

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

1.1. Product identifier

Product form	: Mixture
Trade name	: Eni Aster MP
UFI	: QKCF-S0R5-900N-SUVC
Product code	: 5190
Type of product	: Lubricant
Formula	: 0005-2007
Product group	: Trade product

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

1.2.1. Relevant identified uses

Main use category	: Industrial use, Professional use
Industrial/Professional use spec	: Used in closed systems Wide dispersive use
Use of the substance/mixture	: Metalworking lubricant
Function or use category	: Lubricants and additives

1.2.2. Uses advised against

Recommended use are listed above; other uses are not recommended unless an assessment has provided that risks are controlled.

1.3. Details of the supplier of the safety data sheet

Enilive S.p.A, Viale Giorgio Ribotta 51, 00144 Rome, ITALY, Tel. +39 06 59821

Competent person responsible for the safety data sheet (Reg. EC nr. 1907/2006): SDS.Enilive@enilive.com

Distributed by: Enilive Schmiertechnik GmbH, Paradiesstraße 14, 97080 Würzburg, GERMANY

Department responsible for information: Application Engineering & Product Management (AEPM), Tel. +49 (0)931-900 98-0

e-mail: technik.wuerzburg@enilive.com

1.4. Emergency telephone number

Emergency number	: CNIT +39 0382 24444 (24h) (IT + EN) Poison Center
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin sensitisation, Category 1 H317

Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411

Category 2

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

Adverse physicochemical, human health and environmental effects

Prolonged and repeated skin contact may cause reddening, irritation and dermatitis. May cause sensitization by skin contact. Toxic to aquatic life with long lasting effects. For specific information about the toxicological/ecotoxicological properties and classification of this product, see Sect. 11 and/or Sect. 12.

2.2. Label elements

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

Hazard pictograms (CLP)



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CLP Signal word	: Warning
Contains	: Polysulfides, Di-tert-dodecyl-
Hazard statements (CLP)	: H317 - May cause an allergic skin reaction. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P261 - Avoid breathing mist, spray, vapours. P273 - Avoid release to the environment. P280 - Wear protective gloves, eye protection, face protection. P333+P313 - If skin irritation or rash occurs, get medical advice/attention. P362+P364 - Take off contaminated clothing and wash before reuse. P391 - Collect spillage. P501 - Dispose of contents and container to according to national or local regulations.

2.3. Other hazards (not relevant for classification)

Other hazards not contributing to the classification : This product is combustible, but not classified as Flammable. The creation of flammable vapour mixtures takes place at temperatures which are higher than normal ambient levels. In case of contact with eyes, this product may cause irritation. If the product is handled or used at high temperature, contact with hot product or vapours may cause burns. Any substance, in case of accidents involving pressurized circuits and the like, may be accidentally injected under the skin, even without external damage. In such a case, the victim should be brought to an hospital as soon as possible, to get specialized medical treatment. Do not wait for symptoms to develop. A potential risk may arise from the release of hydrogen sulfide, when the product is stored or handled at high temperature. Hydrogen sulfide may accumulate in the tanks or other confined spaces, with danger to the workers that enter the spaces. In these cases overexposure to hydrogen sulfide may cause irritation to airways, nausea, dizziness, loss of consciousness and death.

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 $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0), Polysulfides, Di-tert-dodecyl- (68425-15-0), Phenol, isopropylated, phosphate (3:1) (68937-41-7)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0), Polysulfides, Di-tert-dodecyl- (68425-15-0), Phenol, isopropylated, phosphate (3:1) (68937-41-7)

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 %

Component	
Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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	Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0), Polysulfides, Di-tert-dodecyl- (68425-15-0), Phenol, isopropylated, phosphate (3:1) (68937-41-7)

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Other information : 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

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Composition/ Information on ingredients:
Mixture of hydrocarbons
Additives

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (see note [*], see note [**])	CAS-No.: 64742-65-0 EC-No.: 265-169-7 EC Index-No.: 649-474-00-6 REACH-no: 01-2119471299-27	90 – 95	Not classified
Polysulfides, Di-tert-dodecyl- (Additive)	CAS-No.: 68425-15-0 EC-No.: 270-335-7 REACH-no: 01-2119540516-41-0000	1,5 - 2,5	Skin Sens. 1B, H317
Phenol, isopropylated, phosphate (3:1) (Additive)	CAS-No.: 68937-41-7 EC-No.: 273-066-3 REACH-no: 01-2119535109-41	1 – 1.5	Repr. 2, H361fd STOT RE 2, H373 Aquatic Chronic 1, H410 (M=10)

Comments : Note [*]:
this product has a value of DMSO extract < 3 % wt, according to IP 346. According to the criteria laid out by the EU (note L, Annex VI of Regulation (CE) 1272/2008), this product must be regarded as non carcinogenic.
Note [**]:
substance with occupational exposure limits for some EU countries affecting the category of mineral oils (finely refined mineral base oil mists; see section 8.1)

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 : Remove to fresh air, keep the casualty warm and at rest. If breathing is difficult, give oxygen if possible, or assisted ventilation. If necessary, give external cardiac massage and obtain medical advice. See also section 4.3.

