OPALJET 16 S 10W40

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
SDS Reference Number: 263526
Issue date: 07/10/2011 Revision date: 31/01/2025 Supersedes version of: 16/06/2023 Version: 8.0

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

1.1. Product identifier

Product form : Mixture
Product name : OPALJET 16 S 10W40
Product code : 263526
Type of product : Use in lubricants
Product group : Trade product

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

Relevant identified uses

Industrial/Professional use spec : Wide dispersive use
Function or use category : Lubricants and additives

1.3. Details of the supplier of the safety data sheet

UNIL LUBRICANTS NV
Bergensesteenweg 713
BE 1600 Sint - Pieters - Leeuw
Belgique-Belgie
T 0032 02 365 02 00
info@unil.com, www.unil.be

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

EUH-statements : EUH208 - Contains Calcium long chain alkyl aryl sulfonate. May produce an allergic reaction.
EUH210 - Safety data sheet available on request.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5), Group I Base oil 150N (64742-65-0)

Component	
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5), Group I Base oil 150N (64742-65-0)

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are 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

Component	
Substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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	phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5)

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Comments : DMSO extract < 3% (IP 346)
The highly refined mineral oil contains <3% (w/w) DMSO extract, according to IP346.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Group I Base oil 150N substance with a Community workplace exposure limit (Note L)	CAS-No.: 64742-65-0 EC-No.: 265-169-7 EC Index-No.: 649-484-00-0 REACH-no: 01-2119471299-27	50 – 80	Not classified
Distillates (petroleum), hydrotreated heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (Note L)	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627-25	10 – 25	Asp. Tox. 1, H304
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	CAS-No.: 68784-31-6 EC-No.: 272-238-5 REACH-no: 01-2119657973-23	0,1 – 2,5	Eye Dam. 1, H318 Aquatic Chronic 2, H411
bis (nonylphenyl) amine	CAS-No.: 36878-20-3 EC-No.: 253-249-4 REACH-no: 01-2119488911-28	0,1 – 2,5	Aquatic Chronic 4, H413
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	CAS-No.: 68784-26-9 EC-No.: 701-251-5 REACH-no: 01-2119524004-56	0,1 – 2,5	Aquatic Chronic 4, H413

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Calcium long chain alkyl aryl sulfonate	CAS-No.: 722503-68-6	0,1 – 2,5	Skin Sens. 1B, H317
phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (Impurity, Impurity, Impurity) substance listed on REACH Candidate List (Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)) substance identified as having endocrine disrupting properties	CAS-No.: 121158-58-5 EC-No.: 310-154-3 EC Index-No.: 604-092-00-9 REACH-no: 01-2119513207-49	0,01 – 1	Skin Corr. 1C, H314 Eye Dam. 1, H318 Repr. 1B, H360F Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
Calcium long chain alkyl aryl sulfonate	CAS-No.: 722503-68-6	(2 ≤ C < 100) Skin Sens. 1B; H317

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 (“Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method” Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

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 general : If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : When symptoms occur: go into open air and ventilate suspected area.

First-aid measures after skin contact : Rinse skin with water/shower. Wash contaminated clothing before reuse.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER/doctor if you feel unwell.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation : None under normal use.

Symptoms/effects after skin contact : in case of longer skin contact irritation can apperar, i.g.degrease.

Symptoms/effects after eye contact : May cause slight irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry powder. Carbon dioxide. Foam. Sand. AFFF foam.

Unsuitable extinguishing media : Do not use a heavy water stream. When cooling/extinguishing: no water in the substance.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid. Heating may cause a fire.

Explosion hazard : None under normal conditions.

Reactivity in case of fire	:	release of harmful/irritant gases/vapours (carbon monoxide - carbon dioxide).
Hazardous decomposition products in case of fire	:	On incomplete combustion releases : Nitrogen oxides. Organic compounds. Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Precautionary measures fire	:	Post warning notices (including no smoking). No naked lights. No smoking. Avoid ignition sources.
Firefighting instructions	:	Evacuate area. Prevent fire fighting water from entering the environment. Exercise caution when fighting any chemical fire.
Protection during firefighting	:	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	:	Use water spray or fog for cooling exposed containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Relevant water authorities should be notified of any large spillage to water course or drain. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

For non-emergency personnel

Protective equipment	:	Concerning personal protective equipment to use, see section 8. Wear suitable protective clothing and gloves.
Emergency procedures	:	Evacuate unnecessary personnel. Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel).
Measures in case of dust release	:	Not applicable.

For emergency responders

Protective equipment	:	Equip cleanup crew with proper protection.
Emergency procedures	:	Clean up any spills as soon as possible, using an absorbent material to collect it.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Remove all floating oil before biological treatment/discharge. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	:	Clean up any spills as soon as possible, using an absorbent material to collect it. Collect all waste in suitable and labelled containers and dispose according to local legislation.
Other information	:	May be dangerously slippery if spilled.

