# Eni i-Sigma monograde SAE 40

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878
Revision date: 7/30/2025 Supersedes: 12/27/2024 Version: 1.3

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

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Trade name | : | Eni i-Sigma monograde SAE 40 |
| Product code | : | 1089 |
| Type of product | : | Lubricants |
| Formula | : | 0018-2012 |
| Product group | : | Trade product |

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

#### Relevant identified uses

| | | |
|---|---|---|
| Main use category | : | Industrial use,Professional use,Consumer use |
| Industrial/Professional use spec | : | Wide dispersive use<br>Used in closed systems |
| Use of the substance/mixture | : | Lubricant for internal combustion engines |
| Function or use category | : | Lubricants and additives |

#### Uses advised against

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

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

Manufacturer: Enilive Iberia S.L.U. Avenida de Europa, 24, Edificio Torona B - Planta 1ª, 28108 Alcobendas (Madrid)
Tel: (+34) 917 277 878 Competent person responsible for the Safety Data Sheet (Reg. EC nr. 1907/2006): SDS.Enilive@enilive.com

Distributed by: Enilive Schmiertechnik GmbH, Paradiesstraße 14, 97080 Würzburg, GERMANY
Department responsible for information: Application Engineering & Product Management (AEPM), Tel. +49 (0)931-900 98-0
e-mail: technik.wuerzburg@enilive.com

### 1.4. Emergency telephone number

| | | |
|---|---|---|
| Emergency number | : | CNIT +39 0382 24444 (24h) (IT + EN)<br>Poison Center |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412
Full text of H- and EUH-statements: see section 16

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

Harmful to aquatic life with long lasting effects. For specific information about the toxicological/ecotoxicological properties and classification of this product, see Sect. 11 and/or Sect. 12.

### 2.2. Label elements

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

| | | |
|---|---|---|
| CLP Signal word | : | - |
| Hazard statements (CLP) | : | H412 - Harmful to aquatic life with long lasting effects. |

Precautionary statements (CLP) : P273 - Avoid release to the environment.
P501 - Dispose of contents and container to according to national or local regulations.

EUH-statements : EUH208 - Contains Amides, C18 (unsaturated). May produce an allergic reaction.

## 2.3. Other hazards

Other hazards not contributing to the classification : This product is combustible, but not classified as Flammable. The creation of flammable vapour mixtures takes place at temperatures which are higher than normal ambient levels. In case of contact with eyes, this product may cause irritation. If the product is handled or used at high temperature, contact with hot product or vapours may cause burns. Any substance, in case of accidents involving pressurized circuits and the like, may be accidentally injected under the skin, even without external damage. In such a case, the victim should be brought to an hospital as soon as possible, to get specialized medical treatment. Do not wait for symptoms to develop.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

| Component | |
|---|---|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII | Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0), Residual oils (petroleum,) solvent-refined (64742-01-4), Phenol, dodecyl-, branched, sulfurized (96152-43-1), Dodecylphenol, mixed isomers, branched (121158-58-5) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0), Residual oils (petroleum,) solvent-refined (64742-01-4), Phenol, dodecyl-, branched, sulfurized (96152-43-1), Dodecylphenol, mixed isomers, branched (121158-58-5) |

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

| Component | |
|---|---|
| Substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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 | Dodecylphenol, mixed isomers, branched (121158-58-5) |
| Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 | Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0), Residual oils (petroleum,) solvent-refined (64742-01-4), Phenol, dodecyl-, branched, sulfurized (96152-43-1) |

