

Safety Data Sheet

According to Regulation (EU) No. 830/2015

Revision date: 03/02/2020 Supersedes: 21/11/2017 Version: 4.0

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

1.1. Product identifier

Product form : Mixture

Trade name : Eni i-Sigma top 10W-40

Product code : 1069

Type of product : Lubricants

Formula : 0221-2019

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 : Non-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.

Function or use category : Lubricants and additives

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

Contact:

Refining & Marketing

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. Prolonged and repeated skin contact may cause reddening, irritation and dermatitis. May cause an allergic skin reaction. 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 : EUH208 - Contains Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs,

calcium salts. May produce an allergic reaction. 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. If the product is handled or used at high temperature, contact with hot product or vapours may cause burns. Do not wait for symptoms to develop. 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. 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 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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Notes

: Composition/Information on ingredients:

Mixture of hydrocarbons

Polymers Additives

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]
Distillates (petroleum), hydrotreated heavy paraffinic (see note [**], see note [***])	(CAS-No.) 64742-54-7 (EC-No.) 265-157-1 (EC Index-No.) 649-467-00-8 (REACH-no) 01-2119484627-25	70 - 80	Asp. Tox. 1, H304
Mineral base oil, severely refined (For identification of the substance, see note [*], see note [***])		5 - 10	Not classified
Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated (see note [**], see note [***])	(CAS-No.) 101316-72-7 (EC-No.) 309-877-7 (EC Index-No.) 649-530-00-X (REACH-no) 01-2119489969-06	5 - 10	Not classified
Polyolefin polyamine succinimide, polyol	(CAS-No.) 147880-09-9 (EC-No.) 604-611-9 (EC Index-No.) N/A (REACH-no) N/A	3 - 5	Aquatic Chronic 4, H413
Distillates (petroleum), solvent-refined light paraffinic (see note [**], see note [***])	(CAS-No.) 64741-89-5 (EC-No.) 265-091-3 (EC Index-No.) 649-455-00-2 (REACH-no) 01-2119487067-30	2 - 3	Asp. Tox. 1, H304
Calcium long chain alkaryl sulfonate (Additive)	(CAS-No.) 722503-69-7 (EC-No.) N/A (EC Index-No.) N/A (REACH-no) N/A	2 - 3	Aquatic Chronic 4, H413
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts (Additive)	(CAS-No.) 68784-31-6 (EC-No.) 272-238-5 (EC Index-No.) N/A (REACH-no) 01-2119657973-23	1 - 1,5	Eye Dam. 1, H318 Aquatic Chronic 2, H411
Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts (Additive)	(CAS-No.) 722503-68-6 (EC-No.) 682-816-2 (EC Index-No.) N/A (REACH-no) N/A	0,1 - 0,15	Skin Sens. 1, H317 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/ÈC 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 346/92 (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 346/92. 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

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mineral oils (finely refined mineral base oil mists; see section 8.1)

Full text of H-statements: see section 16

CECTION	I A. Eirot oid	MA A A A A I I KA A
	l 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. If skin irritation or rash occurs, get medical advice/attention. 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. 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. 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 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.

Symptoms/effects after skin contact

: Prolonged and repeated skin contact may cause reddening, irritation and dermatitis. May cause sensitization by skin contact. Contact with hot product may cause thermal burns.

Symptoms/effects after eye contact

: Contact with eyes may cause 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

administration
Chronic symptoms

: None to be reported, according to the present classification criteria.

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

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

: No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

: Small-size fires: carbon dioxide, dry chemicals, foam, sand or earth. Large fires: foam or water fog (mist). These means should be used by trained personnel only. Other extinguishing gases (according to regulations).

Unsuitable extinguishing media

: Do not use water jets. They could cause splattering, and spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2. Special hazards arising from the substance or mixture

Fire hazard

: This product is combustible, but not classied 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. ZnOx. CaOx. BOx.

