

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878 Revision date: 4/4/2024 Version: 1.0

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

1.1. Product identifier

Product form	: Mixture
Trade name	: Eni Mix 2T
Product code	: 1401
Type of product	: Lubricant
Formula	: 0134-2023
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, Consumer use
Industrial/Professional use spec	: Wide dispersive use
	Used in closed systems
Use of the substance/mixture	: Lubricant for two-stroke engines
Function or use category	: Lubricants and additives
	: Lubricant for two-stroke engines

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

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1.4. Emergency telephone number

Emergency number

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

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

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.	
Nordic countries regulation		

Denmark

MAL code

: 00-1 (Executive Order No. 301 from 1993)

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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. 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.		

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	
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent- refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	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
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 °C (104 °F).] (101316-72-7)	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
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics	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

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	
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 °C (104 °F).](101316-72-7)	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

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Component	
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics	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
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent- refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	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 Additives

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]
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 °C (104 °F).] (see note [**], see note [***]) substance with national workplace exposure limit(s) (AT, BE, DK, ES, GB, HU, NL, SE)	CAS-No.: 101316-72-7 EC-No.: 309-877-7 EC Index-No.: 649-530-00-X REACH-no: 01-2119489969- 06	80 – 90	Not classified
Residual oils (petroleum,) solvent-refined substance with national workplace exposure limit(s) (AT, BE, DK, ES, GB, HU, NL, SE)	CAS-No.: 64742-01-4 EC-No.: 265-101-6 EC Index-No.: 649-459-00-4 REACH-no: 01-2119488707- 21	10 – 15	Not classified
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics substance with national workplace exposure limit(s) (DE)	EC-No.: 926-141-6 REACH-no: 01-2119456620- 43	3 - 5	Asp. Tox. 1, H304 EUH066
Mineral base oil, severely refined (see note [*]) substance with national workplace exposure limit(s) (AT, BE, DK, ES, GB, HU, NL, SE)	EC-No.: N/A	0,9 - 1,3	Not classified

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent- refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50		0.108 – 0.12	Repr. 1B, H360 Aquatic Chronic 4, H413

Notes

: [*] Note: this product may be formulated with one or more of the following severely refined mineral base oils (not classified as hazardous):

CAS 64742-54-7/EC 265-157-1/REACH Reg. # 01-2119484627-25-xxxx; CAS 64742-65-0/EC 265-169-7/REACH Reg. # 01-2119471299-27-xxxx; CAS 64742-70-7/EC 265-174-4/REACH Reg. # 01-2119487080-42-xxxx; CAS 64742-56-9/EC 2265-159-2/ REACH Reg. # 01-2119480132-48-xxxx. All these substances have a value < 3 % wt of DMSO extract, according to IP 346 (Nota L -Annex VI Reg (CE) 1272/2008, # 1.1.3) 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 First-aid measures after skin contact	 In case of disturbances owing to inhalation of vapours or mists, remove the victim from exposure; keep at rest; if necessary, seek medical attention. See also section 4.3. Take off contaminated clothing and shoes. Wash thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention. 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. Body hypothermia must be avoided. Do not put ice on the burn. 	
First-aid measures after eye contact	: Rinse eyes thoroughly for at least 15 minutes. Keep eyelids well apart. Remove contact lenses, if present and easy to do. Continue rinsing. 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	: 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. Do not induce vomiting to avoid aspiration into the lungs. 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 inconscious, place in the recovery position. Do not give anything by mouth to an unconscious person.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms / injuries (general indications) Symptoms/effects after inhalation	 Not expected to present a significant hazard under anticipated conditions of normal use. 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. 	
Symptoms/effects after skin contact	: Contact with hot product may cause thermal burns.	

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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 Chronic symptoms	 No information available. 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 Unsuitable 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). 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 subst	tance or mixture	
Fire hazard Explosion 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. Heat may build pressure in tank and containers, rupturing closed vessels, spreading fire and increasing the other and the vapour and flammable of wave and the vapour. 	
Hazardous decomposition products in case of fire	 increasing risk of burns and injuries. The vapours are flammable and may form explosive mixtures with air. Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, NOx, H2S and SOx (harmful/toxic gases). Oxygenated compounds (aldehydes, etc.). CaOx. 	
5.3. Advice for firefighters		
Firefighting instructions	: Shut off source of product, if possible. If possible, move containers and drums away from the danger area, if safe to do so. 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.	
Special protective equipment for firefighters	 Advice for firefighters and protective measures. 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, prote	ctive 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 Emergency procedures	 See Section 8. 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.