# SECTION 3: Composition/information on ingredients

## 3.2. Mixtures

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

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP] |
|---|---|---|---|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).]<br>(see note [**], see note [*], see note [***])<br>substance with national workplace exposure limit(s) (AT, BE, DK, ES, GB, HU, NL, SE) | CAS-No.: 64742-65-0<br>EC-No.: 265-169-7<br>EC Index-No.: 649-474-00-6<br>REACH-no: 01-2119471299-27 | 70 – 80 | Not classified |
| Residual oils (petroleum,) solvent-refined<br>(see note [**], see note [*])<br>substance with national workplace exposure limit(s) (AT, BE, DK, ES, GB, HU, NL, SE) | CAS-No.: 64742-01-4<br>EC-No.: 265-101-6<br>EC Index-No.: 649-459-00-4<br>REACH-no: 01-2119488707-21 | 20 – 25 | Not classified |
| Phenol, dodecyl-, branched, sulfurized | CAS-No.: 96152-43-1<br>EC-No.: 306-115-5<br>REACH-no: 01-2119524001-62 | 0.1 - 0.2 | Repr. 1B, H360F<br>Aquatic Chronic 4, H413 |
| Amides, C18 (unsaturated) | EC-No.: 931-801-1<br>REACH-no: 01-2119560613-41 | 0.1 – 0.15 | Skin Sens. 1B, H317<br>Aquatic Chronic 3, H412 |
| phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched<br>Substance included in REACH Candidate List (Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/or combinations thereof (PDDP))<br>substance identified as having endocrine disrupting properties | CAS-No.: 121158-58-5<br>EC-No.: 310-154-3<br>EC Index-No.: 604-092-00-9<br>REACH-no: 01-2119513207-49 | 0.1 - 0.15 | Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>Repr. 1B, H360F<br>Aquatic Acute 1, H400 (M=10)<br>Aquatic Chronic 1, H410 (M=10) |

Comments : Note [*]:
this product has a value of DMSO extract < 3 % wt, according to IP 346. According to the criteria laid out by the EU (note L, Annex VI of Regulation (CE) 1272/2008), this product must be regarded as non carcinogenic.
Note [**]:
substance with occupational exposure limits for some EU countries affecting the category of mineral oils (finely refined mineral base oil mists; see section 8.1)
Note [***]:
this product may be formulated with one or more of the following base oils: CAS 74869-22-0/ EC: 278-012-2/ REACH Reg. # 01-2119495601-36-XXXX; CAS 64742-54-7/ EC 265-157-1/ REACH Reg. # 01-2119484627-25-XXXX

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. If skin irritation occurs: Get medical advice/attention. In case of burns, cool affected part with cold running water for at least 10 min. Cover with gauze or clean cloth. Ask for medical assistance or bring to a hospital. Do not apply salves or other substances, unless by doctor's advice. Body hypothermia must be avoided. Do not put ice on the burn.

First-aid measures after eye contact : Rinse eyes thoroughly for at least 15 minutes. Keep eyelids well apart. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist. In case of burns, cool affected part with cold running water for at least 10 min. Cover with gauze or clean cloth. Ask for medical assistance or bring to a hospital. Do not apply salves or other substances, unless by doctor's advice.

First-aid measures after ingestion : Do NOT induce vomiting. If the person is conscious, rinse mouth with water without swallowing. Keep at rest. Call for medical assistance or bring to an hospital. If the casualty is unconscious, place in the recovery position. 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 / injuries (general indications) : Not expected to present a significant hazard under anticipated conditions of normal use.

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 : 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 : No information available.

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

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

Obtain medical attention if casualty has an altered state of consciousness or if symptoms do not resolve. Seek medical attention in all cases of serious burns.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

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

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

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : This product is combustible, but not classified as Flammable. The creation of flammable vapour mixtures takes place at temperatures which are higher than normal ambient levels.

Explosion hazard : Heat may build pressure in tank and containers, rupturing closed vessels, spreading fire and increasing risk of burns and injuries. The vapours are flammable and may form explosive mixtures with air.

Hazardous decomposition products in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases. POx. ZnOx. CaOx.

### 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 | : | Wear personal protection equipment. (see chapter 8). In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. EN 443. EN 469. EN 659. |
| Other information | : | In case of fire, do not discharge residual product, waste materials and runoff water: collect separately and use a proper treatment. If the fire cannot be controlled, evacuate area. |

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

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

**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. |

**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 (AX), or a Self-contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used. |
| Emergency procedures | : | If required, notify relevant authorities according to all applicable regulations. |

### 6.2. Environmental precautions

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

### 6.3. Methods and material for containment and cleaning up

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

### 6.4. Reference to other sections

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

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : This material is combustible, but will not ignite readily. Provide adequate ventilation. Use adequate personal protective equipment as needed. Due to the extremely slippery nature of this material, more care than usual must be exercised in material handling practices to keep off all walking surfaces. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid release to the environment. Emptied containers can contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been drained and cleaned. Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), carry out an adequate clean-up, and check the atmosphere for oxygen content and flammability. See also Section 16, "Other information".

