

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878 Revision date: 19/07/2022 Supersedes: 07/10/2019 Version: 3.0

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

1.1. Product identifier Product form : Mixture Trade name • Eni i-Base 15W-40 Product code · 1033 Type of product : Lubricants : 0197-2019 Formula 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 Used in closed systems Wide dispersive use Use of the substance/mixture : Lubricant for internal combustion engines ____ Do not use the product for any purposes that have not been advised by the manufacturer. : Lubricants and additives Function or use category 1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ENI S.p.A. P.le E. Mattei 1 - 00144 Rome Italy Phone: (+39) 06 59821 www.eni.com

Competent person responsible for the Safety Data Sheet (Reg. EC nr. 1907/2006): SDSInfo@eni.com

1.4. Emergency telephone number	
Emergency number	: CNIT +39 0382 24444 (24h) (IT + EN)
	Poison centre (UK):
	National Poisons Information Service Edinburgh (24h)
	(+44) 844 892 0111
	0870 600 6266 (UK only)
	(Source: UN-WHO)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

Contact with eyes may cause temporary reddening and irritation. For specific information about the toxicological/ecotoxicological properties and classification of this product, see Sect. 11 and/or Sect. 12.

2.2. Label elements

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

EUH-statements

: EUH210 - Safety data sheet available on request.

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2.3. Other hazards (not relevant for classification)		
Other hazards not contributing to the classification	: 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. Any substance, in case of accidents involving pressurized circuits and the like, may be accidentally injected under the skin, even without external damage. In such a case, the victim should be brought to an hospital as soon as possible, to get specialized medical treatment. Do not wait for symptoms to develop. A potential risk may arise from the release of hydrogen sulfide, when the product is stored or handled at high temperature. Hydrogen sulfide may accumulate in the tanks or other confined spaces, with danger to the workers that enter the spaces. In these cases overexposure to hydrogen sulfide may cause irritation to airways, nausea, dizziness, loss of consciousness and death.	

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Component		
Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated (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)	
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII 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)	
Distillates (petroleum), solvent-refined light paraffinic (64741-89-5)	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)	
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	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)	
Calcium carbonate (471-34-1)	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)	
Component		
Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated(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	
Distillates (petroleum), solvent-dewaxed heavy paraffinic(64742-65-0)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
Distillates (petroleum), solvent-refined light paraffinic(64741-89-5)	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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Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	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
Calcium carbonate(471-34-1)	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 (Main component, see note [**])	(CAS-No.) 101316-72-7 (EC-No.) 309-877-7 (EC Index-No.) 649-530-00-X (REACH-no) 01-2119489969-06	50 – 60	Not classified
Distillates (petroleum), solvent-dewaxed heavy paraffinic (Component, see note [**])	(CAS-No.) 64742-65-0 (EC-No.) 265-169-7 (EC Index-No.) 649-474-00-6 (REACH-no) 01-2119471299-27	30 – 35	Not classified
Mineral base oil, severely refined (For identification of the substance, see note [*], see note [***])	(CAS-No.) N/A (EC-No.) N/A	1 - 3	Not classified
Distillates (petroleum), solvent-refined light paraffinic	(CAS-No.) 64741-89-5 (EC-No.) 265-091-3 (EC Index-No.) 649-455-00-2 (REACH-no) 01-2119487067-30	1,5 – 1,9	Asp. Tox. 1, H304
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts (see note [****])	(EC-No.) 939-603-7 (REACH-no) 01-2119978241-36	0,5 – 0,9	Not classified
Calcium carbonate (see note [*****])	(CAS-No.) 471-34-1 (EC-No.) 207-439-9 (EC Index-No.) N/A (REACH-no) 01-2119486795-18-0059	0,5 – 0,9	Not classified
Fumaric acid	(CAS-No.) 110-17-8 (EC-No.) 203-743-0 (EC Index-No.) 607-146-00-X (REACH-no) N/D	0,001 – 0,004	Eye Irrit. 2, H319

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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. 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) Note [*****]: Total Base Number (TBN): > 300 mgKOH/g (ASTM D 2896) More detailed information: See section 11. Note [*****]:
	Note [*****]: substance with national workplace exposure limit(s)