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First-aid measures after skin contact	: Remove contaminated clothing and shoes. Wash skin with soap and water. If inflammation or irritation persists, seek medical advice. In case of burns, cool affected part with cold running water for at least 10 min. Cover with gauze or clean cloth. Ask for medical assistance or bring to a hospital. Do not apply salves or other substances, unless by doctor's advice.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do so. Rinse eyes thoroughly for at least 15 minutes. Keep eyelids well apart. If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist. In case of burns, cool affected part with cold running water for at least 10 min. Cover with gauze or clean cloth. Ask for medical assistance or bring to a hospital. Do not apply salves or other substances, unless by doctor's advice.
First-aid measures after ingestion	: Rinse mouth thoroughly with water. Give water to drink if victim completely conscious/alert. Do not induce vomiting.

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

Symptoms/effects after inhalation	: Inhalation of fumes or oil mists produced at high temperatures may cause irritation of the respiratory tract. Symptoms of overexposure to vapours include drowsiness, weakness, headache, dizziness, nausea, vomiting, dimming of vision.
Symptoms/effects after skin contact	: Prolonged and repeated skin contact may cause reddening, irritation and dermatitis. May cause sensitization by skin contact. Contact with hot product may cause thermal burns.
Symptoms/effects after eye contact	: Contact with eyes may cause temporary reddening and irritation. Contact with hot product or vapours may cause burns.
Symptoms/effects after ingestion	: Accidental ingestion of small quantities of the product may cause nausea, discomfort and gastric disturbances.
Symptoms/effects upon intravenous administration	: No information available.
Chronic symptoms	: None to be reported, according to the present classification criteria.

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

Obtain medical attention if casualty has an altered state of consciousness or if symptoms do not resolve. Seek medical attention in all cases of serious burns. If there is any suspicion of inhalation of H₂S (hydrogen sulphide), Rescuers must wear breathing apparatus, belt and safety rope, and follow rescue procedures. Send patient to hospital. Immediately begin artificial respiration if breathing has ceased. Administer oxygen if necessary.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Small-size fires: carbon dioxide, dry chemicals, foam, sand or earth. Large fires: foam or water fog (mist). These means should be used by trained personnel only. Other extinguishing gases (according to regulations).
Unsuitable extinguishing media	: Do not use water jets. They could cause splattering, and spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: This product is combustible, but not classified as Flammable. The creation of flammable vapour mixtures takes place at temperatures which are higher than normal ambient levels.
Explosion hazard	: Heat may build pressure in tank and containers, rupturing closed vessels, spreading fire and increasing risk of burns and injuries. The vapours are flammable and may form explosive mixtures with air.
Hazardous decomposition products in case of fire	: Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, NO _x , H ₂ S and SO _x (harmful/toxic gases). Oxygenated compounds (aldehydes, etc.). PO _x .

5.3. Advice for firefighters

Firefighting instructions	: Shut off source of product, if possible. Move undamaged containers from immediate hazard area if it can be done safely. Spilled product which is not burning should be covered with sand or foam. Use water sprays to cool containers and surfaces exposed to the flames. If the fire cannot be controlled, evacuate area.
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- Special protective equipment for firefighters : Wear personal protection equipment. (see chapter 8). In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. EN 443. EN 469. EN 659.
- Other information : In case of fire, do not discharge residual product, waste materials and runoff water: collect separately and use a proper treatment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Stop or contain leak at the source, if safe to do so. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares). Avoid accidental sprays on hot surfaces or electrical contacts. Avoid direct contact with released material. Keep upwind.

6.1.1. For non-emergency personnel

- Protective equipment : See Section 8.
- Emergency procedures : Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency.

6.1.2. For emergency responders

- Protective equipment : Standard EN 469 - Protective clothing for firefighters. Standard - EN 659: Protective gloves for firefighters. Small spillages: normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material. if necessary heat resistant and insulated. Work helmet. Antistatic non-skid safety shoes or boots. Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory protection: A half or full-face respirator with filter(s) for organic vapours (A) (or A+B when applicable for H2S), or a Self-contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
- Emergency procedures : If required, notify relevant authorities according to all applicable regulations.

6.2. Environmental precautions

Do not let the product accumulate in confined or underground spaces. Do not let the product flow into sewers or water courses, or in any way contaminate the environment. In case of contamination of environment compartments (soil, subsoil, surface or underground waters), remove contaminated soil when possible, and in any case treat all involved compartments in accordance with local regulations. The site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.

