# Eni Arnica 32

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878
Revision date: 12/04/2023 Version: 1.0

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

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Trade name | : | Eni Arnica 32 |
| Product code | : | 2531 |
| Type of product | : | Lubricants |
| Formula | : | 0067-2022 |
| 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 |
| Industrial/Professional use spec | : | Wide dispersive use<br>Used in closed systems |
| Use of the substance/mixture | : | Hydraulic oil<br>----<br>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 Sustainable Mobility S.p.A., Viale Giorgio Ribotta 51, 00144 Rom, ITALY, Tel. +39 06 59821, www.eni.com
Competent person responsible for the safety data sheet (Reg. EC nr. 1907/2006): SDS.ESM.info@eni.com

Distributed by: Enilive Schmiertechnik GmbH, Paradiesstraße 14, 97080 Würzburg, GERMANY, www.oilproducts.eni.com
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 centre |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Not classified

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

None to be reported, according to the present EU regulations. For specific information about the toxicological/ecotoxicological properties and classification of this product, see Sect. 11 and/or Sect. 12.

### 2.2. Label elements

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

| | | |
|---|---|---|
| EUH-statements | : | EUH210 - Safety data sheet available on request. |

### 2.3. Other hazards (not relevant for classification)

Other hazards not contributing to the classification : This product is combustible, but not classified as Flammable. The creation of flammable vapour mixtures takes place at temperatures which are higher than normal ambient levels. Any substance, in case of accidents involving pressurized circuits and the like, may be accidentally injected under the skin, even without external damage. In such a case, the victim should be brought to an hospital as soon as possible, to get specialized medical treatment. 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. Do not wait for symptoms to develop. 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
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

| Component | |
|---|---|
| Distillates (petroleum), solvent-refined light paraffinic (64741-89-5) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| 2,6-Di-tert-butylphenol (128-39-2) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| Distillates (petroleum) hydrotreated light paraffinic (64742-55-8) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

| Component | |
|---|---|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic(64742-65-0) | The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 |
| Distillates (petroleum), solvent-refined light paraffinic(64741-89-5) | The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 |
| Distillates (petroleum) hydrotreated light paraffinic (64742-55-8) | The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 |
| 2,6-Di-tert-butylphenol(128-39-2) | The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 |

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

## 3.2. Mixtures

Notes : Composition/ Information on ingredients:
Mixture of hydrocarbons
Acrylic resin
Additives

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP] |
|---|---|---|---|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic<br>(see note [*], see note [**], see note [***]) | CAS-No.: 64742-65-0<br>EC-No.: 265-169-7<br>REACH-no: 01-2119471299-27 | 70 – 80 | Not classified |
| Distillates (petroleum), solvent-refined light paraffinic<br>(see note [*], see note [**]) | CAS-No.: 64741-89-5<br>EC-No.: 265-091-3<br>EC Index-No.: 649-455-00-2<br>REACH-no: 01-2119487067-30 | 20 - 30 | Asp. Tox. 1, H304 |
| 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.]<br>(see note [*], see note [**]) | CAS-No.: 64742-54-7<br>EC-No.: 265-157-1<br>EC Index-No.: 649-467-00-8<br>REACH-no: 01-2119484627-25 | ≤ 2 | Not classified |
| Distillates (petroleum) hydrotreated light paraffinic<br>(see note [*], see note [**]) | CAS-No.: 64742-55-8<br>EC-No.: 265-158-7<br>EC Index-No.: 649-468-00-3<br>REACH-no: 01-2119487077-29 | ≤ 2 | Asp. Tox. 1, H304 |
| 2,6-Di-tert-butylphenol<br>(Additive) | CAS-No.: 128-39-2<br>EC-No.: 204-884-0<br>REACH-no: 01-2119490822-33 | 0,1 - 0,2 | Skin Irrit. 2, H315<br>Aquatic Acute 1, H400 (M=1)<br>Aquatic Chronic 1, H410 (M=1) |

Notes : Note [*]:
this product has a value of DMSO extract < 3 % wt, according to IP 346. According to the criteria laid out by the EU (note L, Annex VI of Regulation (CE) 1272/2008), this product must be regarded as non carcinogenic.
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 (not classified as hazardous): CAS 64742-54-7/ REACH Reg. # 01-2119484627-25-XXXX; CAS 64742-65-0/ REACH Reg. # 01-2119471299-27-XXXX; CAS 64742-65-0/ EC 265-169-7/ REACH Reg # 01-2119471299-27-XXXX/ EC index No 649-474-00-6

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 contact with hot product, cool affected part with plenty of cold water, and cover with gauze or clean cloth. Call a doctor or bring to an hospital. Do not use salves or ointments, unless directed by doctor. Body hypothermia must be avoided. Do not put ice on the burn.