Hygiene measures : Ensure that proper housekeeping measures are in place. Avoid contact with skin. Do not breathe fume/ mist/ vapours. Do not ingest. Do not smoke. Do not eat and do not drink during use. Do not clean hands with dirty or oil-soaked rags. Do not re-use clothes, if they are still contaminated. Keep away from food and beverages. Take off immediately all contaminated clothing and wash it before reuse. Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Separate working clothes from town clothes. Launder separately.

### 7.2. Conditions for safe storage, including 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 oxidizers.

Storage area : Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation. Storage installations/areas should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.

Packages and containers: : If the product is supplied in containers: Keep containers tightly closed and properly labelled. Keep only in the original container or in a suitable container for this kind of product.

Packaging materials : For containers, or container linings use materials specifically approved for use with this product. Compatibility should be checked with the manufacturer, according to the specific use conditions.

**Germany**

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

**Switzerland**

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

### 7.3. Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**National occupational exposure and biological limit values**

| **Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)** | |
|---|---|
| **Austria - Occupational Exposure Limits** | |
| MAK (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0) | |
|---|---|
| **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 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| OEL STEL | 2 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Hungary - Occupational Exposure Limits** | |
| AK (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Netherlands - Occupational Exposure Limits** | |
| MAC TGG 8h (mg/m³) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Spain - Occupational Exposure Limits** | |
| VLA-ED (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| VLA-EC (mg/m³) | 10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Sweden - Occupational Exposure Limits** | |
| NGV (OEL TWA) | 1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| KGV (OEL STEL) | 3 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **United Kingdom - Occupational Exposure Limits** | |
| WEL TWA (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| WEL STEL (OEL STEL) | 10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **USA - ACGIH - Occupational Exposure Limits** | |
| ACGIH® TLV® TWA | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| ACGIH® TLV® STEL | 10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |

| Residual oils (petroleum,) solvent-refined (64742-01-4) | |
|---|---|
| **Austria - Occupational Exposure Limits** | |
| MAK (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Belgium - Occupational Exposure Limits** | |
| OEL TWA | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Denmark - Occupational Exposure Limits** | |
| OEL TWA | 1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| OEL STEL | 2 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Hungary - Occupational Exposure Limits** | |
| AK (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Netherlands - Occupational Exposure Limits** | |
| MAC TGG 8h (mg/m³) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Spain - Occupational Exposure Limits** | |
| VLA-ED (OEL TWA) | 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) |

| Residual oils (petroleum,) solvent-refined (64742-01-4) | |
|---|---|
| **Sweden - Occupational Exposure Limits** | |
| NGV (OEL TWA) | 1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| KGV (OEL STEL) | 3 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **United Kingdom - Occupational Exposure Limits** | |
| WEL TWA (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| WEL STEL (OEL STEL) | 10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **USA - ACGIH - Occupational Exposure Limits** | |
| ACGIH® TLV® TWA | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| ACGIH® TLV® STEL | 10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |

**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. |

**Air contaminants formed**

Applicable OEL and BLV for air contaminants : None known

**DNEL and PNEC**

| Eni i-Sigma monograde SAE 40 | |
|---|---|
| **DNEL/DMEL (additional information)** | |
| Additional information | Not applicable |
| **PNEC (additional information)** | |
| Additional information | Not applicable |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 0.97 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 2.73 mg/m³ |
| Long-term - local effects, inhalation | 5.58 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 0.74 mg/kg bodyweight/day |
| **PNEC (Oral)** | |
| PNEC oral (secondary poisoning) | 9.33 mg/kg food |
| **PNEC (additional information)** | |
| Additional information | Not derived - Not classified as hazardous for environment |

| Residual oils (petroleum,) solvent-refined (64742-01-4) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 0.97 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 2.73 mg/m³ |

| Residual oils (petroleum,) solvent-refined (64742-01-4) | |
|---|---|
| Long-term - local effects, inhalation | 5.58 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 0.74 mg/kg bodyweight/day |
| Long-term - local effects, inhalation | 1.19 mg/m³ |
| **PNEC (Oral)** | |
| PNEC oral (secondary poisoning) | 9.33 mg/kg food |