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6.1.2. For emergency responders

Protective equipment	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 gloves providing adequate chemical resistance, specifically to aromatic
	hydrocarbons. Gloves made of PVA are not water-resistant, and are not suitable for
	emergency use. 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. 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.

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 cleanup, 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".

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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. Take off immediately all contaminated clothing and wash it before reuse. Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets. 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.
7.2. Conditions for safe storage, including a	ny 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	: Keep away from: strong oxidants.
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.

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

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 °C (104 °F).] (101316-72-7)

Austria - Occupational Exposure Limits	
MAK (OEL TWA)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Belgium - Occupational Exposure Limits	
OEL TWA	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Denmark - Occupational Exposure Limits	
OEL TWA [1]	1 mg/m³ (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 Limits	
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)

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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 °C (104 °F).] (101316-72-7)		
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
KGV (OEL STEL)	3 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
WEL STEL (OEL STEL)	10 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)	
Hydrocarbons, C11-C14, n-alkanes, iso-alkan	es, cyclics < 2% aromatics	
Germany - Occupational Exposure Limits (TRGS 90	0)	
AGW (OEL TWA) [1]	350 mg/m³	
AGW (OEL TWA) [2]	50 ppm	
Limitation of exposure peaks (mg/m³)	700 mg/m³	
Limitation of exposure peaks (ppm)	100 ppm	
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA) [1]	350 mg/m³	
VLE [mg/m³]	700 mg/m³	
Mineral base oil, severely refined		
Austria - Occupational Exposure Limits		
MAK (OEL TWA)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Belgium - Occupational Exposure Limits		
OEL TWA	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Denmark - Occupational Exposure Limits		
OEL TWA [1]	1 mg/m³ (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 Limits		
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/m ³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
KGV (OEL STEL)	3 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	

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Mineral base oil, severely refined		
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
WEL STEL (OEL STEL)	10 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)	
Residual oils (petroleum,) solvent-refined (64742-01-4)		
Austria - Occupational Exposure Limits		
MAK (OEL TWA)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Belgium - Occupational Exposure Limits		
OEL TWA	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Denmark - Occupational Exposure Limits		
OEL TWA [1]	1 mg/m³ (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 Limits		
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 Limits		
NGV (OEL TWA)	1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
KGV (OEL STEL)	3 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
WEL STEL (OEL STEL)	10 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	

Applicable OEL and BLV for air contaminants : None known

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8.1.4. DNEL and PNEC

8.1.4. DNEL and PNEC	
Eni Mix 2T	
DNEL/DMEL (additional information)	
Additional information	Not applicable
PNEC (additional information)	
Additional information	Not applicable
combination of hydrocarbons obtained by sol consists predominantly of hydrocarbons havi	extd., dewaxed, hydrogenated; Baseoil— unspecified; [A complex vent extraction and hydrogenation of atmospheric distillation residues. It ng carbon numbers predominantly in the range of C24 through C50 and order of 16cSt to 75cSt at 40 °C (104 °F).] (101316-72-7)
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2.7 mg/m³
Long-term - local effects, inhalation	5.4 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
Hydrocarbons, C11-C14, n-alkanes, iso-alkane	es, cyclics < 2% aromatics
DNEL/DMEL (additional information)	
Additional information	No-threshold effect and/or no dose-response information available
PNEC (additional information)	
Additional information	Not derived - Not classified as hazardous for environment
	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	None known
Control banding :	

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure that there is a suitable ventilation system. 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. See also Section 16, "Other information".

8.2.2. Personal protection equipment

Personal protective equipment (for industrial or professional use):

Gloves. Safety glasses.

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Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

When there is a risk of contact with the eyes, use safety goggles or other means of protection (face shield). If necessary, refer to national standards or to the EN 166 standard.

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 and insulated.