5.3. Advice for firefighters

Firefighting instructions

: Shut off source of product, if possible. Move undamaged containers from immediate hazard area if it can be done safely. Spilled product which is not burning should be covered with sand or foam. Use water sprays to cool containers and surfaces exposed to the flames. If the fire cannot be controlled, evacuate area.

Special protective equipment for firefighters

: Personal protection equipment for firefighters (see also sect. 8). In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. EN 443. EN 469. EN 659.

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Other information

: In case of fire, do not discharge residual product, waste materials and runoff water: collect separately and use a proper treatment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

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

6.1.1. For non-emergency personnel

Protective equipment

: See Section 8.

Emergency procedures

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

6.1.2. For emergency responders

Protective equipment

: 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. 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. 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.

Other information

: Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. Local regulations may also prescribe or limit actions to be taken. For this reason, local experts should be consulted when necessary.

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

: 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.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in dry, well ventilated area. Keep away from open flames, hot surfaces and sources of

ignition. Do not smoke.

Incompatible products

: 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 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.

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

	hydrotreated heavy paraffinic (64742-54-7)	
Austria	MAK (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Belgium	Limit value (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Denmark	Grænseværdi (langvarig) (mg/m³)	1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Denmark	Grænseværdi (kortvarig) (mg/m³)	2 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Hungary	AK-érték	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Netherlands	MAC TGG 8h (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Spain	VLA-ED (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Spain	VLA-EC (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Sweden	Nivågränsvärde (NVG) (mg/m3)	1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Sweden	Kortidsvärde (KTV) (mg/m3)	3 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
United Kingdom	WEL TWA (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
United Kingdom	WEL STEL (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Canada (Quebec)	VECD (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Canada (Quebec)	VEMP (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - ACGIH	ACGIH TLV®-TWA (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - ACGIH	ACGIH TLV®-STEL (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - NIOSH	NIOSH REL (STEL) (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)

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Mineral base oil, severe	ely refined	
Austria	MAK (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Belgium	Limit value (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Denmark	Grænseværdi (langvarig) (mg/m³)	1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Denmark	Grænseværdi (kortvarig) (mg/m³)	2 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Hungary	AK-érték	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Netherlands	MAC TGG 8h (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Spain	VLA-ED (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Spain	VLA-EC (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Sweden	Nivågränsvärde (NVG) (mg/m3)	1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Sweden	Kortidsvärde (KTV) (mg/m3)	3 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
United Kingdom	WEL TWA (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
United Kingdom	WEL STEL (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Canada (Quebec)	VECD (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Canada (Quebec)	VEMP (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - ACGIH	ACGIH TLV®-TWA (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - ACGIH	ACGIH TLV®-STEL (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - NIOSH	NIOSH REL (STEL) (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Lubricating oils (petrole	eum), C24-50, solvent-extd., dewaxed, hydrogena	ted (101316-72-7)
Austria	MAK (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
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Hungary	AK-érték	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Netherlands	MAC TGG 8h (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Spain	VLA-ED (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
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United Kingdom	WEL TWA (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined,

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ubricating oils (petrole	eum), C24-50, solvent-extd., dewaxed, hydrogena	,
Jnited Kingdom	WEL STEL (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Canada (Quebec)	VECD (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Canada (Quebec)	VEMP (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
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Distillates (petroleum).	solvent-refined light paraffinic (64741-89-5)	
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Hungary	AK-érték	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Netherlands	MAC TGG 8h (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Spain	VLA-ED (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Spain	VLA-EC (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
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Canada (Quebec)	VEMP (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
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USA - ACGIH	ACGIH TLV®-STEL (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - NIOSH	NIOSH REL (STEL) (mg/m³)	10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)
USA - OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m)

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.