| Phenol, dodecyl-, branched, sulfurized (96152-43-1) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Acute - systemic effects, dermal | 80 mg/kg bodyweight/day |
| Acute - systemic effects, inhalation | 66.8 mg/m³ |
| Long-term - systemic effects, dermal | 3.12 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 3.526 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Acute - systemic effects, dermal | 40 mg/kg bodyweight/day |
| Acute - systemic effects, inhalation | 66.8 mg/m³ |
| Acute - systemic effects, oral | 25 mg/kg bodyweight/day |
| Long-term - systemic effects,oral | 0.25 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 0.87 mg/m³ |
| Long-term - systemic effects, dermal | 1.56 mg/kg bodyweight/day |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 0.25 mg/l |
| PNEC aqua (marine water) | 0.024 mg/l |
| PNEC aqua (intermittent, freshwater) | 2.5 mg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 0.223 mg/kg dwt |
| PNEC sediment (marine water) | 0.021 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 260.04 mg/kg dwt |
| **PNEC (Oral)** | |
| PNEC oral (secondary poisoning) | 6.67 mg/kg food |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 6.5 mg/l |

| phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Acute - systemic effects, dermal | 166 mg/kg bodyweight/day |
| Acute - systemic effects, inhalation | 44.18 mg/m³ |
| Long-term - systemic effects, dermal | 0.25 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 1.762 mg/m³ |

| phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5) | |
|---|---|
| **DNEL/DMEL (General population)** | |
| Acute - systemic effects, dermal | 50 mg/kg bodyweight |
| Acute - systemic effects, inhalation | 13.26 mg/m³ |
| Acute - systemic effects, oral | 1.26 mg/kg bodyweight |
| Long-term - systemic effects,oral | 0.075 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 0.79 mg/m³ |
| Long-term - systemic effects, dermal | 0.075 mg/kg bodyweight/day |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 0.074 µg/l |
| PNEC aqua (marine water) | 0.0074 µg/l |
| PNEC aqua (intermittent, freshwater) | 0.37 µg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 0.226 mg/kg dwt |
| PNEC sediment (marine water) | 0.0266 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 118 µg/kg dw |
| **PNEC (Oral)** | |
| PNEC oral (secondary poisoning) | 4 mg/kg food |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 100 mg/l |

| Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 50 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 140 mg/m³ |
| Long-term - local effects, inhalation | 5.4 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 0.74 mg/kg bodyweight/day |
| Long-term - local effects, inhalation | 1.2 mg/m³/day |
| **PNEC (Oral)** | |
| PNEC oral (secondary poisoning) | 9.33 mg/kg food |

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.

### Control banding

Control banding : None known

## 8.2. Exposure controls

### Appropriate engineering controls

**Appropriate engineering controls:**
Ensure that there is a suitable ventilation system. Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), carry out an adequate clean-up, and check the atmosphere for oxygen content and flammability. See also Section 16, "Other information".

### Personal protection equipment

**Personal protective equipment (for industrial or professional use):**
Gloves. Protective clothing. Safety glasses. Safety shoes or boots. Wear a face shield.
**Personal protective equipment symbol(s):**

### 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.

### 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.

**Hand protection:**
When there is a risk of contact with the skin, use waterproof gloves, resistant to chemical products. Gloves must be felt-lined. Adequate materials: nitrile (NBR) or PVC with a protection index > 5 (permeation time > 240 mins). Use gloves respecting all the conditions and within the limits set by the manufacturer. Replace gloves immediately in case of cuts, holes or other signs of damages or degradation. If necessary, refer to the EN 374 standard. Personal hygiene is a key element for an effective hand care. Gloves must be worn only with clean hands. After wearing gloves, hands must be carefully washed and dried.

### Respiratory protection

**Respiratory protection:**
Independently from other possible actions (technical modifications, operating procedures, and other means to limit the exposure of workers), personal protection equipment can be used according to necessity. Open or well ventilated spaces: in presence of mists and if the product is handled without adequate containment means: use full or half-face masks with filter for mists/aerosols. (EN 136/140/145). Combined gas/dust mask with filter type: EN 14387. Closed or confined areas (e.g. tank interiors): the use of protection measures for airways (masks or self-contained breathing apparatus), must be assessed according to the specific activity, as well as level and duration of predicted exposure.

### Thermal hazards

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

### Environmental exposure controls

**Environmental exposure controls:**
Do not discharge the product into the environment. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Prevent discharge of undissolved substance to or recover from onsite wastewater. Onsite wastewater treatment required. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.
**Consumer exposure controls:**
No special requirements.

# SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Colour | : | Yellow-brown. |

| | | |
|---|---|---|
| Appearance | : | Liquid, bright & clear. |
| Odour | : | Slight odour of petroleum. |
| Odour threshold | : | Not available |
| Melting point | : | Not applicable |
| Freezing point | : | Not determined |
| Softening point | : | -18 °C (ASTM D 5950) |
| Boiling point | : | 200 – 800 (CAS 64742-65-0) |
| Flammability | : | Not flammable |
| Lower explosion limit | : | Not determined |
| Upper explosion limit | : | Not determined |
| Flash point | : | 190 °C (ASTM D 93) |
| Auto-ignition temperature | : | > 300 °C (CAS 64742-65-0) |
| Decomposition temperature | : | Not determined |
| pH | : | Lack of data (on mixture / components of the mixture) - Data not available |
| Viscosity, kinematic | : | 165 mm²/s (40 °C) (ASTM D 445) |
| Viscosity, dynamic | : | Not determined |
| Solubility | : | Water: Immiscible and insoluble |
| Log Kow | : | Not applicable for mixtures |
| Log Pow | : | Not applicable for mixtures |
| Vapour pressure | : | < 0.1 hPa (20°C) |
| Vapour pressure at 50°C | : | Not determined |
| Critical pressure | : | Not applicable for mixtures |
| Density | : | 895 kg/m³ (15 °C) (ASTM D 4052) |
| Relative density | : | Not determined |
| Relative vapour density at 20°C | : | Not determined |
| Particle characteristics | : | Not applicable |

### 9.2. Other information

**Information with regard to physical hazard classes**

| | | |
|---|---|---|
| Critical temperature | : | Not applicable for mixtures |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

Stable product, according to its intrinsic properties.

### 10.3. Possibility of hazardous reactions

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

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : Carbon dioxide, Carbon monoxide, Toxic fumes.

## 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)

| Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0) | |
|---|---|
| LD50 oral rat | > 5000 mg/kg bodyweight Not determined |

| Residual oils (petroleum,) solvent-refined (64742-01-4) | |
|---|---|
| LD50 oral rat | > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity) |
| LD50 dermal rat | > 2000 mg/kg bodyweight |
| LC50 Inhalation - Rat | > 5 mg/l/4h |

| Phenol, dodecyl-, branched, sulfurized (96152-43-1) | |
|---|---|
| LD50 oral rat | > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity) |
| LD50 dermal rabbit | > 4000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |

| phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5) | |
|---|---|
| LD50 oral rat | 2200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity) |
| LD50 dermal rabbit | 15000 mg/kg bodyweight |

| Amides, C18 (unsaturated) | |
|---|---|
| LD50 oral rat | > 5000 mg/kg bodyweight |
| LD50 dermal rat | > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: Lack of data (on mixture / components of the mixture) - Data not available
Additional information : (according to composition)

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

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: Lack of data (on mixture / components of the mixture) - Data not available
Additional information : (according to composition)

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

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

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)
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)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)

| phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5) | |
|---|---|
| NOAEL (animal/male, F1) | 1.5 mg/kg |
| NOAEL (animal/female, F1) | 15 mg/kg (OECD 416) |

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), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0) | |
|---|---|
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight Not determined |
| LOAEL (dermal, rat/rabbit, 90 days) | 100 mg/kg bodyweight/day |
| NOAEL (oral, rat, 90 days) | < 125 mg/kg bodyweight/day (CAS 64742-04-7, Mobil 1990) (OECD 408) |
| NOAEL (dermal, rat/rabbit, 90 days) | ≈ 1000 mg/kg bodyweight Not determined |
| NOAEC (inhalation,rat, vapour, 90 days) | 220 – 980 mg/m³ (Dalbey W, Osimitz T, Kommineni C, Roy T, Feuston M and Yang J 1991 - OECD 412) |

| Residual oils (petroleum,) solvent-refined (64742-01-4) | |
|---|---|
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents) |
| NOAEC (inhalation, rat, dust/mist/fume, 90 days) | > 0.98 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study) |

| Phenol, dodecyl-, branched, sulfurized (96152-43-1) | |
|---|---|
| NOAEL (dermal, rat/rabbit, 90 days) | ≈ 250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) |

| Amides, C18 (unsaturated) | |
|---|---|
| NOAEL (oral, rat, 90 days) | ≈ 10000 mg/kg bodyweight Animal: rat, Animal sex: male |