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.

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: in presence of oil mists and if the product is handled without adequate containment means: use full or half-face masks with filter for mists/aerosols (P). In case there is a significant presence of vapours (e.g. through handling at high temperature), use full or half-face masks with a filter for organic vapours (A), and H2S (B) where applicable. (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. 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. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Prevent discharge of undissolved substance to or recover from onsite wastewater. Onsite wastewater treatment required. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

Consumer exposure controls:

No special requirements.

SECTION 9: Physical and chemical properties

Physical state :	Liquid
Colour	Red
Appearance :	Liquid, bright & clear.
Odour :	Slight odour of petroleum.
Odour threshold :	There are no data available on the preparation/mixture itself.
Melting point :	Not applicable
Freezing point :	≈ 0 °C (CAS 101316-72-7)
Softening point :	-28 °C (ASTM D 5950)
Boiling point :	> 250 (CAS 101316-72-7)
Flammability	Not flammable
Lower explosion limit :	Lack of data (on mixture / components of the mixture) - Data not available

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Upper explosion limit	: Lack of data (on mixture / components of the mixture) - Data not available
Flash point	: 111 °C (ASTM D 93)
Auto-ignition temperature	: > 300 °C (CAS 101316-72-7)
Decomposition temperature	: Lack of data (on mixture / components of the mixture) - Data not available
рН	: Lack of data (on mixture / components of the mixture) - Data not available
Viscosity, kinematic	: 62 mm²/s (40 °C) (ASTM D 445)
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	: ≤ 890 kg/m³ (15 °C) (ASTM D 4052)
Relative density	: Lack of data (on mixture / components of the mixture) - Data not available
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 (butvlacetate=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.) or alkali metals 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 generates : Carbon dioxide, Carbon monoxide, 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)	
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)	
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)	
Additional information	: (according to composition)	

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LD50 oral rat		
	> 5000 mg/kg bodyweight (OECD 401)	
LD50 dermal rabbit	> 4000 mg/kg bodyweight (24h, OECD 402)	
LC50 Inhalation - Rat	> 1.67 mg/l (1h, OECD 403)	
LC50 Inhalation - Rat (Vapours)	> 1.67 mg/l/4h (1h, OECD 403)	
combination of hydrocarbons obtained by so consists predominantly of hydrocarbons have	extd., dewaxed, hydrogenated; Baseoil— unspecified; [A complex lvent extraction and hydrogenation of atmospheric distillation residues. It ing carbon numbers predominantly in the range of C24 through C50 and order of 16cSt to 75cSt at 40 °C (104 °F).] (101316-72-7)	
LD50 oral rat	> 5000 mg/kg (API 1982a, OECD 420)	
LD50 dermal rabbit	> 5000 mg/kg bodyweight (API 1986b, OECD 403)	
LC50 Inhalation - Rat	≤ 5.53 mg/l/4h (API 1987, Exxon Biomedical Sciences, Inc. 1988, BioResearch Laboratories, Ltd. 1984 - OECD 403)	
Hydrocarbons, C11-C14, n-alkanes, iso-alkane	es, cyclics < 2% aromatics	
LD50 oral rat	5000 – 15000 mg/kg bodyweight (OECD 401; ExxonMobil, 1989)	
LD50 dermal rat	≥ 2000 mg/kg bodyweight (OECD 402; CEPSA Quimica, 1989)	
LD50 dermal rabbit	3160 – 5000 mg/kg bodyweight (OECD 402; ExxonMobil, 1984)	
LC50 Inhalation - Rat	5000 – 11000 mg/m³ (OECD 403) (Read across: C11-C13, < 2% arom; ExxonMobil, 2005)	
Mineral base oil, severely refined		
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401)	
LD50 dermal rat	> 5000 mg/kg bodyweight (OECD 402)	
LC50 Inhalation - Rat	> 5 mg/l/4h (OECD 403)	
Residual oils (petroleum,) solvent-refined (64742-01-4)		
LD50 oral rat	> 5000 mg/kg bodyweight	
LD50 dermal rat	> 2000 mg/kg bodyweight	
LC50 Inhalation - Rat	> 5 mg/l/4h	
	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 (according to composition)	
	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 °C (104 °F).] (101316-72-7)		
рН	Not applicable	
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics		
рН	Not applicable	
Mineral base oil, severely refined		
pH	Not applicable	
	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 : 4/4/2024 (Revision date)	(according to composition) EN (English) 13/25	

