



Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015
Revision date: 03/11/2020 Supersedes: 01/07/2013 Version: 3.0

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

1.1. Product identifier

| | |
|-----------------------|--|
| Product form | : Substance (UVCB) |
| Trade name | : Eni Alaria 3 HT |
| Chemical name | : Distillates (petroleum), hydrotreated heavy paraffinic |
| IUPAC name | : Distillates (petroleum), hydrotreated heavy paraffinic |
| EC Index-No. | : 649-467-00-8 |
| EC-No. | : 265-157-1 |
| CAS-No. | : 64742-54-7 |
| REACH registration No | : 01-2119484627-25 |
| Product code | : 7311 |
| Type of product | : Mixture of hydrocarbons |
| Product group | : Trade product |

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

1.2.1. Relevant identified uses

| | |
|----------------------------------|--|
| Main use category | : Industrial use, Professional use, Consumer use |
| Industrial/Professional use spec | : Used in closed systems Wide dispersive use |
| Use of the substance/mixture | : Functional fluids ---- Do not use the product for any purposes that have not been advised by the manufacturer. |
| Function or use category | : Heat transferring agents |

1.2.2. Uses advised against

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

1.3. Details of the supplier of the safety data sheet

Eni S.p.A., P.le E. Mattei 1, 00144 Rom, ITALY, Tel. +39 06 59821, www.eni.com
Competent person responsible for the safety data sheet (Reg. EC nr. 1907/2006): SDSInfo@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) |
| | Poison centre (UK): National Poisons Information Service Edinburgh (24h) (+44) 844 892 0111 0870 600 6266 (UK only) (Source: UN-WHO) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

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

None to be reported, according to the present EU regulations.

No labelling applicable

2.3. Other hazards (not relevant for classification)

Other hazards not contributing to the classification : This product is combustible, but not classified as Flammable. The creation of flammable vapour mixtures takes place at temperatures which are higher than normal ambient levels. In case of contact with eyes, this product may cause irritation. If the product is handled or used at high temperature, contact with hot product or vapours may cause burns. Any substance, in case of accidents involving pressurized circuits and the like, may be accidentally injected under the skin, even without external damage. In such a case, the victim should be brought to an hospital as soon as possible, to get specialized medical treatment. Do not wait for symptoms to develop. In exceptional cases (i.e prolonged storage in tanks contaminated with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H₂S.

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

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Notes : 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.]

Substance type : UVCB

| Name | Product identifier | % |
|--|--|-------|
| Distillates (petroleum), hydrotreated heavy paraffinic | (CAS-No.) 64742-54-7 (EC-No.) 265-157-1 (EC Index-No.) 649-467-00-8 (REACH-no) 01-2119484627-25 | ≈ 100 |

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Inhalation is unlikely because of the low vapour pressure of the substance at ambient temperature. Exposure to vapours may however occur when the substance is handled at high temperatures with poor ventilation. In case of symptoms arising from inhalation of product fumes, mists or vapour : Remove to fresh air, keep the casualty warm and at rest. If casualty is unconscious and not breathing: ensure that there is no obstruction to breathing and give artificial respiration by trained personnel. If necessary, give external cardiac massage and obtain medical advice. If the casualty is breathing: Place in the recovery position. Administer oxygen if necessary. See also section 4.3.

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

| | |
|---------------------------------------|---|
| 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. 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. |

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 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. 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 | : In case of losses from pressurized circuits, the sprays may form mists. Take into account that in this case the lower explosion limit for mists is about 45 g/m ³ of air. |
| Hazardous decomposition products in case of fire | : Incomplete combustion will generate poisonous carbon monoxide, carbon dioxide and other toxic gases. Combustion products include sulphur oxides (SO ₂ and SO ₃) and Hydrogen sulphide H ₂ S. Oxygenated compounds (aldehydes, etc.). |

5.3. Advice for firefighters

| | |
|---------------------------|---|
| Firefighting instructions | : Stop or contain leak at the source, if safe to do so. 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. |
|---------------------------|---|

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

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

6.1.1. For non-emergency personnel

- Protective equipment : See Section 8.
- Emergency procedures : Avoid direct contact with released material. 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. Gloves made of PVA are not water-resistant, and are not suitable for emergency use. If contact with hot product is possible or anticipated, gloves should be heat-resistant and thermally insulated. Work helmet. Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated. Antistatic non-skid safety shoes or boots, chemical resistant, if necessary heat resistant and insulated. Respiratory protection: A half or full-face respirator with filter(s) for organic vapours (AX) (and when applicable for H₂S (B)), 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. Work gloves (preferably gauntlets) providing adequate chemical resistance.
- 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. Large spillages may be cautiously covered with foam, if available, to limit fire risk. Do not use direct jets. When inside buildings or confined spaces, ensure adequate ventilation. If in water: In case of small spillages in closed waters, contain product with floating barriers or other equipment. If possible, large spillages in open waters should be contained with floating barriers or other suitable mechanical means. Collect recovered product and other materials in suitable tanks or containers for recovery or safe disposal. Dispose of in accordance with relevant local regulations.
- Other information : Do not use solvents or dispersants, unless specifically advised by an expert, and, if required, approved by local authorities. Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. Local regulations may also prescribe or limit actions to be taken.

6.4. Reference to other sections

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

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: This material is combustible, but will not ignite readily. Provide adequate ventilation. Use adequate personal protective equipment as needed. Due to the extremely slippery nature of this material, more care than usual must be exercised in material handling practices to keep off all walking surfaces. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid release to the environment. Emptied containers can contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been drained and cleaned. The product may release Hydrogen Sulphide: a specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances. Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), carry out an adequate clean-up, and check the atmosphere for oxygen content, flammability, and the presence of sulphur compounds. See also Section 16, "Other information".

