

## Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878 Revision date: 1/24/2023 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier		
Product form Trade name Product code	<ul> <li>Mixture</li> <li>Eni Grease MU EP 00</li> <li>4643</li> </ul>	
Type of product Formula Product group	<ul> <li>Lubricant grease</li> <li>2401-2023</li> <li>Trade product</li> </ul>	
1.2. Relevant identified uses of the substance or mixture and uses advised against		
1.2.1. Relevant identified uses		
Main use category Industrial/Professional use spec Use of the substance/mixture	<ul> <li>Industrial use,Professional use</li> <li>Non-dispersive use</li> <li>General purpose lubricant</li> </ul>	
Function or use category 1.2.2. Uses advised against	Do not use the product for any purposes that have not been advised by the manufacturer. : Lubricants and additives	
No additional information available		

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

Eni Sustainable Mobility S.p.A., Viale Giorgio Ribotta 51, 00144 Rom, ITALY, Tel. +39 06 59821, www.eni.com Competent person responsible for the safety data sheet (Reg. EC nr. 1907/2006): SDS.ESM.info@eni.com

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#### 1.4. Emergency telephone number

Emergency number

: CNIT +39 0382 24444 (24h) (IT + EN)

Poison centre (UK): National Poisons Information Service Edinburgh (24h) (+44) 844 892 0111 0870 600 6266 (UK only) (Source: UN-WHO)

#### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

#### Not classified

#### Adverse physicochemical, human health and environmental effects

None to be reported, according to the present EU regulations. 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]

EUH-statements

: EUH210 - Safety data sheet available on request.

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2.3. Other hazards (not relevant for classification)			
Other hazards not contributing to the classification	: Combustible product. Thermal decomposition generates toxic vapours. In case of contact with eyes, this product may cause irritation. Ingestion may cause nausea, vomiting and diarrhea. Prolonged and repeated skin contact may cause reddening, irritation and dermatitis. May cause long-term adverse effects in the environment. 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/vPvB substances  $\geq$  0.1% assessed in accordance with REACH Annex XIII

Component	
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	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
Residual oils (petroleum,) solvent-refined (64742-01- 4)	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
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)	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

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 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 at a concentration equal to or greater than 0,1 %

Component		
Distillates (petroleum), solvent-dewaxed heavy paraffinic(64742-65-0)	The substance is 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	
Residual oils (petroleum,) solvent-refined(64742-01-4)	The substance is 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	

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

#### 3.1. Substances

Not applicable

3.2. Mixtures

Notes

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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]
Distillates (petroleum), solvent-dewaxed heavy paraffinic (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	66 – 70	Not classified

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]
Residual oils (petroleum,) solvent-refined (see note [*], see note [**])	CAS-No.: 64742-01-4 EC-No.: 265-101-6 EC Index-No.: 649-459-00-4 REACH-no: 01-2119488707- 21	20 - 25	Not classified
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (Additive, see note [***])	CAS-No.: 68457-79-4 EC-No.: 270-608-0 REACH-no: 01-2119493628- 22	≥ 1,5 < 2	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (Additive, see note [***])	CAS-No.: 68457-79-4 EC-No.: 270-608-0 REACH-no: 01-2119493628- 22	( 15 <c 100)="" 2,="" h315<="" irrit.="" skin="" td="" ≤=""></c>
Notes	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.</li>
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)
Note [\*\*]:
More detailed information: See section 11.

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. Seek medical advice. See also section 4.3.		
First-aid measures after skin contact	: Take off contaminated clothing and shoes. Wash thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.		
First-aid measures after eye contact	<ul> <li>Rinse immediately with plenty of water. If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist.</li> </ul>		
First-aid measures after ingestion	Do NOT induce vomiting. If the person is conscious, rinse mouth with water without swallowing. Keep at rest. Call for medical assistance or bring to an hospital. If the casualty is unconscious, place in the recovery position. In case of spontaneous vomiting, keep head low, to avoid the risk of aspiration into the lungs. Do not give anything by mouth to an unconscious person.		
4.2. Most important symptoms and effective eff	4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	<ul> <li>None under normal conditions at ambient temperatures.</li> <li>Prolonged and repeated skin contact may cause reddening, irritation and dermatitis.</li> <li>Contact with eyes may cause temporary reddening and irritation.</li> <li>Accidental ingestion of small quantities of the product may cause nausea, discomfort and gastric disturbances.</li> </ul>		

Symptoms/effects upon intravenous administration : No information available. Chronic symptoms : None known.

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## 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. 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 Unsuitable extinguishing media	<ul><li>Dry chemical, CO2, or water spray or regular foam.</li><li>Do not use a heavy water stream. Use water stream to cool containers.</li></ul>		
5.2. Special hazards arising from the subst	tance or mixture		
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	<ul> <li>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.</li> <li>No direct explosion hazard.</li> <li>Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, NOx (harmful/toxic gases). Oxygenated compounds (aldehydes, etc.). Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S. LiOx. POx. ZnOx.</li> </ul>		
5.3. Advice for firefighters			
Firefighting instructions Special protective equipment for firefighters	<ul> <li>Shut off source of product, if possible. Move undamaged containers from immediate hazard area if it can be done safely. Use water sprays to cool containers and surfaces exposed to the flames. If the fire cannot be controlled, evacuate area.</li> <li>Personal protection equipment for firefighters (see also sect. 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</li> </ul>		
Other information	<ul> <li>mode. EN 443. EN 469. EN 659.</li> <li>In case of fire, do not discharge residual product, waste materials and runoff water: collect separately and use a proper treatment.</li> </ul>		

SECTION 6: Accidental release measu	res	
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 direct contact with released material. Avoid accidental sprays on hot surfaces or electrical contacts. Keep upwind. Spill area may be slippery.	
6.1.1. For non-emergency personnel		
Protective equipment Emergency procedures	<ul> <li>See Section 8.</li> <li>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.</li> </ul>	

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#### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. Personal protective
	equipment Standard EN 469 - Protective clothing for firefighters. Standard - EN 659:
	Protective gloves for firefighters. If contact with hot product is possible or anticipated, gloves
	should be heat-resistant and thermally insulated. Antistatic non-skid safety shoes or boots,
	chemical resistant, if necessary heat resistant and insulated. Work helmet. 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. 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	: Notify local authorities according to relevant regulations.
Emergency procedures	: Notify local authorities according to relevant regulations.