6.4. Reference to other sections

For disposal of residues refer to section 13 : Disposal considerations" ". Concerning personal protective equipment to use, see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Combustible product.
Precautions for safe handling	:	Use personal protective equipment as required. Do not get in eyes, on skin, or on clothing. No open flames. No smoking.
Hygiene measures	:	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Comply with applicable regulations.
Storage conditions	:	Store in original container. Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Keep in fireproof place.
Incompatible products	:	Refer to Section 10 on Incompatible Materials.
Incompatible materials	:	Refer to Section 10 on Incompatible Materials.

Heat and ignition sources	:	No flames, no sparks. Eliminate all sources of ignition.
Information on mixed storage	:	Oxidation agents.
Storage area	:	Store away from heat. Floors should be impervious, resistant to liquids and easy to clean.
Special rules on packaging	:	Keep only in original container.

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

Group I Base oil 150N (64742-65-0)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m³

8.2. Exposure controls

Personal protection equipment

Personal protective equipment:
Avoid all unnecessary exposure.
Personal protective equipment symbol(s):



Eye and face protection

Eye protection:
Eye protection should only be necessary where liquid could be splashed or sprayed

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety glasses	Droplet		

Skin protection

Skin and body protection:
Rinse and then wash skin thoroughly with water and soap

Hand protection:
protective gloves

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
	Nitrile rubber (NBR), Neoprene rubber (HNBR), Polyvinylchloride (PVC)	6 (> 480 minutes)			

Other skin protection
Materials for protective clothing:
Separate working clothes from town clothes. Launder separately

Respiratory protection

Respiratory protection:

Avoid the formation of mists in the atmosphere. If this material is handled at elevated temperature or under mist forming conditions, approved respiratory protection equipment should be used

Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	colourless to yellow.
Appearance	:	Oily. Viscous.
Odour	:	characteristic.
Odour threshold	:	No data available No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flammability	:	Combustible liquid
Explosive properties	:	Heating may cause a fire. Not classified as explosive according to EC criteria, but may present risks in the event of a fire.
Oxidising properties	:	Not applicable.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	201 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not applicable
pH solution	:	Not applicable
Viscosity, kinematic	:	102 mm²/s
Solubility	:	Insoluble in water. soluble in most organic solvents.
Partition coefficient n-octanol/water (Log Kow)	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Vapour pressure	:	< 0,01 mm Hg
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	0,87
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

Other safety characteristics

Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Additional information	:	At or above flash point, vapours present may burn in open or explode if confined when mixed with air and exposed to ignition source

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored normally.

10.2. Chemical stability

Combustible liquid. Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. On heating: release of toxic/combustible gases/vapours (acrolein).

10.4. Conditions to avoid

All heat sources. Sparks. Open flame. Keep at temperature not exceeding the flash point.

10.5. Incompatible materials

Strong oxidizers. Strong acids. Strong bases.

10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (sulphur oxides, phosphorus oxides, zinc oxide, carbon monoxide - carbon dioxide).

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Distillates (petroleum), hydrotreated heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rabbit	> 2000 mg/kg (OECD 402 method)
LC50 Inhalation - Rat	> 5,53 mg/l/4h (mg/L air, aerosol) (OECD 403 method)

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts (68784-31-6)	
LD50 oral rat	2900 mg/kg
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

bis (nonylphenyl) amine (36878-20-3)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50 (68784-26-9)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401)
LD50 dermal rabbit	> 4000 mg/kg bodyweight (OECD 402)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: Not applicable
Additional information : Based on available data, the classification criteria are not met

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts (68784-31-6)	
pH	≈ 7 Temp.: 25 °C Concentration: (≈)0,00116 other:

Group I Base oil 150N (64742-65-0)	
pH	Not applicable

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met).
pH: Not applicable

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

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts (68784-31-6)	
pH	≈ 7 Temp.: 25 °C Concentration: (≈)0,00116 other:

Group I Base oil 150N (64742-65-0)	
pH	Not applicable

Respiratory or skin sensitisation : Skin sensitization: Not classified (Based on available data, the classification criteria are not met). Respiratory sensitization: Not classified (Based on available data, the classification criteria are not met).

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

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

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

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

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

phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5)	
NOAEL (chronic, oral, animal/male, 2 years)	5 mg/kg bodyweight

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

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

phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5)	
NOAEL (animal/male, F0/P)	5 mg/kg bodyweight

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

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

phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5)	
NOAEL (oral, rat)	5 mg/kg bodyweight

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

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

Distillates (petroleum), hydrotreated heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	> 0,98 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts (68784-31-6)	
NOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

OPALJET 16 S 10W40	
Viscosity, kinematic	102 mm²/s

Distillates (petroleum), hydrotreated heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
Viscosity, kinematic	1,99 – 847 mm²/s @40°C

Group I Base oil 150N (64742-65-0)	
Viscosity, kinematic	≥ 25 (≤ 35) mm²/s (40°C) | 5,2 - 5,7 cSt (100°C)

11.2. Information on other hazards

Endocrine disrupting properties

Component	
phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5)	The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)

Other information

Potential adverse human health effects and symptoms : Not classified as dangerous preparation/substance

Other information : Likely route of exposure: ingestion, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long–term (chronic) : Not classified (Based on available data, the classification criteria are not met).