Eni i-Sigma top 10W-40	
DNEL/DMEL (additional information)	

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= 1101	
Eni i-Sigma top 10W-40	
Additional information	Not applicable
PNEC (additional information)	
Additional information	Not applicable
Distillates (petroleum), hydrotreated heav	y paraffinic (64742-54-7)
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	5,4 mg/m³/day (DNEL, Mineral base oil mist, severely refined, DMSO extract <3% m/m)
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	1,2 mg/m³/day (DNEL, Mineral base oil mist, severely refined, DMSO extract <3% m/m)
Distillates (petroleum), solvent-refined lig	ht paraffinic (64741-89-5)
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	5,4 mg/m³ (Aerosol)
PNEC (additional information)	
Additional information	Not derived - Not classified as hazardous for environment
Phosphorodithioic acid, mixed O.O-bis(se	c-Bu and 1,3-dimethylbutyl) esters, zinc salts (68784-31-6)
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	100 mg/kg bodyweight/day
Acute - systemic effects, inhalation	496,4 mg/m³
Long-term - systemic effects, dermal	10,42 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2,93 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	50 mg/kg bodyweight
Acute - systemic effects, inhalation	198,6 mg/m³
Acute - systemic effects, oral	29 mg/kg bodyweight
Long-term - systemic effects,oral	0,21 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	11,75 mg/m³
Long-term - systemic effects, dermal	2,1 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	4 μg/l
PNEC aqua (marine water)	4,6 μg/l
PNEC aqua (intermittent, freshwater)	44 μg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,0701 mg/kg dwt
PNEC sediment (marine water)	0,00701 mg/kg dwt
PNEC (Soil)	
PNEC soil	54,8 μg/kg
PNEC (Oral)	
PNEC oral (secondary poisoning)	8,33 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	3,8 mg/l
Note	The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from

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.

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station. 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".

Personal protective equipment (for industrial or professional use):

Face shield. Gloves. Protective clothing. Safety glasses. Safety shoes or boots. Dust/aerosol mask.

Hand protection:

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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.

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.

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.

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). 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)

Personal protective equipment symbol(s):













Thermal hazard protection:

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

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:

Relative density

Wear protective gloves. Avoid excessive or improper use.

SECTION 9: Physical and chemical properties

9.1.	Information	on basic	nhysical and	chemical	nronerties

Physical state : Liquid

Appearance : Liquid, bright & clear.
Colour : Yellow-brown.

Odour : Slight odour of petroleum.

Odour threshold : There are no data available on the preparation/mixture itself.

Not applicable

: No data available

: Negligible. Relative evaporation rate (butylacetate=1) Melting point : No data available Freezing point : No data available **Boiling point** No data available Flash point : > 180 °C (ASTM D 93) Auto-ignition temperature : No data available Decomposition temperature No data available Flammability (solid, gas) Not applicable Vapour pressure : No data available Relative vapour density at 20 °C : No data available

Solubility : Water: Immiscible and insoluble Log Pow : Not applicable for mixtures

Viscosity, kinematic : 12,5 - 16,3 mm²/s (100°C); Viscosity, kinematic: > 20,5 mm2/s (40 °C) (ASTM D 445)

Viscosity, dynamic : No data available

Explosive properties : None.

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Oxidising properties : None.

Explosive limits : LEL ≥ 45 g/m³ (Aerosol)

9.2. Other information

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.

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 toxicological effects

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)

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
LD50 oral rat	> 5000 mg/kg (OECD 401)	
LD50 dermal rat	> 5000 mg/kg (OECD 402)	
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (OECD 403)	
Mineral base oil, severely refined		
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401)	
LDE0 dormal rat	> 5000 mg/kg hodywoight (OECD 402)	

LD50 dermal rat	> 5000 mg/kg bodyweight (OECD 402)	
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (OECD 403)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401)	

Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated (101316-72-7)	
LD50 oral rat	> 5000 mg/kg (OECD 401)
LD50 dermal rat	> 5000 mg/kg (OECD 402)
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (OECD 403)

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 (mg/l) > 5 mg/l/4h (OECD 403)		

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

pH: Not applicable: (according to composition)

Additional information : (according to composition)

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

pH: Not applicable

Additional information : (according to composition)

This product is formulated with a component which contains substances classified as Eye Dam.1, H318. The component itself has been tested by the manufacturer and has been assessed as NOT irritant to eyes. This result has been used for classification of the final

mixture (Bridging principle "Dilution").