First-aid measures after eye contact : Rinse eyes thoroughly for at least 15 minutes. Keep eyelids well apart. 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 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 : Contact with hot product may cause thermal burns.

Symptoms/effects after eye contact : Contact with eyes may cause temporary reddening and irritation. Contact with hot product or vapours may cause burns.

Symptoms/effects after ingestion : Accidental ingestion of small quantities of the product may cause nausea, discomfort and gastric disturbances.

Symptoms/effects upon intravenous administration : No information available.

Chronic symptoms : None known.

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

Obtain medical attention if casualty has an altered state of consciousness or if symptoms do not resolve. Seek medical attention in all cases of serious burns. If there is any suspicion of inhalation of H2S (hydrogen sulphide), Rescuers must wear breathing apparatus, belt and safety rope, and follow rescue procedures. Send patient to hospital. Immediately begin artificial respiration if breathing has ceased. Administer oxygen if necessary.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : 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. Vapours are heavier than air, spread along floors and form explosive mixtures with 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.

### 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.

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 accidental sprays on hot surfaces or electrical contacts. Avoid direct contact with released material. Keep upwind.

#### 6.1.1. For non-emergency personnel

Protective equipment : 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. 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/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, flammability, and the presence of sulphur compounds. The product may release Hydrogen Sulphide: a specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances. See also Section 16, "Other information". |
| Handling temperature | : | This product can be handled at ambient temperatures. |
| 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. Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets. Take off immediately all contaminated clothing and wash it before reuse. 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 oxidants. |
| Storage temperature | : | This product can be stored at ambient temperatures. |
| 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

#### 8.1.1 National occupational exposure and biological limit values

| Distillates (petroleum), solvent-refined light paraffinic (64741-89-5) | |
|---|---|
| **Austria - Occupational Exposure Limits** | |
| MAK (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Belgium - Occupational Exposure Limits** | |
| OEL TWA | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Denmark - Occupational Exposure Limits** | |
| OEL TWA [1] | 1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| OEL STEL | 2 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Hungary - Occupational Exposure Limits** | |
| AK (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Netherlands - Occupational Exposure Limits** | |
| MAC TGG 8h (mg/m³) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Spain - Occupational Exposure Limits** | |
| VLA-ED (OEL TWA) [1] | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| VLA-EC (mg/m³) | 10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Sweden - Occupational Exposure Limits** | |
| NGV (OEL TWA) | 1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| KTV (OEL STEL) | 3 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **USA - ACGIH - Occupational Exposure Limits** | |
| ACGIH OEL TWA | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| ACGIH OEL STEL | 10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
|---|---|
| **Austria - Occupational Exposure Limits** | |
| MAK (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Belgium - Occupational Exposure Limits** | |
| OEL TWA | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Denmark - Occupational Exposure Limits** | |
| OEL TWA [1] | 1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| OEL STEL | 2 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Hungary - Occupational Exposure Limits** | |
| AK (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Netherlands - Occupational Exposure Limits** | |
| MAC TGG 8h (mg/m³) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Spain - Occupational Exposure Limits** | |
| VLA-ED (OEL TWA) [1] | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| VLA-EC (mg/m³) | 10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Sweden - Occupational Exposure Limits** | |
| NGV (OEL TWA) | 1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| KTV (OEL STEL) | 3 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
|---|---|
| **USA - ACGIH - Occupational Exposure Limits** | |
| ACGIH OEL TWA | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| ACGIH OEL STEL | 10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |

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

| Distillates (petroleum) hydrotreated light paraffinic (64742-55-8) | |
|---|---|
| **Austria - Occupational Exposure Limits** | |
| MAK (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Belgium - Occupational Exposure Limits** | |
| OEL TWA | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Denmark - Occupational Exposure Limits** | |
| OEL TWA [1] | 1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| OEL STEL | 2 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Hungary - Occupational Exposure Limits** | |
| AK (OEL TWA) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Netherlands - Occupational Exposure Limits** | |
| MAC TGG 8h (mg/m³) | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |

| Distillates (petroleum) hydrotreated light paraffinic (64742-55-8) | |
|---|---|
| **Spain - Occupational Exposure Limits** | |
| VLA-ED (OEL TWA) [1] | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| VLA-EC (mg/m³) | 10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **Sweden - Occupational Exposure Limits** | |
| NGV (OEL TWA) | 1 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| KTV (OEL STEL) | 3 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| **USA - ACGIH - Occupational Exposure Limits** | |
| ACGIH OEL TWA | 5 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| ACGIH OEL STEL | 10 mg/m³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |

#### 8.1.2. Recommended monitoring procedures

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

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

| Eni Arnica 32 | |
|---|---|
| **DNEL/DMEL (additional information)** | |
| Additional information | Not applicable |
| **PNEC (additional information)** | |
| Additional information | Not applicable |

| Distillates (petroleum), solvent-refined light paraffinic (64741-89-5) | |
|---|---|
| **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 |
| Long-term - local effects, inhalation | 1,19 mg/m³ |
| **PNEC (Oral)** | |
| PNEC oral (secondary poisoning) | 9,33 mg/kg food |
| **PNEC (additional information)** | |
| Additional information | Not derived - Not classified as hazardous for environment |

| 2,6-Di-tert-butylphenol (128-39-2) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 11,25 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 70,61 mg/m³ |

| 2,6-Di-tert-butylphenol (128-39-2) | |
|---|---|
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 6,75 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 20,9 mg/m³ |
| Long-term - systemic effects, dermal | 6,75 mg/kg bodyweight/day |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 0,0007 mg/l |
| PNEC aqua (marine water) | 0,00007 mg/l |
| PNEC aqua (intermittent, freshwater) | 0,0045 mg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 0,317 mg/kg dwt |
| PNEC sediment (marine water) | 0,0317 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 0,697 mg/kg dwt |
| **PNEC (Oral)** | |
| PNEC oral (secondary poisoning) | 60 mg/kg food |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 10 mg/l |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 0,97 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 2,73 mg/m³ |
| Long-term - local effects, inhalation | 5,58 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 0,74 mg/kg bodyweight/day |
| **PNEC (Oral)** | |
| PNEC oral (secondary poisoning) | 9,33 mg/kg food |
| **PNEC (additional information)** | |
| Additional information | Not derived - Not classified as hazardous for environment |

| Distillates (petroleum) hydrotreated light paraffinic (64742-55-8) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 220 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 160 mg/m³/day |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 40 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 35 mg/m³ |
| Long-term - systemic effects, dermal | 92 mg/kg bodyweight/day |

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

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

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

#### 8.2.2. Personal protection equipment

**Personal protective equipment (for industrial or professional use):**
Gloves. Safety glasses.

**Personal protective equipment symbol(s):**

#### 8.2.2.1. Eye and face protection

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

#### 8.2.2.2. Skin protection

**Skin and body protection:**
Long-sleeved overalls. If necessary, refer to the EN 340 and related standards, for definition of characteristics and performance according to the risk rating of the area. Antistatic non-skid safety shoes or boots, chemical resistant, if necessary heat resistant and insulated.

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

#### 8.2.2.3. Respiratory protection

**Respiratory protection:**
Independently from other possible actions (technical modifications, operating procedures, and other means to limit the exposure of workers), personal protection equipment can be used according to necessity. Open or well ventilated spaces: in presence of oil mists and if the product is handled without adequate containment means: use full or half-face masks with filter for mists/aerosols (P). In case there is a significant presence of vapours (e.g. through handling at high temperature), use full or half-face masks with a filter for organic vapours (A), and H2S (B) where applicable. (EN 136/140/145). Combined gas/dust mask with filter type: EN 14387. Closed or confined areas (e.g. tank interiors): the use of protection measures for airways (masks or self-contained breathing apparatus), must be assessed according to the specific activity, as well as level and duration of predicted exposure. (EN 136/140/145). Approved respiratory protection equipment shall be used in spaces where hydrogen sulphide may accumulate: full face mask with cartridge/filter type “B” (grey for inorganic vapours including H2S) or self-contained breathing apparatus (SCBA). (EN 136/140/145)

#### 8.2.2.4. Thermal hazards

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

#### 8.2.3. Environmental exposure controls

**Environmental exposure controls:**
Do not discharge the product into the environment. 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:**
Not applicable.