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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 °C (104 °F).] (101316-72-7)

рН	Not applicable
Hydrocarbons, C11-C14, n-alkanes, iso-alka	nes, cyclics < 2% aromatics
рН	Not applicable
Mineral base oil, severely refined	
рН	Not applicable
Additional information	 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 °C (104 °F).], Residual oils (petroleum) solvent-refined; Baseoil— unspecified; [A complex combination form 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°C (752°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. All the mineral base oils contained in this product have a value < 3 % wt of DMSO extract, according to IP 346 (Nota L - Annex VI Reg (CE) 1272/2008, # 1.1.3) No carcinogenic effect
Hydrocarbons, C11-C14, n-alkanes, iso-alka	nes, cyclics < 2% aromatics
NOAEL (chronic, oral, animal/male, 2 years)	138 mg/m ³ (NOAEC - OECD 453) (Read across: Stoddard solvent; NTP, 2004)
NOAEL (chronic, oral, animal/female, 2 years)	> 2200 mg/m³ (NOAEC - OECD 453) (Read across: Stoddard solvent; NTP, 2004)
	 Not classified (Based on available data, the classification criteria are not met) (according to composition)
	branched olefins (C12 rich) derived from propene oligermization, carbonate, ng distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or C10-C50
NOAEL (animal/male, F0/P)	300 mg/kg (OECD 416)
Hydrocarbons, C11-C14, n-alkanes, iso-alka	nes, cyclics < 2% aromatics
NOAEC (PO), Inhalation, rat, local	≥ 1720 mg/m³ (5 days/week, for 8 weeks, (OECD 421), (ExxonMobil 1980))
STOT-single exposure : Additional information : STOT-repeated exposure : Additional information :	 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)
	branched olefins (C12 rich) derived from propene oligermization, carbonate, ng distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or C10-C50
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight/day
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Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate,		
calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50		
NOAEL (dermal, rat/rabbit, 90 days)	250 mg/kg bodyweight/day	
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 °C (104 °F).] (101316-72-7)		
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day (Mobil 1990 - OECD TG 408)	
LOAEL (dermal, rat/rabbit, 90 days)	100 mg/kg bodyweight/day (mouse, Chasey, K.L. and McKee, R.H. 1993 - OECD 453)	
NOAEL (dermal, rat/rabbit, 90 days)	1000 – 2000 mg/kg bodyweight/day (API 1986, Mobil Environmental and Health Science Laboratory 1983 - OECD 410)	
NOAEC (inhalation,rat, vapour, 90 days)	220 – 1500 mg/m³ (Exxon Biomedical Sciences, Inc. 1991, Dalbey W, Osimitz T, Kommineni C, Roy T, Feuston M and Yang J 1991 - OECD 412)	
Hydrocarbons, C11-C14, n-alkanes, iso-alkane	es, cyclics < 2% aromatics	
NOAEL (oral, rat, 90 days)	1000 – 5000 mg/kg bodyweight/day (OECD 408, Sasol, 1995 - ExxonMobil 1991)	
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	2200 – 10400 mg/l air (OECD 413 - OECD 453, National Toxicology Program 2006 - Shell, 1980)	
Mineral base oil, severely refined		
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day (OECD TG 408)	
Residual oils (petroleum,) solvent-refined (64	742-01-4)	
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)	
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	 > 0.98 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study) 	
	Not classified (Based on available data, the classification criteria are not met) (according to composition)	
Eni Mix 2T		
Viscosity, kinematic	62 mm²/s (40 °C) (ASTM D 445)	
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50		
Viscosity, kinematic	206820 mm²/s (40°C)	
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 °C (104 °F).] (101316-72-7)		
Viscosity, kinematic	20.6 – 62 mm²/s (40 °C) (ASTM D 445)	
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics		
Viscosity, kinematic	2 – 3.5 mm²/s (20°C - ASTM D 7042)	
Hydrocarbon	Yes	
Mineral base oil, severely refined		
Viscosity, kinematic	> 21 mm²/s	