## 6.2. Environmental precautions

Prevent product from entering sewers, rivers or other bodies of water. 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. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.	
Methods for cleaning up Other information	<ul> <li>Wash contaminated area with large amounts of water.</li> <li>Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air 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.</li> </ul>	

#### 6.4. Reference to other sections

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

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	<ul> <li>This material is combustible, but will not ignite readily. Keep away from heat/sparks/open flames/hot surfaces. Avoid contact with skin, eyes and clothing. Do not use compressed air for filling, discharging, or handling operations. Use and store only outdoors or in a well-ventilated area. 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.</li> <li>Ensure that proper housekeeping measures are in place. 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. Separate working clothes from town clothes. Launder separately.</li> </ul>
7.2. Conditions for safe storage, including a	ny incompatibilities
Incompatible products	<ul> <li>Store in dry, well ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not smoke.</li> <li>Keep away from: strong oxidants.</li> <li>&lt; 50 °C</li> </ul>

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SECTION 8: Exposure controls/personal protection

Storage area	: Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation. Storage installations should be designed with adequate bunds so as to prevent ground and water pollution 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	<ul> <li>For containers, or container linings use materials specifically approved for use with this product.</li> </ul>

7.3. Specific end use(s)

No information available.

8.1. Control parameters		
8.1.1 National occupational exposure and biological	limit values	
Residual oils (petroleum,) solvent-refined (64742-01-4)		
Austria - Occupational Exposure Limits		
MAK (OEL TWA)	5 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Belgium - Occupational Exposure Limits		
OEL TWA	5 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Denmark - Occupational Exposure Limits		
OEL TWA [1]	1 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
OEL STEL	2 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Hungary - Occupational Exposure Limits		
AK (OEL TWA)	5 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Netherlands - Occupational Exposure Limits		
MAC TGG 8h (mg/m³)	5 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA) [1]	5 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
VLA-EC (mg/m³)	10 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	1 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
KTV (OEL STEL)	3 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	5 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
ACGIH OEL STEL	10 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Distillates (petroleum), solvent-dewaxed heav	y paraffinic (64742-65-0)	
Austria - Occupational Exposure Limits		
MAK (OEL TWA)	5 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Belgium - Occupational Exposure Limits		
OEL TWA	5 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	

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Distillates (petroleum), solvent-de	waxed heavy paraffinic (64742-65-0)
Denmark - Occupational Exposure Lim	its
OEL TWA [1]	1 mg/m <sup>3</sup> (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
OEL STEL	2 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Hungary - Occupational Exposure Lim	its
AK (OEL TWA)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Netherlands - Occupational Exposure	Limits
MAC TGG 8h (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
VLA-EC (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Sweden - Occupational Exposure Limi	ts
NGV (OEL TWA)	1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
KTV (OEL STEL)	3 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - ACGIH - Occupational Exposure	Limits
ACGIH OEL TWA	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
ACGIH OEL STEL	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)

## 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

# No additional information available

8.1.4.	DNEL	and	<b>PNEC</b>
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Eni Grease MU EP 00			
DNEL/DMEL (additional information)			
Additional information	Not applicable		
PNEC (additional information)	PNEC (additional information)		
Additional information	Not applicable		
Residual oils (petroleum,) solvent-refined (64742-01-4)			
DNEL/DMEL (Workers)			
Long-term - systemic effects, dermal	0.97 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	2.73 mg/m <sup>3</sup>		
Long-term - local effects, inhalation	5.58 mg/m³		
DNEL/DMEL (General population)			
Long-term - systemic effects,oral	0.74 mg/kg bodyweight/day		
Long-term - local effects, inhalation	1.19 mg/m³		
PNEC (Oral)			
PNEC oral (secondary poisoning)	9.33 mg/kg food		

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Phosphorodithioic acid, mixed O,O-bis(iso	o-Bu and pentyl) esters, zinc salts (68457-79-4)
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	11.87 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	8.13 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.24 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2.06 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	5.93 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	4 µg/l
PNEC aqua (marine water)	4.6 µg/l
PNEC aqua (intermittent, freshwater)	45 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.024 mg/kg dwt
PNEC sediment (marine water)	0.002 mg/kg dwt
PNEC (Soil)	
PNEC soil	2.49 µg/kg dw
PNEC (Oral)	
PNEC oral (secondary poisoning)	10.67 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l
Distillates (petroleum), solvent-dewaxed h	eavy paraffinic (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/m³
Long-term - local effects, inhalation	5.58 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.74 mg/kg bodyweight/day
PNEC (Oral)	
PNEC oral (secondary poisoning)	9.33 mg/kg food
PNEC (additional information)	
Additional information	Not derived - Not classified as hazardous for environment
Note	<ul> <li>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</li> </ul>

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.

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#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station. Minimize exposure to mists/vapours/aerosol. Before entering storage tanks and commencing any operation in a confined area, carry out an adequate clean-up, and check the atmosphere for oxygen content, flammability, and the presence of sulphur compounds. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment (for industrial or professional use):

Protective clothing. Safety glasses. Safety shoes or boots.

Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

#### Eye protection:

Chemical goggles or safety glasses. DIN EN 166

#### 8.2.2.2. Skin protection

Skin and body protection:

Non-skid safety shoes or boots, chemical resistant.

#### Hand protection:

When there is a risk of contact with the skin, use waterproof gloves, resistant to chemical products. Gloves must be felt-lined. Adequate materials: nitrile (NBR) or PVC with a protection index > 5 (permeation time > 240 mins). 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.