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	: 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.
First-aid measures after skin contact	: Take off contaminated clothing and shoes. Wash thoroughly with soap and water. Seek medical attention if skin irritation, swelling or redness develops and persists. In case of contact with hot product, cool affected part with plenty of cold water, and cover with gauze or clean cloth. Call a doctor or bring to an hospital. Do not use salves or ointments, unless directed by doctor. 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. If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist. Remove contact lenses, if present and easy to do. Continue rinsing. In case of contact with hot product, cool affected part with plenty of cold water, and cover with gauze or clean cloth. Call a doctor or bring to an hospital. Do not use salves or ointments, unless directed by doctor.
First-aid measures after ingestion	: Do not induce vomiting. If the person is conscious, rinse mouth with water without swallowing. Keep at rest. Call for medical assistance or bring to an hospital. If the casualty is unconscious, place in the recovery position. In case of spontaneous vomiting, keep head low, to avoid the risk of aspiration into the lungs. Do not give anything by mouth to an unconscious person.
4.2. Most important symptoms and effects,	both acute and delayed
Symptoms/effects after inhalation	: 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 severe thermal burns.
Symptoms/effects after eye contact	: Contact with eyes may cause a light transient irritation. Contact with hot product or vapours may cause burns.
Symptoms/effects after ingestion	 Accidental ingestion of small quantities of the product may cause nausea, discomfort and gastric disturbances.
Symptoms/effects upon intravenous administration	: No information available.
Chronic symptoms	: None to be reported, according to the present classification criteria.

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

Obtain medical attention if casualty has an altered state of consciousness or if symptoms do not resolve. Seek medical attention in all cases of serious burns. If there is any suspicion of inhalation of H2S (hydrogen sulphide). Send the casualty immediately to hospital. Immediately begin artificial respiration if breathing has ceased. Administer oxygen if necessary.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Small-size fires: carbon dioxide, dry chemicals, foam, sand or earth. Large fires: foam or water fog (mist). These means should be used by trained personnel only. Other extinguishing gases (according to regulations).
Unsuitable extinguishing media	: Do not use direct water jets on the burning product. 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 subs	tance or mixture
Fire hazard	: This product is combustible, but not classified as Flammable. The creation of flammable vapour mixtures takes place at temperatures which are higher than normal ambient levels.
Explosion hazard	: In case of losses from pressurized circuits, the sprays may form mists. Take into account that in this case the lower explosion limit for mists is about 45 g/m3 of air.
Hazardous decomposition products in case of fire	 Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, NOx, H2S and SOx (harmful/toxic gases). Oxygenated compounds (aldehydes, etc.). POx. CaOx. ZnOx.
5.3. Advice for firefighters	
Precautionary measures fire	: Stop or contain leak at the source, if safe to do so. Do not try to extinguish the fire until the flow of product has been stopped, or it is certain that this will be done immediately. Contact of hot product with water will result in a violent expansion as the water turns to steam.
Firefighting instructions	: If possible, move containers and drums away from danger area. Spilled product which is not burning should be covered with sand or foam. Use water spray or fog for cooling exposed containers. If the fire cannot be controlled, evacuate area.
Special protective equipment for firefighters	: Personal protection equipment for firefighters (see also sect. 8). Self-contained breathing apparatus. Complete protective clothing. 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. Evacuate unnecessary personnel. 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
Protective equipment	
	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. Work helmet. Non-skid safety shoes or boots, chemical
	resistant. Tightly fitting goggles and face shield, if splashes or contact of cold vapour with
	eyes is possible or anticipated. Respiratory protection: A half or full-face respirator with
	filter(s) for organic vapours (A) (or A+B when applicable for H2S), or a Self-contained
	Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable
	amount of exposure. A Self Contained Breathing Apparatus (SCBA) can be used according
	to the extent of spill and predictable amount of exposure. If the situation cannot be
	completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
Emergency procedures	: Notify local authorities according to relevant regulations.

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.

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.
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. 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. 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".