Distillates (petroleum), hydrotreated heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
LC50 - Fish [1]	> 100 mg/l (Pimephales promelas, 96h) (OECD 203 method)
EC50 - Crustacea [1]	> 10000 mg/l (Daphnia magna, 48h) (OECD 202)
EC50 - Other aquatic organisms [1]	> 10000 mg/l
NOEC (acute)	≥ 100 mg/l (Pseudokirchnerella subcapitata, 72h) (OECD 201 method)
NOEC chronic fish	≥ 1000 mg/l (Oncorhynchus mykiss - QSAR Petrotox, 14/28d)
NOEC chronic crustacea	10 mg/l (Daphnia magna, 21d) (OECD 211 method)

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts (68784-31-6)	
LC50 - Fish [1]	46 mg/l Test organisms (species): Cyprinodon variegatus
EC50 - Crustacea [1]	75 mg/l (48h, Daphnia magna)
EC50 72h - Algae [1]	240 mg/l (72h, Scenedesmus subspicatus)

bis (nonylphenyl) amine (36878-20-3)	
LC50 - Fish [1]	> 100 mg/l Brachydanio rerio (zebra-fish)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202 method)
EC50 72h - Algae [1]	600 mg/l
EC50 96h - Algae [1]	870 mg/l
ErC50 algae	600 mg/l

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50 (68784-26-9)	
LC50 - Fish [1]	> 1000 mg/l (96h, Pimephales promelas) [OECD 203]
EC50 - Crustacea [1]	> 1000 mg/l (48h, Daphnia magna) [OECD 202]
ErC50 algae	> 500 mg/l (96h, Pseudokirchneriella subcapitata) [OECD 201]

12.2. Persistence and degradability

OPALJET 16 S 10W40	
Persistence and degradability	Not established.

Distillates (petroleum), hydrotreated heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
Persistence and degradability	Not rapidly degradable
Biodegradation	31 % (28d) (OECD 301F method)

phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5)	
Persistence and degradability	Rapidly degradable

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts (68784-31-6)	
Persistence and degradability	Rapidly degradable

bis (nonylphenyl) amine (36878-20-3)	
Persistence and degradability	Rapidly degradable
Biodegradation	1 % (test concentration 20,1 mg/l)

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50 (68784-26-9)	
Persistence and degradability	Not rapidly degradable

Calcium long chain alkyl aryl sulfonate (722503-68-6)	
Persistence and degradability	Not rapidly degradable

Group I Base oil 150N (64742-65-0)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

OPALJET 16 S 10W40	
Partition coefficient n-octanol/water (Log Pow)	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Bioaccumulative potential	Not established.

Distillates (petroleum), hydrotreated heavy paraffinic, Baseoil - unspecified, [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
Bioaccumulative potential	Bioaccumulative potential.

bis (nonylphenyl) amine (36878-20-3)	
Bioconcentration factor (BCF REACH)	1584,89

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50 (68784-26-9)	
Partition coefficient n-octanol/water (Log Pow)	9,5

Group I Base oil 150N (64742-65-0)	
Partition coefficient n-octanol/water (Log Pow)	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

OPALJET 16 S 10W40
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5), Group I Base oil 150N (64742-65-0)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5), Group I Base oil 150N (64742-65-0)

12.6. Endocrine disrupting properties

Component	
phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5)	The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Recycling is preferred to disposal or incineration. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Take up liquid spill into absorbent material, e.g.: sand/earth.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecological waste information : Avoid release to the environment. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

European List of Waste (LoW, EC 2000/532) : 13 02 00 - waste engine, gear and lubricating oils

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

ADR	IMDG	IATA	ADN	RID
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Transport regulations (ADR) : Not subject

Transport by sea

Transport regulations (IMDG) : Not subject

Air transport

No data available

Inland waterway transport

No data available

Rail transport

Transport regulations (RID) : Not subject

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 substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP) (EC 310-154-3, CAS 121158-58-5)

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)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (EU 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 (EC 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)

15.2. Chemical safety assessment

The substance is not hazardous

For the following substances of this mixture a chemical safety assessment has been carried out:

Group I Base oil 150N

SECTION 16: Other information

Data sources	:	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Training advice	:	Normal use of this product shall imply use in accordance with the instructions on the packaging.
Other information	:	None.

Full text of H- and EUH-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
EUH208	Contains Calcium long chain alkyl aryl sulfonate. May produce an allergic reaction.
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H360F	May damage fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Sens. 1B	Skin sensitisation, category 1B

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.