6.3. Methods and material for containment and cleaning up

- For containment : Contain spilled liquid with sand, earth or other suitable absorbents (non-flammable). Recover free liquid and waste materials in suitable waterproof and oil-resistant containers. Clean contaminated area. Dispose of according to local regulations. If in water: Confine the spillage. Remove from surface by skimming or suitable floating absorbents. Collect recovered product and other waste materials in suitable waterproof, oil resistant containers. Recover or dispose of according to local regulations. Do not use solvents or dispersants, unless specifically advised by an expert, and, if required, approved by local authorities.
- Methods for cleaning up : Transfer recovered product and other materials to suitable tanks or containers and store/dispose according to relevant regulations.
- Other information : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air/water temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. Local regulations may also prescribe or limit actions to be taken. For this reason, local experts should be consulted when necessary.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : This material is combustible, but will not ignite readily. Provide adequate ventilation. Use adequate personal protective equipment as needed. Due to the extremely slippery nature of this material, more care than usual must be exercised in material handling practices to keep off all walking surfaces. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid release to the environment. Emptied containers can contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been drained and cleaned. Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), carry out an adequate clean-up, and check the atmosphere for oxygen content, flammability, and the presence of sulphur compounds. The product may release Hydrogen Sulphide: a specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances. See also Section 16, "Other information".
- Hygiene measures : Ensure that proper housekeeping measures are in place. Avoid contact with skin. Do not breathe fume/ mist/ vapours. Do not ingest. Do not smoke. Do not eat and do not drink during use. Do not clean hands with dirty or oil-soaked rags. Do not re-use clothes, if they are still contaminated. Keep away from food and beverages. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Separate working clothes from town clothes. Launder separately.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in dry, well-ventilated area. Keep away from open flames, hot surfaces and sources of ignition. Do not smoke.
- Incompatible products : Strong oxidizing agents.
- Storage area : Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation. Storage installations/areas should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.
- Packages and containers: : If the product is supplied in containers: Keep containers tightly closed and properly labelled. Keep only in the original container or in a suitable container for this kind of product.
- Packaging materials : For containers, or container linings use materials specifically approved for use with this product. Compatibility should be checked with the manufacturer.

Germany

- Storage class (LGK, TRGS 510) : LGK 10 - Combustible liquids

Switzerland

- Storage class (LK) : LK 10/12 - Liquids

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

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Austria - Occupational Exposure Limits	
MAK (OEL TWA)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Belgium - Occupational Exposure Limits	
OEL TWA	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Denmark - Occupational Exposure Limits	
OEL TWA	1 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
OEL STEL	2 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Netherlands - Occupational Exposure Limits	
MAC TGG 8h (mg/m ³)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
VLA-EC (mg/m ³)	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	1 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
KGV (OEL STEL)	3 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
WEL STEL (OEL STEL)	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
ACGIH OEL STEL	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Polysulfides, Di-tert-dodecyl- (68425-15-0)	
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	5 mg/m ³ (respirable fraction)
Limitation of exposure peaks (mg/m ³)	20 mg/m ³ (respirable fraction)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	300 mg/m ³ (Inhalable aerosol)
VLE [mg/m ³]	600 mg/m ³ (Inhalable aerosol)
Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	3 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)
MAK (OEL STEL)	6 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)
Belgium - Occupational Exposure Limits	
OEL TWA	3 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)

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Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
Denmark - Occupational Exposure Limits	
OEL TWA	3 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)
OEL STEL	6 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	3 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)
HTP (OEL STEL)	6 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)
France - Occupational Exposure Limits	
VME (OEL TWA)	3 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)
Ireland - Occupational Exposure Limits	
OEL TWA	3 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	3 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	3 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	3 mg/m ³ (Reference: CAS 115-86-6, Triphenylphosphate)

8.1.2. Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Monitoring procedures should be chosen according to the indications set by national authorities or labour contracts. Refer to relevant legislation and in any case to the good practice of industrial hygiene.

8.1.3. Air contaminants formed

Applicable OEL and BLV for air contaminants : None known

8.1.4. DNEL and PNEC

Eni Aster MP	
DNEL/DMEL (additional information)	
Additional information	Not applicable
PNEC (additional information)	
Additional information	Not applicable
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.97 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2.73 mg/m ³
Long-term - local effects, inhalation	5.58 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.74 mg/kg bodyweight/day