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Mineral base oil, severely refined		
Hydrocarbon	Yes	
Residual oils (petroleum,) solvent-refined (64742-01-4)	
Viscosity, kinematic	490 mm²/s (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 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 %	
11.2.2. Other information		
Potential adverse human health effects and symptoms Other information	 Contact with eyes may cause reddening and irritation,Avoid all eye and skin contact and do not breathe vapour and mist None 	

			e
SECTION 1	2: Ecolo	dical in	formation

12.1. I OXICITY	
Ecology - general	 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 if the product is used at high temperature, or in case of sprays and mists. In these cases overexposure to vapours 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)
Hazardous to the aquatic environment, short–term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long–term (chronic)	: Not classified

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50

0, Cavedano americano) (OECD 203)
DECD TG 202)
50, Crangon crangon)
50, Pseudokirchneriella subcapitata, OECD TG 201)
ELR, 48h)
ELR, 96h)

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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 °C (104 °F).] (101316-72-7)

LC50 fish 1	> 100 mg/l (LL 50, Exxon 1995 - OECD 203)	
EC50 Daphnia 1	> 10000 mg/l (WAF, 48 h, 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)	
Hydrocarbons, C11-C14, n-alkanes, iso-alkane	es, cyclics < 2% aromatics	
LC50 fish 1	≥ 1000 mg/l LL50, 72 h (Oncorhynchus mykiss, OECD 203) (QSAR, CONCAWE 2010)	
EC50 Daphnia 1	≥ 1000 mg/l EL50, 48 h (OECD 202) (SRC, 1994)	
EC50 other aquatic organisms 1	≥ 10000 mg/l LL50, 48 h (Chaetogammarus marinus, OECD 202) (TNO, 1991)	
ErC50 (algae)	≥ 1000 mg/l EL50, 72 h (Pseudokirchneriella subcapitata, OECD 201) (SRC, 1994)	
NOEC (acute)	1000 mg/l NOELR, 72 h (Pseudokirchnerella subcapitata, OECD 201) (SRC, 1994)	
NOEC chronic fish	0.173 mg/l (NOELR, 28d, QSAR, CONCAWE 2010)	
NOEC chronic crustacea	1.22 mg/l (NOELR, 21d, QSAR, CONCAWE 2010)	
Mineral base oil, severely refined		
LC50 fish 1	> 100 mg/l (LL 50)	
EC50 Daphnia 1	> 10000 mg/l WAF, 48 h (OECD 202)	
Residual oils (petroleum,) solvent-refined (64742-01-4)		
LC50 fish 1	100 mg/l	
EC50 Daphnia 1	10 g/l	
L	·	

12.2. Persistence and degradability

Eni Mix 2T		
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.	
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50		
Persistence and degradability	Product is biodegradable with difficulty.	
Biodegradation	13.4 % (28d, OECD TG 301 B)	
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 °C (104 °F).] (101316-72-7)		
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.	