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 monograde SAE 40 | |
|---|---|
| Viscosity, kinematic | 165 mm²/s (40 °C) (ASTM D 445) |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0) | |
|---|---|
| Viscosity, kinematic | 91 – 99 mm²/s (40 °C) (ASTM D 445) |

| Residual oils (petroleum,) solvent-refined (64742-01-4) | |
|---|---|
| Viscosity, kinematic | 490 mm²/s (40 °C) (ASTM D 445) |

### 11.2. Information on other hazards

#### Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605,Shows an adverse effect in an intact organism or its progeny, which is a change in the morphology, physiology, growth, development, reproduction or life span of an organism, system or (sub)population that results in an impairment of functional capacity, an impairment of the capacity to compensate for additional stress or an increase in susceptibility to other influences,The adverse effect is a consequence of the endocrine mode of action

| Component | |
|---|---|
| phenol, dodecyl-, branched; phenol, 2-dodecyl-, branched; phenol, 3-dodecyl-, branched (121158-58-5) | The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3) |

#### Other information

Potential adverse human health effects and symptoms : Contact with eyes may cause reddening and irritation,Avoid all eye and skin contact and do not breathe vapour and mist

Other information : None

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Handle according to general working hygiene practices to avoid pollution and release into the environment. Notify authorities if product enters sewers or public waters.

Ecology - air : This product has a low vapour pressure, and in normal conditions at ambient temperature the concentration in the air is negligible. A significant concentration may build up only in case of sprays and mists. In these cases overexposure to mists (e.g. through prolonged use in confined insufficiently ventilated spaces) may cause irritation to airways, nausea and dizziness.

Ecology - water : This product is not soluble in water. It floats on water and forms a film on the surface. The damage to aquatic organisms is of mechanical kind (immobilization and entrapment)

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) : Harmful to aquatic life with long lasting effects.

| Distillates (petroleum), solvent-dewaxed 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) |

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

| Phenol, dodecyl-, branched, sulfurized (96152-43-1) | |
|---|---|
| LC50 fish 1 | ≥ 500 mg/l (LL50 - 96h) |
| EC50 Daphnia 1 | ≥ 750 mg/l (LL50 - 96h) |

| Dodecylphenol, mixed isomers, branched (121158-58-5) | |
|---|---|
| LC50 fish 1 | 40 mg/l (Pimephales promelas) |
| EC50 Daphnia 1 | 92.7 µg/l Test organisms (species): Daphnia magna |
| EC50 other aquatic organisms 1 | > 0.58 mg/l (96h, Mysidopsis Bahia) |
| EC50 72h - Algae [1] | > 0.765 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| EC50 72h - Algae [2] | 0.36 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| ErC50 (algae) | 0.36 mg/l (21d) |
| LOEC (chronic) | 0.012 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC (chronic) | 0.0037 mg/l (21d) |

| Amides, C18 (unsaturated) | |
|---|---|
| LC50 fish 1 | > 0.5 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) |
| EC50 Daphnia 1 | > 100 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | > 100 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum) |
| NOEC chronic fish | 0.105 mg/l |

## 12.2. Persistence and degradability

| Eni i-Sigma monograde SAE 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), 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) |

| Residual oils (petroleum,) solvent-refined (64742-01-4) | |
|---|---|
| Persistence and degradability | Substance is complex UVCB, The test methods for this endpoint are not applicable to UVCB substances. |

| Phenol, dodecyl-, branched, sulfurized (96152-43-1) | |
|---|---|
| Persistence and degradability | Rapidly degradable |
| Biodegradation | 13.4 % (28d) |

| Dodecylphenol, mixed isomers, branched (121158-58-5) | |
|---|---|
| Persistence and degradability | Rapidly degradable |
| Biodegradation | 25 % (28 d, OECD TG 301 B) |

| Amides, C18 (unsaturated) | |
|---|---|
| Persistence and degradability | Rapidly degradable |
| Biodegradation | 62 – 64 % (28d, OECD 301B) |