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

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ccording to Regulation (EU) No. 830/2015	
Additional information	: (according to composition) Contains Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs, calcium salts. Exposure may produce an allergic reaction
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition) This product contains: Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fractio with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbe predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SU at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.], 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 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 346/92. 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 346/92 (Nota L - Annex VI Reg (CE) 1272/2008, # 1.1.3) No carcinogenic effect
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition)
Distillates (petroleum), hydrotreated heavy	naraffinic (64742-54-7)
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day (OECD TG 408)
Mineral base oil, severely refined	120 mg.ng 200) notg.notas, (0202 no 100)
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day (OECD TG 408)
• /	nt-extd., dewaxed, hydrogenated (101316-72-7)
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day (OECD TG 408)
Distillates (petroleum), solvent-refined ligh	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day (OECD TG 408)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: (according to composition) Viscosity, kinematic: > 20,5 mm2/s (40 °C) (ASTM D 445)
Eni i-Sigma top 10W-40	
Viscosity, kinematic	12,5 - 16,3 mm ² /s (100°C); Viscosity, kinematic: > 20,5 mm ² /s (40 °C) (ASTM D 445)
Potential adverse human health effects and symptoms	: Contact with eyes may cause temporary reddening and irritation. Prolonged and repeated skir contact may cause reddening, irritation and dermatitis. May cause sensitization by skin contact
Other in the Common of the second	Maria

SECTION 12: Ecological information

12 1	Toxicity	

Other information

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.

: None.

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.

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cording to Regulation (EU) No. 830/2015

according to Regulation (EU) No. 830/2015	
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)
Distillates (petroleum), hydrotreated heavy p	paraffinic (64742-54-7)
LC50 fish 1	> 100 mg/l (LL 50)
EC50 Daphnia 1	> 10000 mg/l WAF, 48 h (OECD 202)
Mineral base oil, severely refined	
LC50 fish 1	> 100 mg/l (LL 50)
EC50 Daphnia 1	> 10000 mg/l WAF, 48 h (OECD 202)
Lubricating oils (petroleum), C24-50, solven	t-extd., dewaxed, hydrogenated (101316-72-7)
LC50 fish 1	> 100 mg/l (LL 50)
EC50 Daphnia 1	> 10000 mg/l WAF, 48 h (OECD 202)
Distillates (petroleum), solvent-refined light	paraffinic (64741-89-5)
LC50 fish 1	> 100 mg/l (LL 50)
EC50 Daphnia 1	> 10000 mg/l WAF, 48 h (OECD 202)
	1 3 , - ()
12.2. Persistence and degradability	
Eni i-Sigma top 10W-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.
Distillates (petroleum), hydrotreated heavy p	paraffinic (64742-54-7)
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.
Mineral base oil, severely refined	
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.
Lubricating oils (petroleum), C24-50, solven	t-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-refined light	paraffinic (64741-89-5)
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.
12.3. Bioaccumulative potential	
Eni i-Sigma top 10W-40	
Log Pow	Not applicable for mixtures
Bioaccumulative potential	Not established.
Distillates (petroleum), solvent-refined light	paraffinic (64741-89-5)
Bioaccumulative potential	Not established.
12.4. Mobility in soil	
Eni i-Sigma top 10W-40	
Ecology - soil	No data available.
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.
12.5. Results of PBT and vPvB assessme	· ·
Eni i-Sigma top 10W-40 This substance/mixture does not meet the PBT	criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvE	-
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)
	THE REPORT ATHON ATH ORIONA (POINT 1.1)

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Component	
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	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)
Mineral base oil, severely refined ()	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 (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-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)

12.6. Other adverse effects

Other adverse effects

: None.

Additional information

: 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.

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

: The product as it is does not contain halogenated substances.

EURAL code (EWC) : 13 02 05* - Mineral-based non-chlorinated engine, gear and lubricating oils

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shippi	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
None.				