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Persistence and degradability The most significant constituents of the product should be considered as 'readily biodogradabile'. Biodegradation 77 – 83 % 28 (GECD 301 F) (Shell, 1997) Mineral base oil, severely refined The most significant constituents of the product should be considered as 'inherently biodogradabile', and they may be moderately persistent, particularly in anaerobic conditions. Residual oils (potroleum,) solvent-refined (45742-01-) Persistence and degradability Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances. UVCB substances 12.3, Bioaccumulative potential Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances. 12.9 Pow Not applicable for mixtures 12.9 Row Not established. Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) dortved from propene ollgermization, carbonato, calchurs alts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffile. C40-C50 Bicoconentation file (BCF REACH) 2.2 (14/2) 12.0 Pow 9.5 12.0 Lubricating oils (petroleum), C24-50, solvent-ext. C40-C50 Bicoconentation of hydrocarbons having carbon numbers prodomated; Basolin– unspecified; [A complex combination of hydrocarbons having carbot 15.0 to 75.5t at 40 °C (144 °F)] (101316-72.7) <th colspan="3">Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics</th>	Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics		
Minoral base oil, severely refined 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. 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. 12.3. Bioaccumulative potential Eni Mix 2T Log Pow Not applicable for mixtures Bioaccumulative potential Not established. Phenol, paraalixylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium saits, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or have y parafinic C10-C50 Bioconcentration factor (BCF REACH) 2.2 (14d) Lubricating oils (petroleum), C24-69, solvent-extd, dewaxed, hydrogenated; Baseol— unspecified; [A complex combination 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 °C (104 °FT)] (101316-72.7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclices < 2% aromatics	Persistence and degradability		
Persistence and degradability The mest significant constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anerobic conditions. Residual olis (petroleum,) solvent-refined (64742-01-4) Persistence and degradability Substances is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances. Intervention of the product should be considered as "inherently biodegradability" 2.3. Bioaccumulative potential Not applicable for mixtures Bioaccumulative potential Not applicable for mixtures Bioaccumulative potential Not established. Phenol, paraalkylation products with C10-155 branched olefins (C12 rich) derived from propane oligermization, carbonate, catalytic dewaxed, light or havey parafilinc C10-C50 Bioconcentration factor (BCF REACH) 22 (14d) Lug Pow 9.5 Lubricating olls (petroleum), C24-50, solvent-ext.d, dewaxed, hydrogenated; Baseol— unspecified; fA complex combination of hydrocarbons having carbon numbers predominanty in the range of C24 through C50 and produces a finished oll with a viscosity in the ord of 16CS to 75CS tat 40 °C (104 4F); (101316-72.7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclices < 2% aromatics	Biodegradation	77 – 83 % 28 d (OECD 301 F) (Shell, 1997)	
bidgeradable*, but not *readily bidgeradable*, and they may be moderately persistent, particularly in anaerobic conditions. Residual oils (petroleum,) solvent-refined (64742-01-) Persistence and degradability Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances. 12.3. Bioaccumulative potential Substances Eni Mix 2T Log Pow Log Fow Net applicable for mixtures Bioaccumulative potential Substance Core pow 95 Bioaccumulation of hydrocarbons obtained by solvent extraction and hydrogenation of atmospheric distillation residues. It consists predominantly of hydrocarbons naving carbon numbers predominantly in the range of C24 through C50 and produces a finished oil with a viscosity in two-refer of Sics to 75cSt at 40 °C (104 °F).] (101316-72.7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Log Pow Not applicable (UVCB) Log Pow Not app	Mineral base oil, severely refined		
Persistence and degradability Substance is complex UVCB. The test methods for this endpoint are not applicable to UVCB substances. 12.3. Bioaccumulative potential Not applicable for mixtures Log Pow Not applicable for mixtures Bioaccumulative potential Not established. Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, catalytic dewaxed, light or heavy paraffinic C1-C50 Bioconcentration factor (BCF REACH) 22 (14d) Log Pow 9.5 Lubricating oils (petroleum), C24-50, solvent-extLd, dewaxed, hydrogenated; Baseoil— unspecified; fA complex combinantly 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 °C (104 °F).] (101316-72-7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkares, cyclics < 2% aromatics	Persistence and degradability	biodegradable", but not "readily biodegradable", and they may be moderately persistent,	
LuvCB substances. 12.3. Bioaccumulative potential Eni Mix 2T Log Pow Not applicable for mixtures Iog Kow Not applicable for mixtures Bioaccumulative potential Not established. Pheno, paraalkytation products with C10-15 branched olefins (C12 rich) derived from propene oilgermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent edwaxed, or catalytic dewaxed, light or heavy paraffinic C1-C50 Bioconcentration factor (BCF REACH) 22 (14d) Lubricating oils (petroleum), C24-50, solvent-vtL, 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 °C (104 °F).] (101316-72-7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkar-c20-0 Veces 24 aromatics Log Pow Not applicable (UVCB) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkar-c2-01-4) Bioaccumulative potential Bioaccumulative potential The test methods for this	Residual oils (petroleum,) solvent-refined (64	742-01-4)	