## 12.3. Bioaccumulative potential

| Eni i-Sigma monograde SAE 40 | |
|---|---|
| Log Pow | Not applicable for mixtures |
| Log Kow | Not applicable for mixtures |
| Bioaccumulative potential | Not established. |

| 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. |

| Residual oils (petroleum,) solvent-refined (64742-01-4) | |
|---|---|
| Bioaccumulative potential | The test methods for this endpoint are not applicable to UVCB substances. |

| Dodecylphenol, mixed isomers, branched (121158-58-5) | |
|---|---|
| Bioconcentration factor (BCF REACH) | 794.33 |
| Log Kow | 7.14 |

| Amides, C18 (unsaturated) | |
|---|---|
| Log Pow | 6.48 |

## 12.4. Mobility in soil

| Eni i-Sigma monograde SAE 40 | |
|---|---|
| Ecology - soil | No data available. |

| 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. |

| Residual oils (petroleum,) solvent-refined (64742-01-4) | |
|---|---|
| Ecology - soil | The test methods for this endpoint are not applicable to UVCB substances. |

| Amides, C18 (unsaturated) | |
|---|---|
| Log Koc | 4.5 – 4.66 |

## 12.5. Results of PBT and vPvB assessment

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

| Component | |
|---|---|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII | Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0), Residual oils (petroleum,) solvent-refined (64742-01-4), Phenol, dodecyl-, branched, sulfurized (96152-43-1), Dodecylphenol, mixed isomers, branched (121158-58-5) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0), Residual oils (petroleum,) solvent-refined (64742-01-4), Phenol, dodecyl-, branched, sulfurized (96152-43-1), Dodecylphenol, mixed isomers, branched (121158-58-5) |

### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Endocrine disrupting properties (Article 57(f) — environment): Has an endocrine mode of action, i.e. it alters the function(s) of the endocrine system. Shows an adverse effect in non-target organisms, which is a change in the morphology, physiology, growth, development, reproduction or life span of an organism, system or (sub)population that results in an impairment of functional capacity, an impairment of the capacity to compensate for additional stress or an increase in susceptibility to other influences.

| Component | |
|---|---|
| Dodecylphenol, mixed isomers, branched (121158-58-5) | Has an endocrine mode of action, i.e. it alters the function(s) of the endocrine system |

### 12.7. Other adverse effects

Other adverse effects : None.

| Eni i-Sigma monograde SAE 40 | |
|---|---|
| Other 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. |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
|---|---|
| Other 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. |

| Residual oils (petroleum,) solvent-refined (64742-01-4) | |
|---|---|
| Other 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 dumping on the ground, or discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector. Dispose of empty containers and wastes safely.

Sewage disposal recommendations : Dispose of in a safe manner in accordance with local/national regulations. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

Product/Packaging disposal recommendations : European Waste Catalogue code(s) (Decision 2001/118/CE): 13 02 05* (mineral-based non-chlorinated engine, gear and lubricating oils). This EWC code is only a general indication, and takes into account the original composition of the product and its intended use. The user has the responsibility of choosing the right EWC code, considering the actual use of the product, alterations and contaminations.

Additional information : Empty containers may contain combustible product residues. Do not cut, weld, bore, burn or incinerate emptied containers, unless they have been cleaned and declared safe.

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

## SECTION 14: Transport information

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

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.1. UN number or ID number** | | | | |
| Not regulated for transport | | | | |
| **14.2. UN proper shipping name** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.3. Transport hazard class(es)** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.4. Packing group** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.5. Environmental hazards** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| None. | | | | |

### 14.6. Special precautions for user

**Overland transport**
Not regulated

**Transport by sea**
Not regulated

**Air transport**
Not regulated

**Inland waterway transport**
Not regulated

**Rail transport**
Not regulated

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

**EU-Regulations**

**REACH Annex XVII (Restriction List)**

| EU restriction list (REACH Annex XVII) | | |
|---|---|---|
| **Reference code** | **Applicable on** | **Entry title or description** |
| 3(b) | Phenol, dodecyl-, branched, sulfurized ; Dodecylphenol, mixed isomers, branched | 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 |

| EU restriction list (REACH Annex XVII) | | |
|---|---|---|
| **Reference code** | **Applicable on** | **Entry title or description** |
| 3(c) | Eni i-Sigma monograde SAE 40 ; Phenol, dodecyl-, branched, sulfurized ; Dodecylphenol, mixed isomers, branched | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1 |

### REACH Annex XIV (Authorisation List)

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

### REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP) (EC 310-154-3, CAS 121158-58-5)

### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

### Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

### Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

### Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### National regulations

### France

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

### Germany

Employment restrictions : Employment prohibitions or restrictions on the protection of young people at work according to § 22 JArbSchG in the case of formation of hazardous substances have to be observed.