## 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 determined |
| Melting point | : | Not applicable. |
| Freezing point | : | ≈ 0 °C (CAS 64742-65-0) |
| Softening point | : | -36 °C (ASTM D 97) |
| Boiling point | : | > 250 °C (CAS 64742-65-0) |
| Flammability (solid, gas) | : | Not flammable |
| Explosive properties | : | Not explosive. |
| Oxidising properties | : | Not oxidising. |
| Explosive limits | : | Lack of data (on mixture / components of the mixture) - Data not available<br>Not determined |
| Lower explosion limit | : | Not determined |
| Upper explosion limit | : | Not determined |
| Flash point | : | 215 °C (ASTM D 92) |
| Auto-ignition temperature | : | > 300 °C (CAS 64742-65-0) |
| Decomposition temperature | : | Not determined |
| pH | : | Not determined |
| Viscosity, kinematic | : | 32 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 | : | Not determined |
| Vapour pressure at 50°C | : | Not determined |
| Critical pressure | : | Not applicable for mixtures |
| Density | : | 869 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

#### 9.2.1. Information with regard to physical hazard classes

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

#### 9.2.2. Other safety characteristics

| | | |
|---|---|---|
| Relative evaporation rate (butylacetate=1) | : | Negligible. |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

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

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

Strong oxidants.

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

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

| **2,6-Di-tert-butylphenol (128-39-2)** | |
|---|---|
| LD50 oral rat | > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity) |
| LD50 dermal rabbit | > 0,5 ml/kg |

| **Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)** | |
|---|---|
| LD50 oral rat | > 5000 mg/kg (API 1982, UBTL 1983 - OECD 401) |
| LD50 dermal rabbit | 2000 – 5000 mg/kg bodyweight (API 1982, UBTL 1984 - OECD 402) |
| LC50 Inhalation - Rat | 3,9 – 5,3 mg/l/4h (Bio-Research Laboratories, Ltd. 1984 - OECD 403) |

| **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)** | |
|---|---|
| LD50 oral rat | > 5000 mg/kg (OECD 401) |
| LD50 dermal rat | > 5000 mg/kg (OECD 402) |
| LC50 Inhalation - Rat | > 5 mg/l/4h (OECD 403) |

| **Distillates (petroleum) hydrotreated light paraffinic (64742-55-8)** | |
|---|---|
| LD50 oral rat | > 5000 mg/kg (OECD 401) |
| LD50 dermal rat | > 5000 mg/kg (OECD 402) |

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

Additional information : (according to composition)

| Distillates (petroleum), solvent-refined light paraffinic (64741-89-5) | |
|---|---|
| pH | Not applicable |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
|---|---|
| pH | Not applicable |

| 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) | |
|---|---|
| pH | Not applicable |

| Distillates (petroleum) hydrotreated light paraffinic (64742-55-8) | |
|---|---|
| pH | Not applicable |

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

Additional information : (according to composition)

| Distillates (petroleum), solvent-refined light paraffinic (64741-89-5) | |
|---|---|
| pH | Not applicable |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
|---|---|
| pH | Not applicable |

| 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) | |
|---|---|
| pH | Not applicable |

| Distillates (petroleum) hydrotreated light paraffinic (64742-55-8) | |
|---|---|
| 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)
This product contains : Distillates (petroleum) hydrotreated light paraffinic, 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.], Distillates (petroleum), solvent-dewaxed heavy paraffinic, Distillates (petroleum), solvent-refined light paraffinic this product has a value of DMSO extract < 3 % wt, according to IP 346. According to the criteria laid out by the EU (note L, Annex VI of Regulation (CE) 1272/2008), this product must be regarded as non carcinogenic.