#### Other skin protection

Materials for protective clothing: Protective apron. DIN EN 465. DIN EN 466

#### 8.2.2.3. Respiratory protection

#### Respiratory protection:

Not necessary with sufficient ventilation. In case of insufficient ventilation, wear suitable respiratory equipment (EN 136/140/145). Combination filter device (DIN EN 141). 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:

None in normal use conditions.

#### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Do not discharge the product into the environment. 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. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

#### Consumer exposure controls:

Not applicable.

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# SECTION 9: Physical and chemical properties 9.1. Information on basic physical and chemical properties Physical state : Viscous liquid. Colour : Amber. Appearance : Semi-solid. Odour : characteristic.

Odour	: characteristic.
Odour threshold	: There are no data available on the preparation/mixture itself.
Melting point	: Not determined
Freezing point	: ≈0 °C (CAS 101316-72-7)
Boiling point	: > 250 °C (CAS 101316-72-7)
Flammability	: Not flammable
Explosive properties	: None (according to composition).
Oxidising properties	: None (according to composition).
Explosive limits	: Not applicable
Lower explosion limit	: Not determined
Upper explosion limit	: Not determined
Flash point	: > 230 °C (base oil) (ASTM D 445)
Auto-ignition temperature	: > 300 °C (CAS 101316-72-7)
Decomposition temperature	: Not determined
рН	: There are no data available on the preparation/mixture itself.
Viscosity, kinematic	: 91 – 99 mm²/s (CAS 64742-65-0) (40 °C) (ASTM D 445)
Viscosity, dynamic	: Not determined
Solubility	: Water: Immiscible and insoluble
Log Kow	: Not applicable for mixtures
Log Pow	: Not applicable for mixtures
Vapour pressure	: < 0.1 hPa (20°C, CAS 101316-72-7)
Vapour pressure at 50°C	: Not determined
Critical pressure	: Not applicable for mixtures
Density	: 0.9 kg/l 15°C (ASTM D 1298)
Relative density	: Not determined
Relative vapour density at 20°C	: Not determined
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	
Penetration	: 400 - 430 dmm ((25°C) (ASTM D 217), Class NLGI: 00)
Drop point / drop range	: 185°C (ASTM D 566)

## 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 (in normal conditions of storage and handling).

10.3. Possibility of hazardous reactions

None (in normal conditions of storage and handling).

10.4. Conditions to avoid

None in normal conditions.

#### **10.5. Incompatible materials**

Strong oxidants.

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## **10.6. Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : COx, HC, NOx, chlorinated compounds, Toxic fumes. This product contains sulfur compounds which, in certain circumstances, may generate hydrogen sulfide.

SECTION 11: Toxicological information	
11.1. Information on hazard classes as define	ed in Regulation (EC) No 1272/2008
Acute toxicity (oral):Acute toxicity (dermal):Acute toxicity (inhalation):Additional information:	Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) (according to composition)
Residual oils (petroleum,) solvent-refined (64	1742-01-4)
LD50 oral rat	> 5000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 5 mg/l/4h
Phosphorodithioic acid, mixed O,O-bis(iso-B	u and pentyl) esters, zinc salts (68457-79-4)
LD50 oral rat	3600 mg/kg (OECD 401)
LD50 dermal rabbit	20000 mg/kg bodyweight (OECD 402)
LC50 Inhalation - Rat (Dust/Mist)	> 5 mg/l/4h
Distillates (petroleum), solvent-dewaxed hea	vy paraffinic (64742-65-0)
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)
Additional information       :         Serious eye damage/irritation       :         Additional information       :         Respiratory or skin sensitisation       :         Additional information       :         Germ cell mutagenicity       :         Additional information       :         Carcinogenicity       :	Not classified (Based on available data, the classification criteria are not met) pH: There are no data available on the preparation/mixture itself. (according to composition) This product contains components with a Specific Concentration Limit (SCL). (provided by the supplier) Not classified (Based on available data, the classification criteria are not met) pH: There are no data available on the preparation/mixture itself. (according to composition) This product contains components with a Specific Concentration Limit (SCL). On basis of test data: Not irritating to eyes This evaluation is based on the information provided by the suppliers. Not classified (Based on available data, the classification criteria are not met) (according to composition) Not classified (Based on available data, the classification criteria are not met) (according to composition) Not classified (Based on available data, the classification criteria are not met) (according to composition) Not classified (Based on available data, the classification criteria are not met) (according to composition) Not classified (Based on available data, the classification criteria are not met) (according to composition) Not classified (Based on available data, the classification criteria are not met) (according to composition) Not classified (Based on available data, the classification criteria are not met) (according to composition) This product contains : Lubricating oils (petroleum), C24-50, solvent-extd, dewaxed,
	hydrogenated; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C24 through C50 and produces a finished oil with a viscosity in the order of 16cSt to 75cSt at 40 $^{\circ}$ C (104 $^{\circ}$ F).], Residual oils (petroleum) solvent-refined; Baseoil— unspecified; [A complex combination by hydrocarbons obtained as the solvent insoluble fraction from solvent refining of a residuum using a polar organic solvent such as phenol or furfural. It consists of hydrocarbons having carbon numbers predominantly higher than C25 and boiling above approximately 400 $^{\circ}$ C (752 $^{\circ}$ F).] 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.