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PNEC (Oral)	
PNEC oral (secondary poisoning)	9.33 mg/kg food
PNEC (additional information)	
Additional information	Not derived - Not classified as hazardous for environment
Polysulfides, Di-tert-dodecyl- (68425-15-0)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	46.7 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	32.9 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	1.7 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	5.8 mg/m ³
Long-term - systemic effects, dermal	16.7 mg/kg bodyweight/day
PNEC (Sediment)	
PNEC sediment (freshwater)	3.85 mg/kg dwt
PNEC sediment (marine water)	0.385 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	66.7 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	1000 mg/l
Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	2000 mg/kg bodyweight/day
Acute - systemic effects, inhalation	700 mg/m ³
Acute - local effects, dermal	16 mg/cm ²
Long-term - systemic effects, dermal	0.4165 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.145 mg/m ³
Long-term - local effects, inhalation	700 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	100 mg/kg bodyweight/day
Acute - systemic effects, inhalation	350 mg/m ³
Acute - systemic effects, oral	50 mg/kg bodyweight/day
Acute - local effects, dermal	8 mg/cm ²
Long-term - systemic effects, oral	0.04 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.07 mg/m ³
Long-term - systemic effects, dermal	0.208 mg/kg bodyweight/day

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Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
PNEC (Water)	
PNEC aqua (freshwater)	0.00031 mg/l
PNEC aqua (marine water)	0.000031 mg/l
PNEC aqua (intermittent, freshwater)	0.015 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.185 mg/kg dwt
PNEC sediment (marine water)	0.0185 mg/kg dwt
PNEC (Soil)	
PNEC soil	2.5 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	1.85 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

Note : The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accord with specific guidance within the European REACH regulation. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be recommended by an individual company, a governmental regulatory body or an expert organization, such as the Scientific Committee for Occupational Exposure Limits (SCOEL) or the American Conference of Governmental Industrial Hygienists (ACGIH). OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). While also considered to be protective of health, OELs are derived by a process different from that of REACH.

8.1.5. Control banding

Control banding : None known

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), check the atmosphere for oxygen content, presence of hydrogen sulphide (H₂S) and SO_x, and flammability. See also Section 16, "Other information".

8.2.2. Personal protection equipment

Personal protective equipment (for industrial or professional use):

Gloves. Protective clothing. Safety glasses. Safety shoes or boots. High gas/vapour concentration: gas mask with filter for organic vapours (A) or organic vapours/H₂S (A+B).

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses. ISO 16321-1. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure

8.2.2.2. Skin protection

Skin and body protection:

Long-sleeved overalls. If necessary, refer to the EN 340 and related standards, for definition of characteristics and performance according to the risk rating of the area. Antistatic non-skid safety shoes or boots, chemical resistant, if necessary heat resistant and insulated.

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Hand protection:

Protective gloves made of PVC. Neoprene rubber (HNBR). Butyl rubber. Protection index: 6 (> 480 minutes). Use gloves respecting all the conditions and within the limits set by the manufacturer. Replace gloves immediately in case of cuts, holes or other signs of damages or degradation. If necessary, refer to the EN 374 standard. Personal hygiene is a key element for an effective hand care. Gloves must be worn only with clean hands. After wearing gloves, hands must be carefully washed and dried.

8.2.2.3. Respiratory protection

Respiratory protection:

Independently from other possible actions (technical modifications, operating procedures, and other means to limit the exposure of workers), personal protection equipment can be used according to necessity. Open or well ventilated spaces: if the product is handled without adequate containment: use full or half-face masks with adequate filter for organic vapours. (EN 136/140/145). Combined gas/dust mask with filter type: EN 14387. Closed or confined areas (e.g. tank interiors): the use of protection measures for airways (masks or self-contained breathing apparatus), must be assessed according to the specific activity, as well as level and duration of predicted exposure. (EN 136/140/145). Approved respiratory protection equipment shall be used in spaces where hydrogen sulphide may accumulate: full face mask with cartridge/filter type "B" (grey for inorganic vapours including H₂S) or self-contained breathing apparatus (SCBA). (EN 136/140/145)

8.2.2.4. Thermal hazards

Thermal hazard protection:

If contact with hot product is possible or anticipated, gloves should be heat-resistant and thermally insulated.

8.2.3. Environmental exposure controls

Environmental exposure controls:

Do not discharge the product into the environment. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed. Prevent discharge of undissolved substance to or recover from onsite wastewater. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills.