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Hygiene measures 7.2. Conditions for safe storage, including	: 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.
1.2. Conditions for sale storage, moldaling	any moonpationales
Storage conditions Incompatible products Storage area	 Store in dry, well ventilated area. Keep away from open flames, hot surfaces and sources of ignition. Do not smoke. Keep away from: strong oxidants. Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or
	company regulations.
Packages and containers:	: If the product is supplied in containers: Keep containers tightly closed and properly labelled. Keep only in the original container or in a suitable container for this kind of product.
Packaging materials	: For containers, or container linings use materials specifically approved for use with this product. Recommended materials for containers, or container linings use mild steel, stainless steel. Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. 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

Mineral base oil, severely refined (N/A	N)	
Austria - Occupational Exposure Limits		
MAK (OEL TWA)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Belgium - Occupational Exposure Limits		
OEL TWA	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Denmark - Occupational Exposure Limits		
OEL TWA [1]	1 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
OEL STEL	2 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Hungary - Occupational Exposure Limits		
AK (OEL TWA)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Netherlands - Occupational Exposure Lim	its	
MAC TGG 8h (mg/m³)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA) [1]	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
VLA-EC (mg/m³)	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	1 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	

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Mineral base oil, severely refined (N/A)		
KTV (OEL STEL)	3 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
WEL STEL (OEL STEL)	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
ACGIH OEL STEL	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	

Calcium carbonate (471-34-1)		
France - Occupational Exposure Limits		
VLE [mg/m³]	10 mg/m ³ (Inhalable dust)	
Hungary - Occupational Exposure Limits		
AK (OEL TWA)	10 mg/m ³ (Inhalable dust)	
Ireland - Occupational Exposure Limits		
OEL TWA [1]	10 mg/m ³ (Inhalable dust)	
Latvia - Occupational Exposure Limits		
OEL TWA	6 mg/m³	
Poland - Occupational Exposure Limits		
NDS (OEL TWA)	10 mg/m ³	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	4 mg/m³ (Respirable dust)	
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA) [1]	3 mg/m ³ (Respirable dust)	

Distillates (petroleum), solvent-refined light paraffinic (64741-89-5)		
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/m ³ (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/m ³ (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/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	

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Distillates (petroleum), solvent-refined light paraffinic (64741-89-5)		
KTV (OEL STEL)	3 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
WEL STEL (OEL STEL)	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
ACGIH OEL STEL	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	

Lubricating oils (petroleum), C24-50, solvent-	extd., dewaxed, hydrogenated (101316-72-7)	
Austria - Occupational Exposure Limits		
MAK (OEL TWA)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Belgium - Occupational Exposure Limits		
OEL TWA	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Denmark - Occupational Exposure Limits		
OEL TWA [1]	1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
OEL STEL	2 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Hungary - Occupational Exposure Limits		
AK (OEL TWA)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Netherlands - Occupational Exposure Limits		
MAC TGG 8h (mg/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/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	1 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
KTV (OEL STEL)	3 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
WEL STEL (OEL STEL)	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
ACGIH OEL STEL	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)		
Austria - Occupational Exposure Limits		
MAK (OEL TWA)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Belgium - Occupational Exposure Limits		
OEL TWA	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Denmark - Occupational Exposure Limits		
OEL TWA [1]	1 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
OEL STEL	2 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	

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Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)		
Hungary - Occupational Exposure Limits		
AK (OEL TWA)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Netherlands - Occupational Exposure Limits		
MAC TGG 8h (mg/m³)	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA) [1]	5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
VLA-EC (mg/m³)	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	1 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
KTV (OEL STEL)	3 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	5 mg/m ³ (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/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	
ACGIH OEL STEL	10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)	

8.1.2. Recommended monitoring procedures

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

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Eni i-Base 15W-40	
DNEL/DMEL (additional information)	
Additional information	Not applicable
PNEC (additional information)	
Additional information Not applicable	

Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts		
DNEL/DMEL (Workers)		
Acute - local effects, dermal	1,04 mg/cm ²	
Long-term - systemic effects, dermal	25 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	35,26 mg/m ³	
DNEL/DMEL (General population)		
Acute - local effects, dermal	0,518 mg/cm ²	
Long-term - systemic effects,oral	2,5 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	8,7 mg/m³	
Long-term - systemic effects, dermal	12,5 mg/kg bodyweight/day	

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PNEC (Water)		
PNEC aqua (freshwater)	0,1 mg/l	
PNEC aqua (marine water)	0,1 mg/l	
PNEC aqua (intermittent, freshwater)	1 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	45211 mg/kg dwt	
PNEC sediment (marine water)	45211 mg/kg dwt	
PNEC (Soil)		
PNEC soil	47025 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	1000 mg/l	

Note

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

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Before entering storage tanks and commencing any operation in a confined area, carry out an adequate clean-up, and check the atmosphere for oxygen content, flammability, and the presence of sulphur compounds. See also Section 16, "Other information".