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SDS ED IOIMAL ACCORDING TO COMMISSION REGULAT	
Reproductive toxicity Additional information STOT-single exposure Additional information STOT-repeated exposure Additional information	<ul> <li>Not classified (Based on available data, the classification criteria are not met)</li> <li>(according to composition)</li> <li>Not classified (Based on available data, the classification criteria are not met)</li> <li>(according to composition)</li> <li>Not classified (Based on available data, the classification criteria are not met)</li> <li>(according to composition)</li> <li>(according to composition)</li> </ul>
Distillates (petroleum), solvent-dewaxed	d heavy paraffinic (64742-65-0)
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
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 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
NOAEC (inhalation,rat, vapour, 90 days)	220 – 980 mg/m³ (Dalbey W, Osimitz T, Kommineni C, Roy T, Feuston M and Yang J 1991 - OECD 412)
Aspiration hazard Additional information	<ul> <li>Not classified (Based on available data, the classification criteria are not met)</li> <li>(according to composition)</li> </ul>
Eni Grease MU EP 00	
Viscosity, kinematic	91 – 99 mm²/s (CAS 64742-65-0) (40 °C) (ASTM D 445)
11.2. Information on other hazards	
11.2.1. Endocrine disrupting properties	
Adverse health effects caused by endocrine disrupting properties	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 is not identified a 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 %
11.2.2. Other information	
Potential adverse human health effects and symptoms	Contact with eyes may cause temporary reddening and irritation, Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, Inhalation of vapours may cause respiratory 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	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. An uncontrolled release to the environment may nevertheless produce a contamination of different environmental compartments (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.
This product is not soluble in water. It floats on water and forms a film on the surface.

Ecology - water : This product is not soluble in water. It floats on water and forms a film on the su Hazardous to the aquatic environment, short-term : Not classified (Based on available data, the classification criteria are not met)

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

Residual oils (petroleum,) solvent-refined (64742-01-4)	
LC50 fish 1	100 mg/l
EC50 Daphnia 1	10 g/l

(acute)