Consumer exposure controls:

Not applicable.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow-brown.
Appearance	: Liquid, bright & clear.
Odour	: Characteristics.
Odour threshold	: Lack of data (on mixture / components of the mixture) - Data not available
Melting point	: Not applicable
Freezing point	: Lack of data (on mixture / components of the mixture) - Data not available
Softening point	: -10 °C (ASTM D 5950)
Boiling point	: 200 – 800 °C (CAS 64742-65-0)
Flammability	: Not applicable
Explosive properties	: None (according to composition).
Oxidising properties	: None (according to composition).
Lower explosion limit	: Lack of data (on mixture / components of the mixture) - Data not available
Upper explosion limit	: Lack of data (on mixture / components of the mixture) - Data not available
Flash point	: 230 °C (ASTM D 92)
Auto-ignition temperature	: > 300 °C (CAS 64742-65-0)
Decomposition temperature	: Lack of data (on mixture / components of the mixture) - Data not available
pH	: Lack of data (on mixture / components of the mixture) - Data not available
Viscosity, kinematic	: 32 mm ² /s (40 °C) (ASTM D 445)
Viscosity, dynamic	: Lack of data (on mixture / components of the mixture) - Data not available
Solubility	: Water: Immiscible and insoluble
Log Kow	: Not applicable for mixtures
Log Pow	: Not applicable for mixtures
Vapour pressure	: < 0.1 hPa (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)
Vapour pressure at 50°C	: Lack of data (on mixture / components of the mixture) - Data not available
Critical pressure	: Not applicable for mixtures
Density	: 878 kg/m ³ (15°C, ASTM D 4052)
Relative density	: Lack of data (on mixture / components of the mixture) - Data not available

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Relative vapour density at 20°C : Lack of data (on mixture / components of the mixture) - Data not available
Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Critical temperature : Not applicable for mixtures

9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1) : Negligible.

SECTION 10: Stability and reactivity

10.1. Reactivity

This mixture does not offer any further hazard for reactivity, except what is reported in the following paragraphs.

10.2. Chemical stability

Stable product, according to its intrinsic properties.

10.3. Possibility of hazardous reactions

None (in normal conditions of storage and handling). Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard. Sensitivity to heat, friction or shock cannot be assessed in advance.

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials

Strong oxidants.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition may produce : Toxic fumes. In exceptional cases (i.e prolonged storage in tanks contaminated with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H₂S.

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; Conclusive but not sufficient for classification)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met; Conclusive but not sufficient for classification)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met; Conclusive but not sufficient for classification)
Additional information : (according to composition)

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)

LD50 oral rat	> 5000 mg/kg (API 1982, UBTL 1983 - OECD 401)
LD50 dermal rabbit	2000 – 5000 mg/kg bodyweight (API 1982, UBTL 1984 - OECD 402)
LC50 Inhalation - Rat	3.9 – 5.3 mg/l/4h (Bio-Research Laboratories, Ltd. 1984 - OECD 403)

Polysulfides, Di-tert-dodecyl- (68425-15-0)

LD50 oral rat	≥ 2000 mg/kg
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Polysulfides, Di-tert-dodecyl- (68425-15-0)	
LD50 dermal rat	≥ 2000 mg/kg
Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
LD50 oral rat	≥ 5000 mg/kg
LD50 dermal rabbit	> 10000 mg/kg bodyweight Animal: rabbit, Guideline: other:
LC50 Inhalation - Rat	≥ 200 mg/l/4h
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: Lack of data (on mixture / components of the mixture) - Data not available
Additional information	: (according to composition)
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
pH	Not applicable
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: Lack of data (on mixture / components of the mixture) - Data not available
Additional information	: (according to composition)
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
pH	Not applicable
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Additional information	: (according to composition) Contains {0 message=<name of the sensitizing substance> fieldvalue=_SENSITIZER_COMPONENTS}. Respiratory or skin sensitisation
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition) This product contains : Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] this product has a value of DMSO extract < 3 % wt, according to IP 346. According to the criteria laid out by the EU (note L, Annex VI of Regulation (CE) 1272/2008), this product must be regarded as non carcinogenic.
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition) This product contains : Phenol, isopropylated, phosphate (3:1) Suspected of damaging fertility. Suspected of damaging the unborn child. The actual relevance of these effects in man is not certain.
Polysulfides, Di-tert-dodecyl- (68425-15-0)	
NOAEL (animal/male, F0/P)	1000 mg/kg (OECD 414)
Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
NOAEL (animal/male, F0/P)	400 mg/kg bodyweight (OECD 414)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition)

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Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day (CAS 64742-04-7, Mobil 1990) (OECD 408)
LOAEL (dermal, rat/rabbit, 90 days)	100 mg/kg bodyweight/day
NOAEL (oral, rat, 90 days)	< 125 mg/kg bodyweight/day (CAS 64742-04-7, Mobil 1990) (OECD 408)
NOAEL (dermal, rat/rabbit, 90 days)	1000 – 2000 mg/kg bodyweight/day (API 1982, Mobil Environmental and Health Science Laboratory 1983 - OECD 410)
NOAEC (inhalation, rat, vapour, 90 days)	220 – 980 mg/m ³ (Dalbey W, Osimitz T, Kommineni C, Roy T, Feuston M and Yang J 1991 - OECD 412)

Polysulfides, Di-tert-dodecyl- (68425-15-0)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight/day (OECD 408)

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
LOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
NOAEL (oral, rat, 90 days)	< 25 mg/kg bodyweight/day (OECD 408)
STOT-repeated exposure	May cause damage to organs (adrenal glands) through prolonged or repeated exposure (oral).