8.2.2. Personal protection equipment

Personal protective equipment (for industrial or professional use):

Gloves.

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, if necessary heat resistant and insulated.

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Hand protection:

When there is a risk of contact with the skin, use hydrocarbon-resistant, felt-lined gloves. 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: if the product is handled without adequate containment means for the vapours: full or half-face gas mask with filter for organic vapours (A) or organic vapours/H2S (A+B). (EN 136/140/145). Combination filter device (DIN EN 141). Closed or confined areas (e.g. tank interiors): the use of protection measures for airways (masks or self-contained breathing apparatus), must be assessed according to the specific activity, as well as level and duration of predicted exposure. (EN 136/140/145). Approved respiratory protection equipment shall be used in spaces where hydrogen sulphide may accumulate: full face mask with cartridge/filter type "B" (grey for inorganic vapours including H2S) or self-contained breathing apparatus (SCBA). (EN 136/140/145)

8.2.2.4. Thermal hazards

Thermal hazard protection:

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

8.2.3. Environmental exposure controls

Environmental exposure controls:

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

Consumer exposure controls:

No special requirements necessary, if handled at room temperature.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow-brown.
Appearance	: Clear liquid.
Odour	: Petroleum-like.
Odour threshold	Not available
Melting point	: Not determined
Freezing point	: Not determined
Boiling point	: Not determined
Flammability	: Not flammable
Explosive properties	: None (according to composition).
Oxidising properties	: None (according to composition).
Explosive limits	: Not determined
Lower explosive limit (LEL)	: Not determined
Upper explosive limit (UEL)	: Not determined
Flash point	: > 100 °C (ASTM D93)
Auto-ignition temperature	: Not determined
Decomposition temperature	: Not determined
рН	: Not determined
Viscosity, kinematic	: 103,9 mm²/s (40°C, ASTM D445)
Solubility	: Water: Immiscible and insoluble
Log Kow	: Not applicable for mixtures
Log Pow	: Not applicable for mixtures
Vapour pressure	: Not determined
Vapour pressure at 50 °C	: Not determined
Density	: Not determined

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Relative density Relative vapour density at 20 °C	: Not determined : Not determined
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Additional information

: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable product, according to its intrinsic properties (in normal conditions of storage and handling).

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

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

10.5. Incompatible materials

Strong oxidants.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition may produce : Toxic fumes. In exceptional cases (i.e prolonged storage in tanks contaminated with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H2S. See also Section 16, "Other information".

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)

Mineral base oil, severely refined (N/A)	
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)

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Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	
LD50 oral rat	> 5000 mg/kg bodyweight ((Sanitised, F. (1989), OECD Guideline 401))
LD50 dermal rat	> 2000 mg/kg bodyweight ((Sanitised, G. (1989), OECD Guideline 402))
LC50 Inhalation - Rat	> 1,9 mg/l/4h ((Hoffman, G.M. (1986), EPA OPP 81-3))

Calcium carbonate (471-34-1)	
LD50 oral rat	2000 mg/kg bodyweight
LD50 dermal rat	2000 mg/kg bodyweight
LC50 Inhalation - Rat	3 mg/l/4h

Distillates (petroleum), solvent-refined light paraffinic (64741-89-5)	
LD50 oral rat	> 5000 mg/kg (OECD 401)
LD50 dermal rat	> 5000 mg/kg (OECD 402)
LC50 Inhalation - Rat	> 5 mg/l/4h (OECD 403)

Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated (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)

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rabbit	2000 – 5000 mg/kg bodyweight (API 1982, UBTL 1984 - OECD 402)
LC50 Inhalation - Rat	3,9 – 5,3 mg/l/4h (Bio-Research Laboratories, Ltd. 1984 - OECD 403)
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: Not determined
Additional information	: (according to composition)
Serious eye damage/irritation	 Not classified (Based on available data, the classification criteria are not met) pH: Not determined
Additional information	: (according to composition)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition)
	This product is formulated with one or more ingredients (complex additive mixtures) which contains calcium sulfonates. All these ingredients have each a TBN value > 300 mg KOH/g, therefore they are not classified as sensitizers. On basis of test data.
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)