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L050 fish 1     4.5 mg/l (Cyprinodon variegatus)       E050 Daphnia 1     23 mg/l (Daphnia Magna)       E050 Taphnia 1     21 mg/l       Distiliates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)     100 mg/l (L1 60, Excon 1995 - OECD 203)       E050 Daphnia 1     > 100 mg/l (L1 60, Excon 1995 - OECD 201)       Petroleum)     2 1000 mg/l (C1 60, Excon 1995 - OECD 202)       NOEC (reute)     2 1000 mg/l (C1 60, Excon 1995 - OECD 201) - Petro-Canada 2009)       NOEC chronic fish     2 1000 mg/l (C10, OECD 211 - Shell 1984 - OECD 201 - Petro-Canada 2009)       NOEC chronic rusiacea     2 1000 mg/l (C10, OECD 211 - Shell 1984 - OECD 201 - Petro-Canada 2009)       NOEC chronic digae     2 1000 mg/l (C10, OECD 211 - Shell 1984 - OECD 201 - Petro-Canada 2009)       NOEC chronic digae     2 1000 mg/l (C10, OECD 211 - Shell 1984 - OECD 201 - Petro-Canada 2009)       NOEC chronic digae     2 1000 mg/l (C10, OECD 211 - Shell 1984)       NOEC chronic digae     2 1000 mg/l (C10, OECD 211 - Shell 1984)       NOEC chronic digae     2 1000 mg/l (C10, OECD 211 - Shell 1984)       NOEC chronic digae     2 1000 mg/l (C10, OECD 211 - Shell 1984)       NOEC chronic digae     2 1000 mg/l (C10, OECD 211 - Shell 1984)       NOEC chronic digae     2 800 mg/l (C10, OECD 211 - Shell 1984)       NOEC chronic digae     2 800 mg/l (C10, OECD 211 - Shell 1984)       Not spication     1 5 (2 2 2 (CECD 10 G 010)       Perisitence and deg	Phosphorodithioic acid, mixed O,O-bis(iso-Bo	u and pentyl) esters, zinc salts (68457-79-4)	
EC50 72h - Algae [1]       21 mg1         Distillates (petroleum), solvent-dewaxed heary paraffinic (64742-65-0)       200 mg1 (L50, Exxon 1985 - OECD 203)         EC50 Daphnia 1       > 1000 mg1 (E50, Shell 1988 - OECD 202)         NOEC dirocitish       > 100 mg1 (Decompression 1985 - OECD 202)         NOEC dirocitish       > 1000 mg1 (Decompression 1985 - OECD 202)         NOEC dirocitish       > 1000 mg1 (Decompression 1985, NOEEL, 740 - QSAR, Redman, A. et al. 2010)         NOEC dirocitish       > 1000 mg1 (Decompression 1985, NOEEL, 741 - QSAR, Redman, A. et al. 2010)         NOEC dirocitish       > 1000 mg1 (Decompression 1985, NOEEL, 741 - QSAR, Redman, A. et al. 2010)         NOEC dirocitish       > 100 mg1 (Pseudokirchneriella subcapitata, 72n)         12.2. Persistence and degradability       A fraction of the constituents of the product should be considered as "inherently biodegradabile", but not "readity biodegradabile", and they may be moderately persistent, particularly in anaerobic conditions.         Residual olis (petroleum,) solvent-refined (64742-04-)         Persistence and degradability       Inherently biodegradabile.         UVCB substances.       Notespression         Phosphoroditholic acid, mixed O,O-bis(Iso-Bustance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances.         Persistence and degradability       Inherently biodegradabile.         Distillates (potroleum,) solvent-female as finin (64742-65-0)	LC50 fish 1 4.5 mg/l (Cyprinodon variegatus)		
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)           LC50 fish 1         > 100 mgl (LL 50, Exon 1995 - OECD 203)           EC50 Daphnia 1         > 1000 mgl (EL50, Shell 1988 - OECD 202)           NOEC (racite)         ≥ 100 mgl (Peuddkirchneriella subcapitata, 72h, OECD 201 - Petro-Canada 2008)           NOEC chronic fish         ≥ 1000 mgl (Chochtynchus mykiss, NOELR, 14d - OSAR, Redman, A. et al. 2010)           NOEC chronic rustacea         ≥ 1000 mgl (Chochtynchus mykiss, NOELR, 14d - OSAR, Redman, A. et al. 2010)           NOEC chronic atgae         ≥ 100 mgl (Peuddkirchneriella subcapitata, 72h)           12.2. Porsistence and degradability         A fraction of the constituents of the product should be considered as "inherently biodegradable", but not "readity biodegradable", and they may be moderately persistent, particularly in anserobic conditions.           Residual olis (potroleum,) solvent-rofined (64742-01-4)         Persistence and degradability           Persistence and degradability         Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances.           Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pertyl) esters, zinc saits (68457-79-4)           Persistence and degradability         Inherently biodegradable", and they may be moderately persistent, particularly in anserbic conditions.           Biodegradability         Inherently biodegradable", and they may be moderately persistent, particularly in anserbic conditions.           Biodegradability         I	EC50 Daphnia 1	23 mg/l (Daphnia Magna)	
LC50 fish 1       > 100 mgl (LL 50, Exxon 1995 - OECD 203)         EC50 Daphnia 1       > 1000 mgl (EL50, Shell 1988 - OECD 202)         NOEC (acule)       > 100 mgl (Pseudokichneriella subcapitala, 72h, OECD 201 - Petro-Canada 2008)         NOEC chronic fish       > 1000 mgl (Cnoothynchus mykiss, NOELR, 14d - OSAR, Redman, A. et al. 2010)         NOEC chronic fish       > 1000 mgl (Cnoothynchus mykiss, NOELR, 14d - OSAR, Redman, A. et al. 2010)         NOEC chronic atgae       > 100 mgl (Cecduchoriella subcapitala, 72h)         Text Persistence and degradability       > 100 mgl (Cecduchoriella subcapitala, 72h)         Text Persistence and degradability       A fraction of the constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent. particularly in anaerobic conditions.         Residual olis (petroleum,) solvent-refined (64742-04-)         Persistence and degradability       Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithiolc acid, mixed O,O-bis(Iso-But pertyl) esters, zinc salts (68457-79-4)         Persistence and degradability       Inherently biodegradable".         Biodegradability       Inherently biodegradable".         Distillates (petroleum), solvent-dewaxed heavy persistent. particularly in anaerobic conditions.         Biodegradability       Inherently biodegradable".         Biodegradability       10 * (	EC50 72h - Algae [1]	21 mg/l	
CEG0 Daphnia 1       > 10000 mg/l (EL50, Shell 1988 - OECD 202)         NOEC (acute)       2 100 mg/l (Pseudokirchnerielia subcapitata, 72h, OECD 201 - Petro-Canada 2008)         NOEC chronic fish       2 100 mg/l (Chcothynchus mykiss, NOELR, 14d - OSAR, Redman, A. et al. 2010)         NOEC chronic crustacea       2 100 mg/l (Pseudokirchnerielia subcapitata, 72h)         NOEC chronic algae       2 100 mg/l (Pseudokirchnerielia subcapitata, 72h) <b>12.2. Porsistonce and degradability</b> A fraction of the constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.         Residual olis (petroleum), solvent-refined (64742-01-4)       Persistence and degradability         Persistence and degradability       Inherently biodegradable.         Biodegradation       1.5 % (28 d) (OECD TG 301 B)         Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)         Persistence and degradability       Inherently biodegradabile, and they may be moderately persistent, particularly in anaerobic conditions.         Biodegradation       1 % (28 d, Excon 1996)         Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)         Persistence and degradability       Inherently biodegradabile, and they may be moderately persistent, particularly in anaerobic conditions.         Biodegradation       1 % (28 d, Excon 1996)       1 % (28 d, Excon 1996) </td <td>Distillates (petroleum), solvent-dewaxed heav</td> <td>/y paraffinic (64742-65-0)</td>	Distillates (petroleum), solvent-dewaxed heav	/y paraffinic (64742-65-0)	
NOEC (acute)       ≥ 100 mg/l (Paeudokirchneriella subcapitata, 72h, OECD 201 - Petro-Canada 2008)         NOEC chronic fish       ≥ 1000 mg/l (Chocordynchus mykiss, NOELR, 14d - QSAR, Redman, A. et al. 2010)         NOEC chronic crustacea       ≥ 1000 mg/l (Paeudokirchneriella subcapitata, 72h) <b>12.2. Persistence and degradability</b> > 100 mg/l (Paeudokirchneriella subcapitata, 72h) <b>12.2. Persistence and degradability</b> A fraction of the constituents of the product should be considered as "inherently biodegradable", un to "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.         Rasidual oils (patroleum,) solvent-refined (64742-01-4)       Persistence and degradability         Persistence and degradability       Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-Butents)       Inherently biodegradable.         Distillates (potroleum), solvent-dewaxed heavy       parfinic (Af742-65-0)         Persistence and degradability       The most significant constituents of the product should be considered as "inherently biodegradable", un to "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.         Biodegradability       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.         Biodegradability       Solvetartificant co	LC50 fish 1	> 100 mg/l (LL 50, Exxon 1995 - OECD 203)	