Eni Mix 2T Log Pow Not applicable for mixtures Log Kow Not applicable for mixtures Bioaccumulative potential Not established. Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium saits, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinc C10-C50 Bioconcentration factor (BCF REACH) 22 (14d) Log Pow 9.5 Lubricating oils (petroleum), C24-50, solvent-wt.d., dewaxed, hydrogenated; Baseoil— unspecified; [A complex combination of hydrocarbons botime 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 °C (104 °F). (101316-72-7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics	Persistence and degradability		
Log Pow Not applicable for mixtures Log Kow Not applicable for mixtures Bioaccumulative potential Not established. Phonol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligernization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-CS0 Bioconcentration factor (BCF REACH) 2.2 (14d) Log Pow 9.5 Lubricating oils (petroleum), C24-50, solvent-ext.d, 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 f6cSt to 75cSt at 40 °C (104 °F.] (101316-72-7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkace, cyclics < 2% aromatics	12.3. Bioaccumulative potential		
Log Kow Not applicable for mixtures Bioaccumulative potential Not established. Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50 Bioconcentration factor (BCF REACH) 2.2 (14d) Log Pow 9.5 Lubricating oils (petroleum), C24-50, solvent-extra, dewaxed, hydrogenated; Baseoil— unspecified; [A complex combination of hydrocarbons babianed 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 °C (104 °F).] (101316-72.7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics	Eni Mix 2T		
Bioaccumulative potential Not established. Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50 Bioconcentration factor (BCF REACH) 2.2 (14d) Log Pow 9.5 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 16CS to 75CS tat 40 °C (104 °F).] (101316-72-7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkares, cyclics < 2% aromatics	Log Pow	Not applicable for mixtures	
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium saits, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50 Bioconcentration factor (BCF REACH) 2.2 (14d) Log Pow 9.5 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 °C (104 °F).] (101316-72-7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkares, cyclics < 2% aromatics	Log Kow	Not applicable for mixtures	
calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50 Bioconcentration factor (BCF REACH) 2.2 (14d) Log Pow 9.5 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 °C (104 °F).] (101316-72-7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkacust, cyclics < 2% aromatics	Bioaccumulative potential	Not established.	
Log Pow 9.5 Lubricating oils (petroleum), C24-50, solvent-orticl, 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 °C (104 °F).] (101316-72-7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics	calcium salts, overbased, sulfurized, includin	g distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or	
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 °C (104 °F).] (101316-72-7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkares, cyclics < 2% aromatics	Bioconcentration factor (BCF REACH)	2.2 (14d)	
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 °C (104 °F).] (101316-72-7) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Hydrocarbons, C11-C14, n-alkanes, iso-alkares, cyclics < 2% aromatics	Log Pow	9.5	
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics	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		
Log Pow Not applicable (UVCB) Log Kow Not applicable (UVCB) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Residual oils (petroleum,) solvent-refined (64742-01-4) Bioaccumulative potential Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. 12.4. Mobility in soil The test methods for this endpoint are not applicable to UVCB substances. 12.4. Mobility in soil Eni Mix 2T Ecology - soil No data available. Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	Bioaccumulative potential	The test methods for this endpoint are not applicable to UVCB substances.	
Log Kow Not applicable (UVCB) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Residual oils (petroleum,) solvent-refined (64742-01-4) Bioaccumulative potential Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. 12.4. Mobility in soil The test methods for this endpoint are not applicable to UVCB substances. Eni Mix 2T Ecology - soil Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	Hydrocarbons, C11-C14, n-alkanes, iso-alkane	es, cyclics < 2% aromatics	
Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. Residual oils (petroleum,) solvent-refined (64742-01-4) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. 12.4. Mobility in soil The test methods for this endpoint are not applicable to UVCB substances. Eni Mix 2T Ecology - soil Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	Log Pow	Not applicable (UVCB)	
Residual oils (petroleum,) solvent-refined (64742-01-4) Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. 12.4. Mobility in soil Image: Comparison of the test methods for this endpoint are not applicable to UVCB substances. 12.4. Mobility in soil Eni Mix 2T Ecology - soil No data available. Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	Log Kow	Not applicable (UVCB)	
Bioaccumulative potential The test methods for this endpoint are not applicable to UVCB substances. 12.4. Mobility in soil 12.4. Mobility in soil Eni Mix 2T Ecology - soil No data available. Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	Bioaccumulative potential	The test methods for this endpoint are not applicable to UVCB substances.	
12.4. Mobility in soil Eni Mix 2T Ecology - soil No data available. Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	Residual oils (petroleum,) solvent-refined (64742-01-4)		
Eni Mix 2T Ecology - soil No data available. Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	Bioaccumulative potential	The test methods for this endpoint are not applicable to UVCB substances.	
Ecology - soil No data available. Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	12.4. Mobility in soil		
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	Eni Mix 2T		
calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	Ecology - soil	No data available.	
Ecology - soil Product adsorbs onto the soil.	calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or		
	Ecology - soil	Product adsorbs onto the soil.	