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

| 2,6-Di-tert-butylphenol (128-39-2) | |
|---|---|
| NOAEL (subacute, oral, animal/male, 28 days) | > 100 mg/kg bodyweight (100 mg / d) |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
|---|---|
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight/day (CAS 64742-04-7, Mobil 1990) (OECD 408) |
| 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 – 2000 mg/kg bodyweight/day (API 1982, Mobil Environmental and Health Science Laboratory 1983 - OECD 410) |
| 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) |

| 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) | |
|---|---|
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight/day (OECD TG 408) |

| Distillates (petroleum) hydrotreated light paraffinic (64742-55-8) | |
|---|---|
| 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 Arnica 32 | |
|---|---|
| Viscosity, kinematic | 32 mm²/s (40 °C) (ASTM D 445) |

| Distillates (petroleum), solvent-refined light paraffinic (64741-89-5) | |
|---|---|
| Viscosity, kinematic | 12,5 – 14,5 mm²/s (40°C, ASTM D 445) |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
|---|---|
| Viscosity, kinematic | 30 – 32 mm²/s (40 °C) (ASTM D 445) |

| Distillates (petroleum) hydrotreated light paraffinic (64742-55-8) | |
|---|---|
| Viscosity, kinematic | > 20,5 mm²/s (40 °C) (ASTM D 445) |

## 11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

### 11.2.2. Other information

Potential adverse human health effects and symptoms : Contact with eyes may cause temporary 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 : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. An uncontrolled release to the environment may nevertheless produce a contamination of different environmental compartments (soil, underground, surface water bodies, aquifers). Handle according to general working hygiene practices to avoid pollution and release into the environment.

Ecology - air : This product has a low vapour pressure. A significant exposure may happen only if the product is used at high temperature, or in case of sprays and mists.

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

Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)

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

| **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) |

| **2,6-Di-tert-butylphenol (128-39-2)** | |
|---|---|
| LC50 fish 1 | 1,4 mg/l Test organisms (species): Pimephales promelas |
| LC50 other aquatic organisms 1 | 0,45 mg/l |
| EC50 Daphnia 1 | 0,45 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 3,6 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| EC50 72h - Algae [2] | 1,4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| EC50 96h - Algae [1] | 3,9 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| EC50 96h - Algae [2] | 1,2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| LOEC (chronic) | 0,086 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC (chronic) | 0,035 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC chronic crustacea | 0,035 mg/l (21d) |

| **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) |

| **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)** | |
|---|---|
| LC50 fish 1 | > 100 mg/l (LL 50) |
| EC50 Daphnia 1 | > 10000 mg/l WAF, 48 h (OECD 202) |

| Distillates (petroleum) hydrotreated light paraffinic (64742-55-8) | |
|---|---|
| LC50 fish 1 | 100 – 10000 mg/l (LL 50) |
| EC50 Daphnia 1 | > 10000 mg/l WAF, 48 h (OECD 202) |
| EC50 72h - Algae [1] | 100 mg/l (EL0, Pseudokirchneriella subcapitata) |
| NOEC (chronic) | 10 – 1000 mg/l (NOELR, Daphnia Magna) |
| NOEC chronic algae | 100 mg/l (72h, Pseudokirchneriella subcapitata) |

## 12.2. Persistence and degradability

| Eni Arnica 32 | |
|---|---|
| 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. |
| Biodegradation | 31 % (28d, Exxon 1995) |

| 2,6-Di-tert-butylphenol (128-39-2) | |
|---|---|
| Biodegradation | 24 % (Zahn-Wellens, 10-20 %) |

| 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) |

| 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) | |
|---|---|
| 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 light paraffinic (64742-55-8) | |
|---|---|
| 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 | < 60 % (28d) |

## 12.3. Bioaccumulative potential

| Eni Arnica 32 | |
|---|---|
| Log Pow | Not applicable for mixtures |
| Log Kow | Not applicable for mixtures |
| Bioaccumulative potential | Not established. |

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

| 2,6-Di-tert-butylphenol (128-39-2) | |
|---|---|
| Log Kow | 4,5 (0.1 d, 10-20 %) |

| 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. |

| Distillates (petroleum) hydrotreated light paraffinic (64742-55-8) | |
|---|---|
| Log Kow | < 1 |

## 12.4. Mobility in soil

| Eni Arnica 32 | |
|---|---|
| Mobility in soil | Not determined |
| 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. |

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

## 12.5. Results of PBT and vPvB assessment

| Eni Arnica 32 | |
|---|---|
| This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII | |
| This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII | |
| Results of PBT-vPvB assessment | The components in this formulation do not meet the criteria for classification as PBT or vPvB. The product should be considered prudentially as "Persistent" in the environment, according to the REACH Annex XIII criteria (point 1.1) |

| Component | |
|---|---|
| Distillates (petroleum), solvent-refined light paraffinic (64741-89-5) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII<br>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) |
| 2,6-Di-tert-butylphenol (128-39-2) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII<br>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) hydrotreated light paraffinic (64742-55-8) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII<br>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

### 12.7. Other adverse effects

Other adverse effects : 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. 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, 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 ADR / IMDG / IATA / ADN / RID

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.1. UN number or ID number** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.2. UN proper shipping name** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.3. Transport hazard class(es)** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.4. Packing group** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.5. Environmental hazards** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 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

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

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). POP (2019/1021) - Persistent Organic Pollutants. Regulation EU (649/2012) - Export and Import of hazardous chemicals (PIC).