NOEC chronic fish       ≥ 1000 mg/l (Oncorhynchus mykiss, NOELR, 144 - QSAR, Redman, A. et al. 2010)         NOEC chronic drustacea       ≥ 1000 mg/l (21d, OECD 211 - Shell 1994)         NOEC chronic drustacea       ≥ 100 mg/l (Pseudokirchneriella subcapitata, 72h)         12.2. Persistence and degradability          Enil Grease MU EP 00       Persistence and degradability         Persistence and degradability       A fraction of the constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.         Residual oils (petroleum), solvent-refined (64742-01-4)       Persistence and degradability         Substances.       Substances.         Phosphorodithioic acid, mixed O,O-bis(iso-U and pentyl) esters, zinc salts (68457-79-4)         Persistence and degradability       Inherently biodegradable.         Biodegradability       Inherently biodegradable.         Persistence and degradability       Inherently biodegradable.         Persistence and degradability       The most significant constituents of the product should be considered as "inherently particularly in anaerobic conditions.         Biodegradability       The most significant constituents of the product should be considered as "inherently particularly in anaerobic conditions.         Biodegradability       The most significant constituents of the product should be considered as "inherently particularly in anaerob	EC50 Daphnia 1	> 10000 mg/l (EL50, Shell 1988 - OECD 202)	
NOEC chronic crustacea         ≥ 1000 mg/l (21d, OECD 211 - Shell 1994)           NOEC chronic algae         ≥ 100 mg/l (Peeudokirchneriella subcapitala, 72h)           12.2. Persistence and degradability         Final Grease MU EP 00           Persistence and degradability         A fraction of the constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.           Residual oils (petroleum,) solvent-refined (64742-01-4)         Persistence and degradability           VUCB substances.         Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances.           Phosphorodithioic acid, mixed O,O-bis(iso-Burter Dentyl) estors, zinc salts (66457-79-4)         Persistence and degradability           Inherently biodegradable.         Inherently biodegradable.         Persistence and degradability           Biodegradability         Inherently biodegradable.         Persistence and degradability           Persistence and degradability         Inherently biodegradable.         Persistence and degradability           Biodegradability         Inherently biodegradable.         Persistence and degradability           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 conditib conditions.           Bio	NOEC (acute)	≥ 100 mg/l (Pseudokirchneriella subcapitata, 72h, OECD 201 - Petro-Canada 2008)	
NOEC chronic algae         ≥ 100 mgil (Pseudokirchnenella subcapitata, 72h)           12.2. Persistence and degradability         A fraction of the constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.           Residual oils (petroleum,) solvent-rofined (647-201-4)         Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances.           Phosphorodithioic acid, mixed O,O-bis(iso-B and pentyl) esters, zinc salts (66457-79-4)         Inherently biodegradable.           Persistence and degradability         Inherently biodegradable.           Biodegradability         Inherently biodegradable.           Persistence and degradability         Inherently biodegradable.           Biodegradability         Inherently biodegradable.           Persistence and degradability         Inherently biodegradable.           Biodegradability         Inherently biodegradable.           Persistence and degradability         The most significant constituents of the product should be considered as "inherently biodegradable", up not readily biodegradable", and they may be moderately persistent. particularly in anaerobic conditions.           Biodegradation         31 % (28d, Exxon 1995)           21.3. Bioaccumulative potential         Not applicable for mixtures           Log Fow         Not applicable for mixtures           Bioaccumulative potential <td>NOEC chronic fish</td> <td>≥ 1000 mg/l (Oncorhynchus mykiss, NOELR, 14d - QSAR, Redman, A. et al. 2010)</td>	NOEC chronic fish	≥ 1000 mg/l (Oncorhynchus mykiss, NOELR, 14d - QSAR, Redman, A. et al. 2010)	
12.2. Persistence and degradability         Eni Grease MU EP 00         Persistence and degradability       A fraction of the constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.         Residual oils (petroleum,) solvent-refined (64742-01-4)         Persistence and degradability       Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)         Persistence and degradability       Inherently biodegradable.         Biodegradation       1.5 % (28 d) (OECD TG 301 B)         Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)         Persistence and degradability       The most significant constituents of the product should be considered as "inherently biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.         Biodegradation       31 % (28d, Exxon 1995)         12.3. Bioaccumulative potential       Not applicable for mixtures         Bioaccumulative potential       Not established. According to the characteristics of the components, the product has a low biodegradabili	NOEC chronic crustacea	≥ 1000 mg/l (21d, OECD 211 - Shell 1994)	
Eni Grease MU EP 00         Persistence and degradability       A fraction of the constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.         Residual oils (petroleum,) solvent-refined (64742-01-4)         Persistence and degradability       Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)         Persistence and degradability       Inherently biodegradable.         Biodegradation       1.5 % (28 d) (OECD TG 301 B)         Distillates (petroleum), solvent-dewaxed heavy paraffinic (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) <b>12.3. Bioaccumulative potential</b> Not applicable for mixtures         Log Kow       Not applicable for mixtures         Bioaccumulative potential       Not established. According to the characteristics of the components, the product has a low obiodegradability in anaerobic conditions, and may be persistent. Some of the chenical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.         Residual oils (petroleum,) solv	NOEC chronic algae	≥ 100 mg/l (Pseudokirchneriella subcapitata, 72h)	
Persistence and degradability       A fraction of the constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.         Residual oils (petroleum,) solvent-refined (64742-01-4)         Persistence and degradability       Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-U       and pentyl) esters, zinc salts (68457-79-4)         Persistence and degradability       Inherently biodegradable.         Biodegradation       1.5 % (28 d) (OECD TG 301 B)         Distillates (petroleum), solvent-dewaxed heexy paraffinic (64742-65-0)         Persistence and degradability       The most significant constituents of the product should be considered as "inherently biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.         Biodegradation       31 % (284, Exxon 1995)         12.3. Bioaccumulative potential       Not applicable for mixtures         Biodegradability       Not applicable for mixtures         Biodegradability       Not applicable for mixtures         Biodegradability       Not applicable for mixtures         Bioaccumulative potential       Not applicable for mixtures         Bioaccumulative potential       Not applicable for mixtures         Bioaccumulative potential       Not applicable for this endpoint are	12.2. Persistence and degradability		
biodegradable", but nd *readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.           Residual oils (petroleum,) solvent-refined (6/742-01-4)           Persistence and degradability         Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances.           Phosphorodithioic acid, mixed O,O-bis(iso-Bu- Persistence and degradability         Inherently biodegradable.           Biodegradability         Inherently biodegradable.           Distillates (petroleum), solvent-dewaxed heavety paraffinic (64742-65-0)           Persistence and degradability         The most significant constituents of the product should be considered as "inherently biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.           Biodegradability         The most significant constituents of the product should be considered as "inherently biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.           Biodegradability         The most significant constituents of the product should be considered as "inherently biodegradability in anaerobic conditions.           Bioaccumulative potential         Not (284, Exxon 1995)           Log Pow         Not applicable for mixtures           Log Kow         Not applicable for mixtures           Bioaccumulative potential         Not established. According the characteristics of the components, the product has a compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic org	Eni Grease MU EP 00		