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Additional information	: (according to composition) 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) This product contains also the following substances : 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).], Distillates (petroleum), solvent-refined light paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C).] this product has a value of DMSO extract < 3 % wt, according to IP 346. According to the criteria laid out by the EU (note L, Annex VI of Regulation (CE) 1272/2008), this product must be regarded as non carcinogenic.
Reproductive toxicity Additional information	 Not classified (Based on available data, the classification criteria are not met) (according to composition)
STOT-single exposure Additional information	 Not classified (Based on available data, the classification criteria are not met) (according to composition)

Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	
NOAEL (dermal, rat/rabbit)	2500 mg/kg bodyweight
NOAEC (inhalation, rat, vapour)	881,58 mg/m³
STOT-repeated exposure : Additional information :	Not classified (Based on available data, the classification criteria are not met) (according to composition)

Mineral base oil, severely refined (N/A)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day (OECD TG 408)

Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	
NOAEL (dermal, rat/rabbit, 90 days)	> 1000 (OECD Giudeline 410)
NOAEL (subacute, oral, animal/male, 28 days)	> 500 mg/kg bodyweight (OECD Guideline 407)

Distillates (petroleum), solvent-refined light paraffinic (64741-89-5)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day (OECD TG 408)

Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated (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)

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
LOAEL (dermal, rat/rabbit, 90 days)	100 mg/kg bodyweight/day

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NOAEL (oral, rat, 90 days)	< 125 mg/kg bodyweight/day (CAS 64742-04-7, Mobil 1990) (OECD 408)
NOAEL (dermal, rat/rabbit, 90 days)	≈ 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
NOAEC (inhalation,rat, vapour, 90 days)	220 – 980 mg/m ³ (Dalbey W, Osimitz T, Kommineni C, Roy T, Feuston M and Yang J 1991 - OECD 412)
Aspiration hazard Additional information	 Not classified (Based on available data, the classification criteria are not met) (according to composition) Viscosity, kinematic: > 20,5 mm2/s (40 °C) (ASTM D 445)
Eni i-Base 15W-40	
Viscosity, kinematic	103,9 mm²/s (40°C, ASTM D445)
11.2. Information on other hazards	
11.2.1. Endocrine disrupting properties	
Adverse health effects caused by endocrine disrupting properties	: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified a having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %
11.2.2 Other information	
Potential adverse human health effects and symptoms	: Contact with eyes may cause temporary reddening and irritation.
Other information	: None

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. An uncontrolled release to the environment may nevertheless produce a contamination of different environmental compartments (air, soil, underground, surface water bodies, aquifers). Handle according to general working hygiene practices to avoid pollution and release into the environment.
Ecology - air	: This product has a low vapour pressure. A significant exposure may happen only if the product is used at high temperature, or in case of sprays and mists.
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 (Based on available data, the classification criteria are not met)

Mineral base oil, severely refined (N/A)	
LC50 fish 1	> 100 mg/l (LL 50)
EC50 Daphnia 1	> 10000 mg/l WAF, 48 h (OECD 202)

Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	
LC50 fish 1	≥ 100 mg/l LL50/96h, OECD 203 (WAF) (Read-across) - Oncorhynchus mykiss - Goodband, T.J. (2005a)
LC50 fish 2	≥ 10000 mg/l LL50/96h, OECD 203 (WAF) (Read-across) - Cyprinodon variegatus - Nicholson, R.B. (1986)
EC50 Daphnia 1	≥ 1000 mg/l EC50/48h, EPA OTS 797.1300 (WAF) (Read-across) - Ward, T.J (1993)

