No.: 1218787-32-6 EC-No.: 620-540-6 REACH-no: 01-2119510877-33	< 0.25	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
naphthalene	CAS-No.: 91-20-3 EC-No.: 202-049-5 EC Index-No.: 601-052-00-2	< 0.01	Carc. 2, H351 Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation	: Not expected to require first aid measures.
First-aid measures after skin contact	: Wash skin with mild soap and water.
First-aid measures after eye contact	: In case of eye contact, immediately rinse with clean water for 10-15 minutes.
First-aid measures after ingestion	: Do not induce vomiting. Rinse mouth. Get immediate medical advice/attention.

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

Symptoms/effects after inhalation	: Inhalation of vapours may cause respiratory irritation. Harmful if inhaled.
Symptoms/effects after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/effects after ingestion	: May cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May be fatal if swallowed and enters airways. Keep under medical supervision for at least 48 hours.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Water fog. Foam. Powder. Dry chemical product.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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

No additional information available

### 5.3. Advice for firefighters

Precautionary measures fire	: Exercise caution when fighting any chemical fire.
Firefighting instructions	: Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

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### SECTION 6: Accidental release measures

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

##### For non-emergency personnel

Protective equipment : Wear suitable protective clothing and gloves.

##### For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

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

For containment : Impound and recover large spill by mixing it with inert granular solids.  
Methods for cleaning up : Detergent. Take up liquid spill into absorbent material sand, saw dust, kieselguhr.  
Other information : Spill area may be slippery. Use suitable disposal containers.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required.  
Handling temperature : < 40 °C  
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

Storage temperature : ≤ 40 °C  
Storage area : Store in dry, cool, well-ventilated area.  
Special rules on packaging : Packaging destined for the general public must be fitted with child-proof closures and a tactile danger indication.

##### Germany

Storage class (LGK, TRGS 510) : LGK 10-13 - Other combustible and non-combustible substances

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### National occupational exposure and biological limit values

##### naphthalene (91-20-3)

##### EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	50 mg/m <sup>3</sup>
	10 ppm

##### Austria - Occupational Exposure Limits

MAK (OEL TWA)	50 mg/m <sup>3</sup>
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naphthalene (91-20-3)	
	10 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	53 mg/m <sup>3</sup>
	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
	15 ppm
Bulgaria - Occupational Exposure Limits	
OEL TWA	50 mg/m <sup>3</sup> 8h
OEL STEL	75 mg/m <sup>3</sup> 15 min.
Denmark - Occupational Exposure Limits	
OEL TWA	50 mg/m <sup>3</sup>
	10 ppm
OEL STEL	100 mg/m <sup>3</sup>
	20 ppm
Estonia - Occupational Exposure Limits	
OEL TWA	50 mg/m <sup>3</sup>
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	5 mg/m <sup>3</sup>
	1 ppm
HTP (OEL STEL)	10 mg/m <sup>3</sup>
	2 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	50 mg/m <sup>3</sup>
	10 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	2 mg/m <sup>3</sup>
	0.4 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	50 mg/m <sup>3</sup>
Ireland - Occupational Exposure Limits	
OEL TWA	50 mg/m <sup>3</sup>
	10 ppm
Italy - Occupational Exposure Limits	
OEL TWA	50 mg/m <sup>3</sup>
	10 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	50 mg/m <sup>3</sup>
	10 ppm

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naphthalene (91-20-3)	
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	50 mg/m <sup>3</sup>
TGG-15min (OEL STEL)	80 mg/m <sup>3</sup>
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	20 mg/m <sup>3</sup>
NDSch (OEL STEL)	50 mg/m <sup>3</sup>
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	50 mg/m <sup>3</sup>
	10 ppm
VLA-EC (OEL STEL)	80 mg/m <sup>3</sup>
	15 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	50 mg/m <sup>3</sup>
	10 ppm
KGV (OEL STEL)	80 mg/m <sup>3</sup>
	15 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	50 mg/m <sup>3</sup>
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	50 mg/m <sup>3</sup>
	10 ppm
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	50 mg/m <sup>3</sup>
	10 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 mg/m <sup>3</sup>
ACGIH OEL STEL	15 fibers/cm <sup>3</sup>

### DNEL and PNEC

Additional information

: 5 mg/m<sup>3</sup> for oil mists (TWA, 8h-workday) recommended, based upon the ACGIH TLV (Analysis according to US NIOSH Method 5026, NIOSH Manual of Analytical Methods, 3rd Edition).