Persistence and degradability         Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances.           Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)           Persistence and degradability         Inherently biodegradable.           Biodegradation         1.5 % (28 d) (OECD TG 301 B)           Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)         Persistence and degradability           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)           12.3. Bioaccumulative potential         Not applicable for mixtures           Log Pow         Not applicable for mixtures           Log Kow         Not applicable for mixtures           Bioaccumulative potential         Not established. According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical components that are present in the product have a potential for bioaccumulation, and may be persistent. Some of the chemical components that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.           Residual oils (petroleum, solvent-refined (64722-01-4)         Endergradability in anaerobic conditions, and may be persistent. Some of the chemical components, the p	Persistence and degradability	biodegradable", but not "readily biodegradable", and they may be moderately persistent,	
UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-Butter pertyl) esters, zinc salts (68457-79-4)         Persistence and degradability       Inherently biodegradable.         Biodegradation       1.5 % (28 d) (OECD TG 301 B)         Distillates (petroleum), solvent-dewaxed heavet paraffinic (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) <b>12.3. Bioaccumulative potential</b> Vot applicable for mixtures         Log Pow       Not applicable for mixtures         Log Kow       Not applicable for mixtures         Bioaccumulative potential       Not established. According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.         Residual oils (petroleum,) solvent-refined (64742-01-4)       Endersone for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-Butter and pentyl) esters, zinc salts (68457-79-4)       Endersone for this endpoint are not applicable to UVCB substances.	Residual oils (petroleum,) solvent-refined (64	742-01-4)	
Persistence and degradability         Inherently biodegradable.           Biodegradation         1.5 % (28 d) (OECD TG 301 B)           Distillates (petroleum), solvent-dewaxed heasymptotic (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)           12.3. Bioaccumulative potential         1% (28d, Exxon 1995)           Eni Grease MU EP 00         Not applicable for mixtures           Log Pow         Not applicable for mixtures           Bioaccumulative potential         Not applicable for mixtures           Bioaccumulative potential         Not established. According to the characteristics of the components, the product have a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.           Residual oils (petroleum,) solvent-refined (64742-C9-C9)         Implicable for this endpoint are not applicable to UVCB substances.           Bioaccumulative potential         The test methods for this endpoint are not applicable to UVCB substances.	Persistence and degradability		
Biodegradation       1.5 % (28 d) (OECD TG 301 B)         Distillates (petroleum), solvent-dewaxed heary       paraffinic (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)         12.3. Bioaccumulative potential       Eni Grease MU EP 00         Log Pow       Not applicable for mixtures         Log Kow       Not applicable for mixtures         Bioaccumulative potential       Not established. According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.         Residual oils (petroleum,) solvent-refined (647+22-01-4)       The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-B und pentyl) esters, zinc salts (68457-79-4)       The test methods for this endpoint are not applicable to UVCB substances.	Phosphorodithioic acid, mixed O,O-bis(iso-B	u and pentyl) esters, zinc salts (68457-79-4)	
Distillates (petroleum), solvent-dewaxed heavy paraffinic (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)           12.3. Bioaccumulative potential         The applicable for mixtures           Eni Grease MU EP 00         Not applicable for mixtures           Log Pow         Not applicable for mixtures           Bioaccumulative potential         Not established. According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.           Residual oils (petroleum,) solvent-refined (64742-61-4)         Bioaccumulative potential           Bioaccumulative potential         The test methods for this endpoint are not applicable to UVCB substances.	Persistence and degradability Inherently biodegradable.		
Persistence and degradability       The most significant constituents of the product should be considered as "inherently biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.         Biodegradation       31 % (28d, Exxon 1995)         12.3. Bioaccumulative potential       Eni Grease MU EP 00         Log Pow       Not applicable for mixtures         Log Kow       Not applicable for mixtures         Bioaccumulative potential       Not established. According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.         Residual oils (petroleum,) solvent-refined (64742-01-4)       Bioaccumulative potential         Bioaccumulative potential       The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)       Entities (68457-79-4)	Biodegradation	1.5 % (28 d) (OECD TG 301 B)	
biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.Biodegradation31 % (28d, Exxon 1995)12.3. Bioaccumulative potentialEni Grease MU EP 00Log PowNot applicable for mixturesLog KowNot applicable for mixturesBioaccumulative potentialNot applicable for mixturesBioaccumulative potentialNot established. According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.Residual oils (petroleum,) solvent-refined (64/2-01-4)Bioaccumulative potentialThe test methods for this endpoint are not applicable to UVCB substances.Phosphorodithioic acid, mixed O,O-bis(iso-B undpoint) esters, zinc salts (68457-79-4)	Distillates (petroleum), solvent-dewaxed heav	/y paraffinic (64742-65-0)	
12.3. Bioaccumulative potential         Eni Grease MU EP 00         Log Pow       Not applicable for mixtures         Log Kow       Not applicable for mixtures         Bioaccumulative potential       Not established. According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.         Residual oils (petroleum,) solvent-refined (647-2-01-4)         Bioaccumulative potential       The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)	Persistence and degradability	biodegradable", but not "readily biodegradable", and they may be moderately persistent,	
Eni Grease MU EP 00       Not applicable for mixtures         Log Pow       Not applicable for mixtures         Log Kow       Not applicable for mixtures         Bioaccumulative potential       Not established. According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.         Residual oils (petroleum,) solvent-refined (64742-01-4)         Bioaccumulative potential       The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-Builty) esters, zinc salts (68457-79-4)	Biodegradation	31 % (28d, Exxon 1995)	
Log Pow       Not applicable for mixtures         Log Kow       Not applicable for mixtures         Bioaccumulative potential       Not established. According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.         Residual oils (petroleum,) solvent-refined (647-24-01-4)       The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-B-ard pentyl) esters, zinc salts (68457-79-4)       The test methods for this endpoint are not applicable to UVCB substances.	12.3. Bioaccumulative potential		
Log Kow       Not applicable for mixtures         Bioaccumulative potential       Not established. According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.         Residual oils (petroleum,) solvent-refined (64742-01-4)       Bioaccumulative potential         Bioaccumulative potential       The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)	Eni Grease MU EP 00		
Bioaccumulative potential       Not established. According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.         Residual oils (petroleum,) solvent-refined (64742-01-4)         Bioaccumulative potential       The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)	Log Pow	Not applicable for mixtures	
biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.Residual oils (petroleum,) solvent-refined (64742-01-4)Bioaccumulative potentialThe test methods for this endpoint are not applicable to UVCB substances.Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)	Log Kow	Not applicable for mixtures	
Bioaccumulative potential       The test methods for this endpoint are not applicable to UVCB substances.         Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)	Bioaccumulative potential	biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may	
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)	Residual oils (petroleum,) solvent-refined (64742-01-4)		
	Bioaccumulative potential	The test methods for this endpoint are not applicable to UVCB substances.	
Log Pow 0.69	Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)		
	Log Pow	0.69	