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

Additional information : (according to composition)
Viscosity, kinematic: > 20,5 mm²/s (40 °C) (ASTM D 445)

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Viscosity, kinematic	32 mm ² /s (40 °C) (ASTM D 445)

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
Viscosity, kinematic	30 – 32 mm ² /s (40 °C) (ASTM D 445)

Polysulfides, Di-tert-dodecyl- (68425-15-0)	
Viscosity, kinematic	55.789 mm ² /s

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
Viscosity, kinematic	57 mm ² /s

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : 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, Shows an adverse effect in an intact organism or its progeny, which is a change in the morphology, physiology, growth, development, reproduction or life span of an organism, system or (sub)population that results in an impairment of functional capacity, an impairment of the capacity to compensate for additional stress or an increase in susceptibility to other influences, The adverse effect is a consequence of the endocrine mode of action

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11.2.2. Other information

Potential adverse human health effects and symptoms	: Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, May cause sensitization by skin contact, Contact with eyes may cause temporary reddening and irritation, Avoid all eye and skin contact and do not breathe vapour and mist
Other information	: None

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. An uncontrolled release to the environment may produce a contamination of different environmental compartments (air, soil, underground, surface water bodies, aquifers). Handle according to general working hygiene practices to avoid pollution and release into the environment. Notify authorities if product enters sewers or public waters.
Ecology - air	: This product has a low vapour pressure, and in normal conditions at ambient temperature the concentration in the air is negligible. A significant concentration may build up only in case of sprays and mists. In these cases overexposure to mists (e.g. through prolonged use in confined insufficiently ventilated spaces) may cause irritation to airways, nausea and dizziness.
Ecology - water	: This product is not soluble in water. It floats on water and forms a film on the surface. The damage to aquatic organisms is of mechanical kind (immobilization and entrapment)
Ecology - water	: Toxic to aquatic life.
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)	: Toxic to aquatic life with long lasting effects.

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)

LC50 fish 1	> 100 mg/l (LL 50, Exxon 1995 - OECD 203)
EC50 Daphnia 1	> 10000 mg/l (EL50, Shell 1988 - OECD 202)
NOEC (acute)	≥ 100 mg/l (Pseudokirchneriella subcapitata, 72h, OECD 201 - Petro-Canada 2008)
NOEC chronic fish	≥ 1000 mg/l (Oncorhynchus mykiss, NOELR, 14d - QSAR, Redman, A. et al. 2010)
NOEC chronic crustacea	≥ 1000 mg/l (21d, OECD 211 - Shell 1994)
NOEC chronic algae	≥ 100 mg/l (Pseudokirchneriella subcapitata, 72h)

Polysulfides, Di-tert-dodecyl- (68425-15-0)

LC50 fish 1	> 100 mg/l (Danio rerio, OECD 203)
NOEC chronic fish	> 0.84 µg/L (Pimephales promelas, OECD TG 210)
NOEC chronic crustacea	≥ 0.1 mg/l (Daphnia magna, 21d, OECD TG 211)
NOEC chronic algae	≥ 0.08 mg/l (Pseudokirchneriella subcapitata, 72d, OECD TG 201)

Phenol, isopropylated, phosphate (3:1) (68937-41-7)

LC50 fish 1	1.6 mg/l (Oncorhynchus mykiss)
LC50 fish 2	10.8 mg/l (Pimephales promelas)
EC50 Daphnia 1	2.44 mg/l
EC50 72h - Algae [1]	> 2.5 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	> 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

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Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
EC50 96h - Algae [1]	> 2.5 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC chronic fish	0.0031 mg/l (33d, Pimephales promelas, OECD 210)
NOEC chronic crustacea	0.041 mg/l (21d, OECD 211)

12.2. Persistence and degradability

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Persistence and degradability	The most significant constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)

Persistence and degradability	The most significant constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions..
Biodegradation	31 % (28d, Exxon 1995)

Polysulfides, Di-tert-dodecyl- (68425-15-0)

Persistence and degradability	Not biodegradable..
Biodegradation	0 % (28d; OECD 301F)

Phenol, isopropylated, phosphate (3:1) (68937-41-7)

Persistence and degradability	Rapidly degradable
Biodegradation	17.9 % (28d)

12.3. Bioaccumulative potential

Eni Aster MP	
Log Pow	Not applicable for mixtures
Log Kow	Not applicable for mixtures
Bioaccumulative potential	Not established.

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)

BCF fish 1	0.4 – 6280 l/kg
BCF fish 2	3.16 – 71100 l/kg
Log Pow	1.99 – 18.02
Log Kow	Not applicable (UVCB)
Bioaccumulative potential	The test methods for this endpoint are not applicable to UVCB substances.