**REACH Annex XVII (Restriction List)**

| EU restriction list (REACH Annex XVII) | | |
|---|---|---|
| **Reference code** | **Applicable on** | **Entry title or description** |
| 3(b) | Distillates (petroleum), solvent-refined light paraffinic ; Distillates (petroleum) hydrotreated light paraffinic | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10 |

**REACH Annex XIV (Authorisation List)**

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

**REACH Candidate List (SVHC)**

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

**PIC Regulation (Prior Informed Consent)**

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

**POP Regulation (Persistent Organic Pollutants)**

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

### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

### Explosives Precursors Regulation (2019/1148)

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

### Drug Precursors Regulation (273/2004)

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

### 15.1.2. National regulations

National adoption of EU Directives concerning health and safety on the workplace.
National adoption of EU Directives concerning control of major-accident hazards involving dangerous substances (2012/18/CE).
Relevant national laws on prevention of water pollution.
Relevant national laws on protection of the health of pregnant workers (National adoption of Dir. 92/85/EEC).
National adoption of Directive 2008/98/CE concerning disposal of used oils.

### France

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

### Germany

| | | |
|---|---|---|
| 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.<br>TRGS 401: Risks resulting from skin contact - identification, assessment, measures.<br>TRGS 402: Identification and Assessment of the Risks from Activities involving Hazardous Substances: Inhalation Exposure.<br>TRGS 555: Working instruction and information for workers.<br>TRGS 800: Fire protection measures.<br>TRGS 900: Occupational Exposure Limits. |
| 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). |
| Storage class (LGK, TRGS 510) | : | LGK 10 - Combustible liquids. |
| Hazardous Incident Ordinance (12. BImSchV) | : | Is not subject of the Hazardous Incident Ordinance (12. BImSchV) |

### Netherlands

| | | |
|---|---|---|
| Saneringsinspanningen | : | C - Minimize discharge |
| SZW-lijst van kankerverwekkende stoffen | : | None of the components are listed |
| SZW-lijst van mutagene stoffen | : | None of the components are listed |
| SZW-lijst van reprotoxische stoffen – Borstvoeding | : | None of the components are listed |
| SZW-lijst van reprotoxische stoffen – Vruchtbaarheid | : | None of the components are listed |
| SZW-lijst van reprotoxische stoffen – Ontwikkeling | : | None of the components are listed |

### Denmark

| | | |
|---|---|---|
| Danish National Regulations | : | Pregnant/breastfeeding women working with the product must not be in direct contact with it |

## 15.2. Chemical safety assessment

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

**A chemical safety assessment has been carried out for the following components of this mixture::**
Distillates (petroleum), solvent-refined light paraffinic
2,6-Di-tert-butylphenol
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.]
Distillates (petroleum) hydrotreated light paraffinic

## SECTION 16: Other information

| Indication of changes | | | |
|---|---|---|---|
| **Section** | **Changed item** | **Change** | **Notes** |
| | First issue. | | |

| Abbreviations and acronyms: | |
|---|---|
| | Complete text of the H phrases quoted in this Safety Data Sheet. These phrases are reported here for information only, and MAY NOT correspond to the classification of the product. |
| | N/D = not available |
| | N/A = not applicable |
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| 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 |

| Abbreviations and acronyms: | |
|---|---|
| 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.

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. This situation is especially relevant for those operations which involve direct exposure to the vapours in the interior of tanks or other confined spaces. Therefore, it is very important to follow the above mentioned precautionary measures also with used oils.

| Full text of H- and EUH-statements: | |
|---|---|
| Aquatic Acute 1 | Hazardous to the aquatic environment – Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment – Chronic Hazard, Category 1 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| EUH210 | Safety data sheet available on request. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |

Safety Data Sheet (SDS), EU

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