## 8.2. Exposure controls

### Personal protection equipment

#### Personal protective equipment:

Safety glasses. Gloves.

#### Personal protective equipment symbol(s):



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### Skin protection

#### Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use

#### Hand protection:

Permeation time: minimum >480min long term exposure; material / thickness [mm]: >0,35 mm. Nitrile rubber (NBR) /

### Respiratory protection

#### Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: dark orange.
Appearance	: Oily liquid.
Odour	: Characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: > 300 °C (EN ISO 3405)
Flammability	: Not available
Oxidising properties	: Not applicable.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 150 °C (ASTM D92)
Auto-ignition temperature	: > 150 °C (ASTM E659)
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 19 mm <sup>2</sup> /s @40°C (ISO 3104)
Solubility	: Slightly soluble, the product remains on the water surface.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: > 0.013 kPa @20°C
Vapour pressure at 50°C	: Not available
Density	: 823 kg/m <sup>3</sup> @ 15°C (ISO 3675)
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

#### Information with regard to physical hazard classes

Explosion limits :  $\geq 0.6 - \leq 6.5$  vol %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

None under normal conditions.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

None under normal conditions.

### 10.4. Conditions to avoid

Open flame. Sparks. No smoking.

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### 10.5. Incompatible materials

Strong oxidizers. acids. Bases.

### 10.6. Hazardous decomposition products

None under normal conditions.

## SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

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ATE CLP (dust,mist)	1.454 mg/l/4h
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#### Hydrogenated dimerization products of 1-decene and reaction products of hydrogenated 1-decene

LD50 oral rat	> 5000 mg/kg (OECD 423)
LD50 dermal rat	> 2000 (OECD 402)
LC50 Inhalation - Rat	1.17 mg/l/4h

#### Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene

LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402)
LC50 Inhalation - Rat	1.4 mg/l/4h (OECD 403)

#### 1-Dodecene dimer with 1-Decene, hydrogenated (151006-58-5)

LD50 oral rat	> 2000 mg/kg (OECD 420)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	1.5 mg/l/4h

#### 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)

LD50 oral rat	300 – 2000 mg/kg (OECD 401)
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat [ppm]	220 ppm @ 1h

#### naphthalene (91-20-3)

LD50 oral rat	533 mg/kg (OECD 401)
LD50 dermal rat	> 16000 mg/kg (OECD 402)
LC50 Inhalation - Rat	500 mg/m³ @ 8h
LC50 Inhalation - Rat (Vapours)	> 0.4 mg/l/4h (OECD 403)

#### 1-Decene, homopolymer, hydrogenated (68037-01-4)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 5.2 mg/l (OECD 403)
LC50 Inhalation - Rat (Vapours)	5.2 mg/l/4h



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Skin corrosion/irritation : May produce an allergic reaction

### 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)

Skin corrosion/irritation, rabbit	Positive (OECD 404)
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### naphthalene (91-20-3)

Skin corrosion/irritation, rabbit	Negative
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Serious eye damage/irritation : Not classified

### naphthalene (91-20-3)

Serious eye damage/irritation, rabbit	Negative
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Respiratory or skin sensitisation : Not classified

### 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)

Skin sensitization, Guinea pig	Negative (OECD 406)
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### naphthalene (91-20-3)

Skin sensitization, Guinea pig	Negative (OECD 406)
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Germ cell mutagenicity : Not classified

### 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)

Bacterial Reverse Mutation Test, Bacteria	Negative (OECD 471)
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Mammalian Cell Gene Mutation Test, In vitro, mammalian	Negative (OECD 476)
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Mammalian Chromosomal Aberration Test, In vitro, human	Negative (OECD 473)
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### naphthalene (91-20-3)

Mammalian Chromosomal Aberration Test, In vitro, mammalian	Positive (OECD 473, WOE does not support classification.)
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Bacterial Reverse Mutation Test, In vitro, Bacteria	Negative
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, In vitro, mammalian	Negative
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, In vivo, mammalian	Negative (OECD 486)
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Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

### Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene

NOAEL (oral, rat, 28 days)	≥ 1000 mg/kg bodyweight/day (OECD 407)
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NOAEL (dermal, rat/rabbit, 90 days)	≥ 2000 mg/kg bodyweight/day (OECD 411)
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### 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)

NOAEL (subacute, oral, 28 days)	12 mg/kg bodyweight/day
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### naphthalene (91-20-3)

LOAEC (inhalation, rat, vapour, 90 days)	0.011 mg/l (OECD 413)
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NOAEL (subchronic, oral, 90 days)	200 mg/kg bodyweight/day (OECD 408)
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NOAEL (subchronic, dermal, 90 days)	1000 mg/kg bodyweight/day (OECD 411)
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Aspiration hazard : May be fatal if swallowed and enters airways.

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Viscosity, kinematic	19 mm²/s @40°C (ISO 3104)
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### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

#### Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene

LC50 - Fish [1]	5003 mg/l
LC50 - Other aquatic organisms [1]	5056 mg/l (Americamysis bahi)
EC50 - Crustacea [1]	1000 mg/l (Senastrum capricornutum)
NOEC chronic fish	> 5003 mg/l (OECD 203)

#### 1-Dodecene dimer with 1-Decene, hydrogenated (151006-58-5)

EC50 - Crustacea [1]	151 mg/l (Daphnia magna)
EC50 72h - Algae [1]	> 1000 mg/l (Pseudokirchneriella subcapitata)

#### 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)

LC50 - Fish [1]	0.1 mg/l @96h; Danio rerio
LC50 - Fish [2]	0.1 mg/l @96h; Brachydanio rerio
EC50 - Crustacea [1]	0.043 mg/l @48h; Daphnia magna
EC50 - Other aquatic organisms [1]	167 mg/l @3h, sludge
EC50 72h - Algae [1]	0.0538 mg/l Pseudokirchneriella subcapitata
NOEC chronic crustacea	0.0107 mg/l @21d, Daphnia magna
NOEC chronic algae	0.0156 mg/l @72h; Pseudokirchneriella subcapitata

#### naphthalene (91-20-3)

LC50 - Fish [1]	1.6 mg/l @96h; Oncorhynchus mykiss
EC50 - Crustacea [1]	2.16 mg/l @48h; Daphnia magna
EC50 96h - Algae [1]	2.96 mg/l Pseudokirchneriella subcapitata
NOEC (chronic)	0.59 mg/l @125d - Daphnia duplex
NOEC chronic fish	0.12 mg/l @40d; Oncorhynchus gorbuscha

#### 1-Decene, homopolymer, hydrogenated (68037-01-4)

LC50 - Fish [1]	> 1000 ng/l @96h; Salmo gairdneri
LC50 - Other aquatic organisms [1]	> 1000 mg/l @3hr, scenedes quadricauda
EC50 - Crustacea [1]	> 1000 mg/l @2d; Daphnia magna
EC50 - Crustacea [2]	> 125 mg/l @21d; Daphnia magna
NOEC (acute)	125 mg/l @Waterflea @21DY

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### 1-Decene, homopolymer, hydrogenated (68037-01-4)

NOEC chronic algae	> 1000 @3hr; scenedesmus quadricauda
NOEC, aquatic invertebrates, acute, daphnia	125 mg/l (21 days)

### 12.2. Persistence and degradability

#### WOLF LDS FLUID

Persistence and degradability	Not soluble in water, so only minimally biodegradable.
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#### Hydrogenated dimerization products of 1-decene and reaction products of hydrogenated 1-decene

Persistence and degradability	Not rapidly degradable
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#### Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene

Persistence and degradability	Readily biodegradable.
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#### 1-Dodecene dimer with 1-Decene, hydrogenated (151006-58-5)

Persistence and degradability	Not rapidly degradable
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#### Petroleum distillates, hydrotreated middle

Persistence and degradability	Rapidly degradable
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#### 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)