Polysulfides, Di-tert-dodecyl- (68425-15-0)

Bioconcentration factor (BCF REACH)	< 1 (14 d, 22 °C, OCDE 305)
Log Pow	5

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Polysulfides, Di-tert-dodecyl- (68425-15-0)

Log Kow > 12

12.4. Mobility in soil

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Ecology - soil No data available.

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)

Log Koc 1.71 – 14.7

Ecology - soil The test methods for this endpoint are not applicable to UVCB substances.

Polysulfides, Di-tert-dodecyl- (68425-15-0)

Log Koc 8.5

12.5. Results of PBT and vPvB assessment

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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 Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0), Polysulfides, Di-tert-dodecyl- (68425-15-0), Phenol, isopropylated, phosphate (3:1) (68937-41-7)

Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0), Polysulfides, Di-tert-dodecyl- (68425-15-0), Phenol, isopropylated, phosphate (3:1) (68937-41-7)

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties

: 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.
Endocrine disrupting properties (Article 57(f) — environment): Has an endocrine mode of action, i.e. it alters the function(s) of the endocrine system. Shows an adverse effect in non-target organisms, which is a change in the morphology, physiology, growth, development, reproduction or life span of an organism, system or (sub)population that results in an impairment of functional capacity, an impairment of the capacity to compensate for additional stress or an increase in susceptibility to other influences.

12.7. Other adverse effects

Other adverse effects : None.
Additional information : No other effects known

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Do not dispose of the product, either new or used, by dumping on the ground, or discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector. Dispose of empty containers and wastes safely.
Sewage disposal recommendations	: Dispose of in a safe manner in accordance with local/national regulations. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.
Product/Packaging disposal recommendations	: European Waste Catalogue code(s) (Decision 2001/118/CE): 13 02 05* (mineral-based non-chlorinated engine, gear and lubricating oils). This EWC code is only a general indication, and takes into account the original composition of the product and its intended use. The user has the responsibility of choosing the right EWC code, considering the actual use of the product, alterations and contaminations.
Additional information	: Empty containers may contain combustible product residues. Do not cut, weld, bore, burn or incinerate emptied containers, unless they have been cleaned and declared safe.
Ecology - waste materials	: The product as it is does not contain halogenated substances.
EURAL code (EWC)	: 13 02 05* - Mineral-based non-chlorinated 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				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol, isopropylated, phosphate (3:1)), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol, isopropylated, phosphate (3:1)), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Phenol, isopropylated, phosphate (3:1)), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol, isopropylated, phosphate (3:1)), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol, isopropylated, phosphate (3:1)), 9, III
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
None.				

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14.6. Special precautions for user

Overland transport

Transport regulations (ADR)	: Subject to the provisions
Classification code (UN)	: M6
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Transport category (ADR)	: 3
Hazard identification number (Kemler No.)	: 90
Orange plates	:



Tunnel restriction code : -

Transport by sea

Transport regulations (IMDG)	: Subject to the provisions
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
IBC packing instructions (IMDG)	: IBC03
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

Air transport

Transport regulations (IATA)	: Subject to the provisions
PCA Excepted quantities (IATA)	: E1
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA max net quantity (IATA)	: 450L
CAO max net quantity (IATA)	: 450L

Inland waterway transport

Transport regulations (ADN)	: Subject to the provisions
Classification code (ADN)	: M6
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1

Rail transport

Transport regulations (RID)	: Subject to the provisions
Classification code (RID)	: M6
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Transport category (RID)	: 3
Hazard identification number (RID)	: 90

14.7. Maritime transport in bulk according to IMO instruments

IBC code : Not applicable.

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Other information, restriction and prohibition regulations : Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). (et sequens). 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 (et sequens). Directives 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE, 93/88/CEE, 95/63/CE, 97/42/CE, 98/24/CE, 99/38/CE, 99/92/CE, 2001/45/CE, 2003/10/CE, 2003/18/CE (Health and safety on the workplace). Directive 2012/18/CE (Control of major-accident hazards involving dangerous substances). Directive 2004/42/CE (Limitation of emissions of Volatile Organic Compounds). Directive 98/24/EC (protection of the health and safety of workers from the risks related to chemical agents at work). Directive 92/85/CE (measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding). Substances Depleting the Ozone layer (1005/2009) - Annex I Substances (ODP). Regulation EU (649/2012) - Export and Import of hazardous chemicals (PIC). POP (2019/1021) - Persistent Organic Pollutants. Commission Delegated Regulation (EU) 2017/2100. Commission Regulation (EU) 2018/605.