14.6. Special precautions for user

- Overland transport

Not regulated

- Transport by sea

Not regulated

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- Air transport

Not regulated

- Inland waterway transport

Not regulated

- Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or Distillates (petroleum), hydrotreated heavy categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 paraffinic - Benzenesulfonic acid, methyl-, monoadverse effects on sexual function and fertility or on development, 3.8 effects other than C20-24-branched alkyl derivs., calcium salts Phosphorodithioic acid, mixed O,O-bis(sec-Bu narcotic effects, 3.9 and 3.10 and 1,3-dimethylbutyl) esters, zinc salts Distillates (petroleum), solvent-refined light paraffinic 3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or Calcium long chain alkaryl sulfonate -Benzenesulfonic acid, methyl-, mono-C20-24categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1 branched alkyl derivs., calcium salts -Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts

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

Contains no REACH Annex XIV substances

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 Directives 75/439/CEE - 87/101/CEE concerning disposal of used oils.

France

Maladies professionelles (F) : RG 36 - Affections provoquées par les huiles et graisses d'origine minérale ou de synthèse

Germany

Reference to AwSV : Water hazard class (WGK) (D) 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)

VbF class (D) : Not applicable.

Storage class (LGK) (D) : LGK 10 - Combustible liquids

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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.

12th Ordinance Implementing the Federal Immission Control Act - 12.BlmSchV

Other information, restrictions and prohibition regulations

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

: 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 500: Protective measures

TRGS 555: Working instruction and information for workers

TRGS 900: Occupational Exposure Limits

TRGS 910: Risk-related concept of measures for activities involving carcinogenic hazardous

substances

Netherlands

Saneringsinspanningen

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen

NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Ontwikkeling

: C - Minimize discharge

: None of the components are listed

Denmark

Danish National Regulations

: Young people under 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with it

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), hydrotreated heavy paraffinic

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts

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

Distillates (petroleum), solvent-refined light paraffinic

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Notes
1.1	Formula	Modified	
2.1	Adverse physicochemical, human health and environmental effects	Modified	
2.2	EUH-statements	Modified	
2.3	Other hazards not contributing to the classification	Modified	
3	Composition/information on ingredients	Modified	
3.2	Notes	Added	
3.2	Comments	Added	
4.1	First-aid measures after ingestion	Modified	
4.1	First-aid measures after eye contact	Modified	
4.1	First-aid measures general	Removed	
4.1	First-aid measures after skin contact	Modified	
4.2	Symptoms/effects after ingestion	Modified	
5.2	Hazardous decomposition products in case of fire	Added	
5.3	Special protective equipment for firefighters	Modified	
5.3	Firefighting instructions	Modified	
7.1	Precautions for safe handling	Modified	

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7.1	Hygiene measures	Modified
8.1	DNEL/DMEL and PNEC values	Added
8.2	Consumer exposure controls	Modified
8.2	Appropriate engineering controls	Modified
9.1	Melting point	Removed
9.1	Density	Removed
9.1	Flash point	Modified
9.1	Viscosity, kinematic	Modified
10.4	Conditions to avoid	Modified
11.1	Additional information	Modified
11.1	Additional information	Modified
11.1	Additional information	Modified
11.1	Potential adverse human health effects and symptoms	Modified
11.1	Additional information	Modified
14.6	Special transport precautions	Removed
15.1	Storage class (LGK) (D)	Modified
15.1	Other information, restrictions and prohibition regulations	Added
15.1	Employment restrictions	Added
15.1	REACH Annex XVII	Modified
15.1	Other information, restriction and prohibition regulations	Added
15.2	Chemical safety assessment	Modified
16	Abbreviations and acronyms	Modified
16	Indication of changes	Added

Abbreviations and acronyms:

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

Data sources

: This Safety Data Sheet is based on the real characteristics of the components and their combination, taking into account the information provided by the suppliers.

Training advice

: Provide adequate training to professional operators for the use of PPEs, according to the information contained in this Safety Data Sheet.

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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:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Sens. 1	Skin sensitisation, Category 1
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH208	Contains Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs, calcium salts. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

SDS EU (REACH Annex II)

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.

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