Persistence and degradability	Rapidly degradable
BOD (% of ThOD)	63 % ThOD
Biodegradation	61 – 65 % @28d (OECD TG 301D)

#### naphthalene (91-20-3)

Persistence and degradability	Inherently biodegradable.
Biodegradation	0 – 2 % @28d (OECD 302C)

#### 1-Decene, homopolymer, hydrogenated (68037-01-4)

Persistence and degradability	Not rapidly degradable
Biodegradation	2 % @28d (OECD TG 301D)

### 12.3. Bioaccumulative potential

#### Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene

Partition coefficient n-octanol/water (Log Kow)	6.5
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#### 1-Dodecene dimer with 1-Decene, hydrogenated (151006-58-5)

Partition coefficient n-octanol/water (Log Kow)	> 6.5
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#### 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol (1218787-32-6)

Bioconcentration factor (BCF REACH)	110.2 Calculated value
Partition coefficient n-octanol/water (Log Kow)	3.6

#### naphthalene (91-20-3)

Bioconcentration factor (BCF REACH)	36,5 - 168
Partition coefficient n-octanol/water (Log Pow)	3.4

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### 1-Decene, homopolymer, hydrogenated (68037-01-4)

Partition coefficient n-octanol/water (Log Kow)	> 6.5
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#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Additional information	: Dispose in a safe manner in accordance with local/national regulations.
European List of Waste (LoW, EC 2000/532)	: 13 02 06* - synthetic engine, gear and lubricating oils

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1. UN number or ID number

Not regulated for transport

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

### 14.3. Transport hazard class(es)

**ADR**  
Transport hazard class(es) (ADR) : Not applicable

**IMDG**  
Transport hazard class(es) (IMDG) : Not applicable

**IATA**  
Transport hazard class(es) (IATA) : Not applicable

**ADN**  
Transport hazard class(es) (ADN) : Not applicable

**RID**  
Transport hazard class(es) (RID) : Not applicable

### 14.4. Packing group

Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable

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Packing group (ADN) : Not applicable  
Packing group (RID) : Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

No data available

#### Transport by sea

No data available

#### Air transport

No data available

#### Inland waterway transport

No data available

#### Rail transport

No data available

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

Not applicable

## SECTION 15: Regulatory information

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

#### EU-Regulations

##### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### Regulation (EU) 2021/821 for the control of dual-use items

Contains no substance subject to the Regulation (EU) 2021/821 for the control of dual-use items

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

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### National regulations

#### Germany

- Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).  
Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

#### Netherlands

- SZW-lijst van kankerverwekkende stoffen : Petroleum distillates, hydrotreated middle is listed  
SZW-lijst van mutagene stoffen : Petroleum distillates, hydrotreated middle is listed  
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

#### Denmark

- Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

#### Poland

- Polish National Regulations : Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended).  
Act of 14 December 2012 on Waste (J. o L. 2013, item 322 as amended).  
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).  
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).  
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2019, item 382).  
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. of 3 July 2018, item 1286 as amended).  
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488).  
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166).  
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).  
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Indication of changes		
Section	Changed item	Comments
	Revision date	Modified
	Supersedes	Modified
1.1	UFI on SDS 1.1	Added
1.1	Name	Added
2.2	EUH-statements	Removed

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Indication of changes		
Section	Changed item	Comments
2.2	Precautionary statements (CLP)	Modified
3	Composition/information on ingredients	Modified
9	Viscosity, kinematic	Modified
9	Upper explosive limit (UEL)	Modified
9	Vapour pressure	Modified
9	Lower explosive limit (LEL)	Modified
9	Auto-ignition temperature	Added
9	Boiling point	Added
9	Density	Modified
9	Flash point	Modified
9.1	Explosive limits (vol %)	Modified
10.4	Conditions to avoid	Modified
11.1	ATE CLP (dust,mist)	Modified
11.2.	Adverse health effects caused by endocrine disrupting properties	Added
12.6	Adverse effects on the environment caused by endocrine disrupting properties	Added
13.1	European List of Waste (LoW, EC 2000/532)	Added
15.1	Storage class (LGK, TRGS 510)	Added
15.1	Water hazard class (WGK)	Added

### Other information

: The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.

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Full text of H- and EUH-statements:	
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.