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(c)	Phenol, isopropylated, phosphate (3:1)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
3(b)	Phenol, isopropylated, phosphate (3:1) ; Polysulfides, Di-tert-dodecyl-	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

REACH Annex XIV (Authorisation List)

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

REACH Candidate List (SVHC)

No ingredients are included in the REACH Candidate list (> 0,1 % m/m).

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 (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)

15.1.2. National regulations

National adoption of EU Directives concerning health and safety on the workplace.

National adoption of EU Directives concerning control of major-accident hazards involving dangerous substances (2012/18/CE).

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Relevant national laws on prevention of water pollution.

Relevant national laws on protection of the health of pregnant workers (National adoption of Dir. 92/85/EEC).

National adoption of Directive 2008/98/CE concerning disposal of used oils.

France

Maladies professionnelles (F)	
Code	Description
RG 36	Diseases caused by oils and fats of mineral or synthetic origin

Germany

Employment restrictions	: Employment prohibitions or restrictions on the protection of young people at work according to § 22 JArbSchG in the case of formation of hazardous substances have to be observed.
National Rules and Recommendations	: TRGS 400: Hazard assessment for activities involving Hazardous Substances. TRGS 401: Risks resulting from skin contact - identification, assessment, measures. TRGS 402: Identification and Assessment of the Risks from Activities involving Hazardous Substances: Inhalation Exposure. TRGS 800: Fire protection measures. TRGS 500: Protective measures. TRGS 555: Working instruction and information for workers. TRGS 900: Occupational Exposure Limits. TRGS 905: List of mutagenic, carcinogenic or teratogenic substances. TRGS 907: List of sensitizing substances and activities with sensitizing substances. TRGS 910: Risk-related concept of measures for activities involving carcinogenic hazardous substances.
VbF class (D)	: Not applicable.
Water hazard class (WGK) (D)	: WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).
WGK remark	: Classification is carried out on the basis of the Ordinance on facilities for handling substances that are hazardous to water (Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV)) of 18 April 2017 (BGBl 2017, Teil I, Nr. 22, Seite 905).
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

Waterbevaarlijkheid	: 6 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment 7 - Toxic to aquatic organisms
Saneringsinspanningen	: C - Minimize discharge
SZW-lijst van kankerverwekkende stoffen	: Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).], Polysulfides, Di-tert-dodecyl-, Phenol, isopropylated, phosphate (3:1) are listed
SZW-lijst van mutagene stoffen	: Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).], Polysulfides, Di-tert-dodecyl-, Phenol, isopropylated, phosphate (3:1) are 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 under 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with it
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15.2. Chemical safety assessment

For this mixture a chemical safety assessment has been not carried out

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A chemical safety assessment has been carried out for the following components of this mixture::

Polysulfides, Di-tert-dodecyl-

Phenol, isopropylated, phosphate (3:1)

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	First issue.		

Abbreviations and acronyms:	
	Complete text of the H phrases quoted in this Safety Data Sheet. These phrases are reported here for information only, and MAY NOT correspond to the classification of the product.
	N/D = not available
	N/A = not applicable
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Effective concentration for 50 percent of test population (median effective concentration)
EC-No.	European Community number
ED	Endocrine disrupting properties
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Lethal concentration for 50 percent of test population (median lethal concentration)
LD50	Lethal dose for 50 percent of test population (median lethal dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals, Regulation (EC) No 1907/2006
RID	Regulation concerning the International Carriage of Dangerous Goods by Railways
SDS	Safety Data Sheet

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Abbreviations and acronyms:	
STP	Sewage treatment plant
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Data sources	: This Safety Data Sheet is based on the real characteristics of the components and their combination, taking into account the information provided by the suppliers.
Training advice	: Provide adequate training to professional operators for the use of PPEs, according to the information contained in this Safety Data Sheet.
Other information	: Do not use the product for any purposes that have not been advised by the manufacturer. In exceptional cases (i.e. prolonged storage in tanks contaminated with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H ₂ S. This situation is especially relevant in all those circumstances which require to enter a confined space, with direct exposure to the vapours. If this possibility is suspected, a specific assessment of inhalation risks from the presence of H ₂ S in confined spaces must be made, to help determine prevention measures and controls (i.e. PPE) appropriate to local circumstances, and adequate emergency procedures. If there is any suspicion of inhalation of H ₂ S (hydrogen sulphide), Rescuers must wear breathing apparatus, belt and safety rope, and follow rescue procedures. Send patient to hospital. Immediately begin artificial respiration if breathing has ceased. Administer oxygen if necessary. This situation is especially relevant for those operations which involve direct exposure to the vapours in the interior of tanks or other confined spaces. Therefore, it is very important to follow the above mentioned precautionary measures also with used oils.

Full text of H- and EUH-statements:	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
H317	May cause an allergic skin reaction.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Sens. 1	H317	Concentration limits
Aquatic Chronic 2	H411	Calculation method

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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.