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Distillates (petroleum), solvent-dewaxed heavy paraffinic (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.	

# 12.4. Mobility in soil

Eni Grease MU EP 00			
Mobility in soil Not determined			
Ecology - soil Product adsorbs onto the soil.			
Residual oils (petroleum,) solvent-refined (64742-01-4)			
Ecology - soil The test methods for this endpoint are not applicable to UVCB substances.			
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts (68457-79-4)			
Ecology - soil Product adsorbs onto the soil.			
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)			
Log Koc 1.71 – 14.7			
Ecology - soil	The test methods for this endpoint are not applicable to UVCB substances.		

## 12.5. Results of PBT and vPvB assessment

Eni Grease MU EP 00		
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		
Results of PBT-vPvB assessment	The components in this formulation do not meet the criteria for classification as PBT or vPvB. The product should be considered prudentially as "Persistent" in the environment, according to the REACH Annex XIII criteria (point 1.1)	
Component		
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	This substance does not meet the criteria for classification as PBT or vPvB. The product should be considered prudentially as "Persistent" in the environment, according to the REACH Annex XIII criteria (point 1.1)	
Residual oils (petroleum,) solvent-refined (64742-01- 4)	This substance does not meet the criteria for classification as PBT or vPvB. The product should be considered prudentially as "Persistent" in the environment, according to the REACH Annex XIII criteria (point 1.1)	
12.6. Endocrine disrupting properties		
Adverse effects on the environment caused by : endocrine disrupting properties	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 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 at a concentration equal to or greater than 0,1 %	
12.7. Other adverse effects		
Other adverse effects : Additional information :	None 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 discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector.		
Sewage disposal recommendations	Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed. Dispose of in a safe manner in accordance with local/national regulations.		
Product/Packaging disposal recommendations	: European Waste Catalogue code(s) (Decision 2001/118/CE): 13 08 99* (oil wastes not otherwise specified - wastes not otherwise specified). 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, drill, burn or incinerate empty containers or drums, unless they have been cleaned, and declared safe.		
EURAL code (EWC)	: 13 08 99* - wastes not otherwise specified		

#### **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID	
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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated         Not regulated         Not regulated         Not regulated				Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated Not regulated Not regulated Not regulated Not regulated			
None.	1	11		1

## 14.6. Special precautions for user

#### **Overland transport**

Not regulated

#### Transport by sea Not regulated

Air transport

Not regulated

#### Inland waterway transport Not regulated

## Rail transport

Not regulated

## 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

EU restriction list (REACH Annex XVII)			
Reference code	Applicable on	Entry title or description	
3(b)	Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	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	
3(c)Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc saltsSubstances 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			

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

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

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals) Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer) Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors) Other information, restriction and prohibition : Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 regulations 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 seguens). 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 (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC. Regulation

EU (649/2012) - Export and Import of hazardous chemicals (PIC). Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain

#### 15.1.2. National regulations

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

substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

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

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

#### Germany

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.
Water hazard class (WGK) (D)	: WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

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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 (BGBI 2017, Teil I, Nr. 22, Seite 905).
Hazardous Incident Ordinance (12. BImSchV) National Rules and Recommendations		Is not subject of the Hazardous Incident Ordinance (12. BImSchV) 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 555: Working instruction and information for workers TRGS 800: Fire protection measures TRGS 900: Occupational Exposure Limits TRGS 905: List of mutagenic, carcinogenic or teratogenic substances
Storage class (LGK, TRGS 510)	:	LGK 11 - Combustible solids
VbF class (D)	:	Not applicable.
Netherlands		
Saneringsinspanningen SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen SZW-lijst van reprotoxische stoffen – Borstvoeding SZW-lijst van reprotoxische stoffen – Vruchtbaarheid SZW-lijst van reprotoxische stoffen – Ontwikkeling <b>Denmark</b> Danish National Regulations	:	C - Minimize discharge None of the components are listed None of the components are listed None of the components are listed None of the components are listed Pregnant/breastfeeding women working with the product must not be in direct contact with it
15.2 Chemical safety assessment		

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP] No chemical safety assessment has been carried out

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

Residual oils (petroleum,) solvent-refined

## SECTION 16: Other information

Indication of changes					
Section	Changed item	Change	Notes		
	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/A = not applicable	
	N/D = not available	
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	
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)	
IARC	International Agency for Research on Cancer	

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Abbreviations and acronyms:		
ΙΑΤΑ	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	
РВТ	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	
STP	Sewage treatment plant	
vPvB	Very Persistent and Very Bioaccumulative	

Data	sources

Training advice

Other information

- : 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.
- Provide adequate training to professional operators for the use of PPEs, according to the information contained in this Safety Data Sheet.
  Do not use the product for any purposes that have not been advised by the manufacturer. In exceptional cases (i.e prolunged 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. This situation is especially relevant in all those circumstances which require to enter a confined space, with direct exposure to the vapours. This situation is especially relevant for those operations which

involve direct exposure to the vapours in the interior of tanks or other confined spaces. 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.

Full text of H- and EUH-statements:		
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
EUH210	Safety data sheet available on request.	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H411	Toxic to aquatic life with long lasting effects.	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	

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.