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EC50 72h - Algae [1]	\geq 100 mg/l LL50/96h, OECD 201 (WAF) (Read-across) - Scenedesmus subspicatus - Mead, C. (2005)
ErC50 (algae)	≥ 1000 mg/l EC50/72h, EPA OTS 797.1050 (WAF) (Read-across) - Pseudokirchnerella subcapitata - Ward, T.J (1994)
Calcium carbonate (471-34-1)	
EC50 72h - Algae [1]	14 mg/l
Fumaric acid (110-17-8)	
LC50 fish 1	≥ 100 mg/l
Distillates (petroleum), solvent-ref	ined light paraffinic (64741-89-5)
LC50 fish 1	> 100 mg/l (LL 50)
EC50 Daphnia 1	> 10000 mg/l WAF, 48 h (OECD 202)
Lubricating oils (petroleum), C24-	50, solvent-extd., dewaxed, hydrogenated (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)
Distillates (petroleum), solvent-de	waxed heavy paraffinic (64742-65-0)
LC50 fish 1	> 100 mg/l (LL 50, Exxon 1995 - OECD 203)
EC50 Daphnia 1	> 10000 mg/l (EL50, Shell 1988 - OECD 202)
NOEC (acute)	≥ 100 mg/l (Pseudokirchneriella subcapitata, 72h, OECD 201 - Petro-Canada 2008)
NOEC chronic fish	≥ 1000 mg/l (Oncorhynchus mykiss, NOELR, 14d - QSAR, Redman, A. et al. 2010)
NOEC chronic crustacea	≥ 1000 mg/l (21d, OECD 211 - Shell 1994)
NOEC chronic algae	≥ 100 mg/l (Pseudokirchneriella subcapitata, 72h)
12.2. Persistence and degradabilit	у
Eni i-Base 15W-40	
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.
	1

Mineral base oil, severely refined (N/A)	
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.

Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	
Persistence and degradability	Not readily biodegradable.
Biodegradation	8 % (28d - OECD Guideline 301 D)

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Distillates (petroleum), solvent-refined light paraffinic (64741-89-5)	
	The most significant constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.
Biodegradation	31 % (28d, Exxon 1995)

Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated (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.

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
Persistence and degradability	The most significant constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.
Biodegradation	31 % (28d, Exxon 1995)

12.3. Bioaccumulative potential

Eni i-Base 15W-40	
Log Pow	Not applicable for mixtures
Log Kow	Not applicable for mixtures
Bioaccumulative potential	Not established.

Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	
BCF fish 1	70,8 (L/Kg w/w)
Log Pow	6,91
Log Kow	8 (OECD Guideline 107 (EU Method A.8))

Distillates (petroleum), solvent-refined light p	araffinic (64741-89-5)
Bioaccumulative potential	The test methods for this endpoint are not applicable to UVCB substances.

Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated (101316-72-7)	
Bioaccumulative potential	The test methods for this endpoint are not applicable to UVCB substances.

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
BCF fish 1	0,4 – 6280 l/kg
BCF fish 2	3,16 – 71100 l/kg
Log Pow	1,99 – 18,02
Log Kow	Not applicable (UVCB)
Bioaccumulative potential	The test methods for this endpoint are not applicable to UVCB substances.

12.4. Mobility in soil

Eni i-Base 15W-40	
Mobility in soil	Not determined
Ecology - soil	No data available.

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Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts		
Log Koc	15,65 – 15,75 (QSAR, Chemservice S.A. (2013a))	
Distillates (petroleum), solvent-refined light paraffinic (64741-89-5)		
Ecology - soil	This product is not soluble in water. It floats on water and forms a film on the surface.	
Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated (101316-72-7)		
Ecology - soil	This product is not soluble in water. It floats on water and forms a film on the surface.	

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
Log Koc	1,71 – 14,7
Ecology - soil	The test methods for this endpoint are not applicable to UVCB substances.

12.5. Results of PBT and vPvB assessment

Eni i-Base 15W-40	
This substance/mixture does not meet the PBT c	riteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB	criteria of REACH regulation, annex XIII
Results of PBT-vPvB assessment	The components in this formulation do not meet the criteria for classification as PBT or vPvB. The product should be considered prudentially as "Persistent" in the environment, according to the REACH Annex XIII criteria (point 1.1)

Component	
Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated (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)
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII 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)
Distillates (petroleum), solvent-refined light paraffinic (64741-89-5)	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)
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	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)
Calcium carbonate (471-34-1)	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)

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12.6. Endocrine disrupting properties	
Adverse effects on the environment caused by endocrine disrupting properties	: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %
12.7. Other adverse effects	
Other adverse effects Additional information	 None 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 discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector. Dispose of empty containers and wastes safely.
Sewage disposal recommendations	: Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed. Dispose of in a safe manner in accordance with local/national regulations.
Product/Packaging disposal recommendations	: European Waste Catalogue code(s) (Decision 2001/118/CE): 13 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, drill, burn or incinerate empty containers or drums, 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

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

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID n	umber	· · ·		
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping	g 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
None.				