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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 °C (104 °F).] (101316-72-7)

Ecology - soil	This product is not soluble in water. It floats on water and forms a film on the surface.	
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics		
Surface tension	24 – 29 mN/m (20°C)	
Log Koc 4.16 – 5.88		
Ecology - soil The test methods for this endpoint are not applicable to UVCB substances.		
Residual oils (petroleum,) solvent-refined (64742-01-4)		
Ecology - soil The test methods for this endpoint are not applicable to UVCB substances.		

12.5. Results of PBT and vPvB assessment

Eni Mix 2T		
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII		
This substance/mixture does not meet the vPvB criteria	a 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		
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent- refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50	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 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)	
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 °C (104 °F).] (101316-72-7)	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 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)	
Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics	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 This substance does not meet the criteria for classification as PBT or vPvB.	
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 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 substance(s) are	

2018/605 at a concentration equal to or greater than 0,1 %.

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)

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12.7. Other adverse effects	
Other adverse effects Additional information	 None. This product has no specific properties for inhibition of bacterial activity. In any case, wastewater containing this product should be treated in plants that are suited for the specific purpose.

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 EURAL code (EWC)	 The product as it is does not contain halogenated substances. 13 02 05* - Mineral-based non-chlorinated engine, gear and lubricating oils 		

SECTION 14: Transport information

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID	number		1	
Not regulated for transport				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shippir	ng 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

14.6. Special precautions for user

Overland transport Not regulated

Transport by sea Not regulated

Air transport Not regulated

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Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

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 (RE/	U restriction list (REACH Annex XVII)		
Reference code	Applicable on Entry title or description		
3(b)	Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics	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)

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)

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

Cermany	
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 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 910: Risk-related concept of measures for activities involving carcinogenic hazardous substances.
VbF class (D)	: Not applicable.
Water hazard class (WGK) (D)	: WGK 1, Slightly 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 (BGBI 2017, Teil I, Nr. 22, Seite 905).
Storage class (LGK, TRGS 510)	: LGK 10 - Combustible liquids.
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject to the Hazardous Incident Ordinance (12. BImSchV)
Netherlands	
Waterbezwaarlijkheid	 8 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment 9 - Harmful to aquatic organisms
Saneringsinspanningen	: C - Minimize discharge
SZW-lijst van kankerverwekkende stoffen	: 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 °C (104 °F).],Residual oils (petroleum,) solvent-refined are listed
SZW-lijst van mutagene stoffen	: 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 °C (104 °F).],Residual oils (petroleum,) solvent-refined 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

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Denmark	
MAL code Danish National Regulations	 : 00-1 (Executive Order No. 301 from 1993) : 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
Switzerland	
Storage class (LK)	: LK 10/12 - Liquids
15.2. Chemical safety assessment	

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

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

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligermization, carbonate, calcium salts, overbased, sulfurized, including distillates (petroleum), hydrotreated, solvent-refined, solvent dewaxed, or catalytic dewaxed, light or heavy paraffinic C10-C50 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 °C (104 °F).]

Hydrocarbons, C11-C14, n-alkanes, iso-alkanes, cyclics < 2% aromatics 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/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	
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)	

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Abbreviations and acronyms:		
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	
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	
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

Other information

: 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 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. 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 H2S 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 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. 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 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH210	Safety data sheet available on request.
H304	May be fatal if swallowed and enters airways.
H360	May damage fertility or the unborn child.
H413	May cause long lasting harmful effects to aquatic life.
Repr. 1B	Reproductive toxicity, Category 1B

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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.