National Rules and Recommendations : TRGS 400: Hazard assessment for activities involving Hazardous Substances.
TRGS 401: Risks resulting from skin contact - identification, assessment, measures.
TRGS 402: Identification and Assessment of the Risks from Activities involving Hazardous Substances: Inhalation Exposure.
TRGS 800: Fire protection measures.
TRGS 500: Protective measures.
TRGS 555: Working instruction and information for workers.
TRGS 900: Occupational Exposure Limits.
TRGS 905: List of mutagenic, carcinogenic or teratogenic substances.
TRGS 910: Risk-related concept of measures for activities involving carcinogenic hazardous substances.

VbF class (D) : Not applicable.

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

| | | |
|---|---|---|
| WGK remark | : | Classification is carried out on the basis of the Ordinance on facilities for handling substances that are hazardous to water (Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV)) of 18 April 2017 (BGBl 2017, Teil I, Nr. 22, Seite 905). |
| Major Accidents Ordinance (12. BImSchV) | : | Is not subject to the Major Accidents Ordinance (12. BImSchV) |

**Netherlands**

| | | |
|---|---|---|
| Waterbezwaarlijkheid | : | 8 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment<br>9 - Harmful to aquatic organisms |
| Saneringsinspanningen | : | C - Minimize discharge |
| SZW-lijst van kankerverwekkende stoffen | : | Distillates (petroleum), solvent-dewaxed heavy paraffinic,Residual oils (petroleum,) solvent-refined,Phenol, dodecyl-, branched, sulfurized,Dodecylphenol, mixed isomers, branched are listed |
| SZW-lijst van mutagene stoffen | : | Distillates (petroleum), solvent-dewaxed heavy paraffinic,Residual oils (petroleum,) solvent-refined,Phenol, dodecyl-, branched, sulfurized,Dodecylphenol, mixed isomers, branched are listed |
| SZW-lijst van reprotoxische stoffen – Borstvoeding | : | None of the components are listed |
| SZW-lijst van reprotoxische stoffen – Vruchtbaarheid | : | Dodecylphenol, mixed isomers, branched is listed |
| SZW-lijst van reprotoxische stoffen – Ontwikkeling | : | None of the components are listed |

**Denmark**

| | | |
|---|---|---|
| Danish National Regulations | : | Young people under 18 years are not allowed to use the product<br>Pregnant/breastfeeding women working with the product must not be in direct contact with it |

**Poland**

| | | |
|---|---|---|
| Polish National Regulations | : | Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).<br>Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).<br>The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).<br>Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).<br>Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).<br>Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).<br>The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)<br>Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).<br>Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).<br>ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891) |

## 15.2. Chemical safety assessment

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

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

Residual oils (petroleum,) solvent-refined

Phenol, dodecyl-, branched, sulfurized

## SECTION 16: Other information

| Indication of changes | | |
|---|---|---|
| **Section** | **Changed item** | **Comments** |
| | Revision date | **Modified** |
| | Supersedes | **Modified** |
| 2.2 | EUH-statements | **Added** |
| 3 | Composition/information on ingredients | **Modified** |
| 15.1 | REACH Annex XVII | **Modified** |

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

| Abbreviations and acronyms: | |
|---|---|
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and Very Bioaccumulative |
| WGK | Water Hazard Class |

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

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

Other information : Do not use the product for any purposes that have not been advised by the manufacturer.

| Full text of H- and EUH-statements: | |
|---|---|
| Aquatic Acute 1 | Hazardous to the aquatic environment – Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment – Chronic Hazard, Category 1 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment – Chronic Hazard, Category 3 |
| Aquatic Chronic 4 | Hazardous to the aquatic environment – Chronic Hazard, Category 4 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Repr. 1B | Reproductive toxicity, Category 1B |
| Skin Corr. 1C | Skin corrosion/irritation, Category 1, Sub-Category 1C |
| Skin Sens. 1B | Skin sensitisation, category 1B |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H360F | May damage fertility. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| H413 | May cause long lasting harmful effects to aquatic life. |
| EUH208 | Contains Amides, C18 (unsaturated). May produce an allergic reaction. |

| Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]: | | |
|---|---|---|
| Aquatic Chronic 3 | H412 | Calculation method |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.