14.6. Special precautions for user

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Transport by sea Not regulated Air transport Not regulated Inland waterway transport Not regulated Rail transport Not regulated

14.7. Maritime transport in bulk according to IMO instruments

IBC code

: Not applicable.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

Reference code	Applicable on	Entry title or description
3(b)	Distillates (petroleum), solvent-refined light paraffinic	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

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

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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 (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC. Regulation EU (649/2012) - Export and Import of hazardous chemicals (PIC).

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.

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Maladies professionel	les (F)		
Code	Description		
RG 36	Diseases caused by oils and fats of mineral or synthetic origin		
Germany			
Employment restrictions		: Employment prohibitions or restrictions on the protection of young people at work according to § 22 JArbSchG in the case of formation of hazardous substances have to be observed.	
Water hazard class (WG	GK) (D)	: WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)	
WGK remark		: Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS)	
Hazardous Incident Ord	inance (12. BImSchV)	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)	
National Rules and Rec	ommendations	: TRGS 400: Hazard assessment for activities involving Hazardous Substances	
		TRGS 401: Risks resulting from skin contact - identification, assessment, measures	
		TRGS 402: Identification and Assessment of the Risks from Activities involving Hazardous	
		Substances: Inhalation Exposure	
		TRGS 555: Working instruction and information for workers	
		TRGS 800: Fire protection measures	
		TRGS 900: Occupational Exposure Limits	
Storage class (LGK, TR	GS 510)	: LGK 10 - Combustible liquids	
VbF class (D)		: Not applicable.	
Netherlands			
Saneringsinspanningen		: C - Minimize discharge	
SZW-lijst van kankerver		: None of the components are listed	
SZW-lijst van mutagene		: None of the components are listed	
•	che stoffen – Borstvoeding	: None of the components are listed	
SZW-lijst van reprotoxis Vruchtbaarheid	che stoffen –	: None of the components are listed	
	che stoffen – Ontwikkeling	: None of the components are listed	
Denmark	tiono	· Vound people under 19 years are not allowed to use the product	
Danish National Regula	10115	: 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 i	

15.2. Chemical safety assessment

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

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

Distillates (petroleum), solvent-refined light paraffinic

Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated

SECTION 16: Other information

Indication of changes:			
Section	Changed item	Change	Notes
	Adverse health effects caused by endocrine disrupting properties	Added	
	Adverse effects on the environment caused by endocrine disrupting properties	Added	
	Date of issue	Modified	
	Supersedes	Modified	
	Revision date	Modified	
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3	Composition/information on ingredients	Modified	
12.4	Mobility in soil	Added	

Abbreviations and acronyr	ns:
	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
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)
ARC	International Agency for Research on Cancer
ATA	International Air Transport Association
MDG	International Maritime Dangerous Goods
_C50	Lethal concentration for 50 percent of test population (median lethal concentration)
_D50	Lethal dose for 50 percent of test population (median lethal dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
DECD	Organisation for Economic Co-operation and Development
РВТ	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals, Regulation (EC) No 1907/2006
RID	Regulation concerning the International Carriage of Dangerous Goods by Railways
SDS	Safety Data Sheet
STP	Sewage treatment plant
vРvВ	Very Persistent and Very Bioaccumulative
Data sources	: This Safety Data Sheet is based on the real characteristics of the components and their combination, tak into account the information provided by the suppliers.
Fraining advice	: Provide adequate training to professional operators for the use of PPEs, according to the information

contained in this Safety Data Sheet.

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Other information	: Do not use the product for any purposes that have not been advised by the manufacturer. In exceptional cases (i.e prolunged storage in tanks contaminated with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H2S. This situation is especially relevant in all those circumstances which require to enter a confined space, with direct exposure to the vapours. 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.

Full text of H- and EUH-statements:		
Asp. Tox. 1	Aspiration hazard, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H304	May be fatal if swallowed and enters airways.	
H319	Causes serious eye irritation.	
EUH210	Safety data sheet available on request.	

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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.