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. Keep away from food and beverages. Do not re-use clothes, if they are still contaminated. Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets. Wash contaminated clothing before reuse. Separate working clothes from town clothes. Launder separately. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in dry, well ventilated area. Keep away from open flames, hot surfaces and sources of ignition. Do not smoke.

Incompatible products

: Keep away from: strong oxidants.

Storage area

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

Packages and containers:

: If the product is supplied in containers: Keep containers tightly closed and properly labelled. Keep only in the original container or in a suitable container for this kind of product. Empty containers may contain combustible product residues. Do not weld, solder, drill, cut or incinerate empty containers, unless they have been properly cleaned.

Packaging materials

: For containers, or container linings use materials specifically approved for use with this product. Recommended materials for containers, or container linings use mild steel, stainless steel. Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Compatibility should be checked with the manufacturer.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

Austria - Occupational Exposure Limits

| | |
|--|---|
| MAK Daily average value (mg/m ³) | 5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
|--|---|

Belgium - Occupational Exposure Limits

| | |
|----------------------------------|---|
| Limit value [mg/m ³] | 5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
|----------------------------------|---|

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

| Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) | |
|--|--|
| Denmark - Occupational Exposure Limits | |
| Grænseværdi (langvarig) (mg/m ³) | 1 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| Grænseværdi (kortvarig) (mg/m ³) | 2 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| Hungary - Occupational Exposure Limits | |
| AK-érték | 5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| Netherlands - Occupational Exposure Limits | |
| MAC TGG 8h (mg/m ³) | 5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| Spain - Occupational Exposure Limits | |
| VLA-ED (mg/m ³) | 5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| VLA-EC (mg/m ³) | 10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| Sweden - Occupational Exposure Limits | |
| Nivågränsvärde (NVG) (mg/m ³) | 1 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| Kortidsvärde (KTV) (mg/m ³) | 3 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| United Kingdom - Occupational Exposure Limits | |
| WEL TWA (mg/m ³) | 5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| WEL STEL (mg/m ³) | 10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| USA - ACGIH - Occupational Exposure Limits | |
| ACGIH TLV®-TWA (mg/m ³) | 5 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |
| ACGIH TLV®-STEL (mg/m ³) | 10 mg/m ³ (Mineral base oil mist, severely refined, DMSO extract <3% m/m) |

| 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. |

| Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) | |
|--|----------------------------|
| DNEL/DMEL (Workers) | |
| Long-term - systemic effects, dermal | 1 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 2,7 mg/m ³ |
| Long-term - local effects, inhalation | 5,6 mg/m ³ |
| DNEL/DMEL (General population) | |
| Long-term - systemic effects, oral | 0,74 mg/kg bodyweight/day |
| Long-term - local effects, inhalation | 1,2 mg/m ³ /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.

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

8.2. Exposure 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".

Personal protective equipment (for industrial or professional use):

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

Hand protection:

When there is a risk of contact with the skin, use hydrocarbon-resistant, felt-lined gloves. 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. Adequate materials: nitrile (NBR) or PVC with a protection index > 5 (permeation time > 240 mins). 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.

Eye protection:

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

Skin and body protection:

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

Respiratory protection:

Independently from other possible actions (technical modifications, operating procedures, and other means to limit the exposure of workers), personal protection equipment can be used according to necessity. Open or well ventilated spaces: in presence of oil mists and if the product is handled without adequate containment means: use full or half-face masks with filter for mists/aerosols. In case there is a significant presence of vapours (e.g. through handling at high temperature), use full or half-face masks with filter for hydrocarbon vapours. (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)

Personal protective equipment symbol(s):



Thermal hazard protection:

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

Environmental exposure controls:

Do not discharge the product into the environment. 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. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

Consumer exposure controls:

Ensure adequate ventilation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|----------------|-----------------------------------|
| Physical state | : Liquid |
| Appearance | : Liquid, clear or slightly hazy. |
| Molecular mass | : Not applicable (UVCB) |
| Colour | : Colourless. |

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

| | |
|--|--|
| Odour | : odourless. |
| Odour threshold | : (No specific data) |
| pH | : Not applicable |
| Relative evaporation rate (butylacetate=1) | : Negligible. |
| Melting point | : -15 °C (pour point) (ASTM D 97) |
| Freezing point | : -60 – 0 °C (EN ISO 3016, CONCAWE 2010) |
| Boiling point | : ≥ 315 °C (ASTM D 1160) |
| Flash point | : 224 °C (ASTM D 92) |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Not applicable |
| Vapour pressure | : < 0,1 hPa (20°C) |
| Relative vapour density at 20 °C | : 5 |
| Relative density | : No data available |
| Density | : 850 kg/m ³ (15°C, ASTM D4052) |
| Solubility | : Water: This product is not soluble in water. Ethanol: Complete. Ether: Complete. Organic solvent: Complete. |
| Log Pow | : No data available |
| Log Kow | : ≈ 3,9 |
| Viscosity, kinematic | : 28,7 mm ² /s (40 °C) (ASTM D 445) |
| Viscosity, dynamic | : No data available |
| Explosive properties | : None. |
| Oxidising properties | : None. |
| Explosive limits | : ≥ 45 g/m ³ (mineral oil mists) |

9.2. Other information

Additional information : No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

This substance 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".

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Conclusive but not sufficient for classification)
Acute toxicity (dermal) : Not classified (Conclusive but not sufficient for classification)
Acute toxicity (inhalation) : Not classified (Conclusive but not sufficient for classification)

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|-----------------------|--|
| LD50 oral rat | > 5000 mg/kg (OECD 401, CAS 64742-53-6, API 1986) |
| LD50 dermal rabbit | > 2000 mg/kg bodyweight (OECD 402, CAS 64742-53-6, API 1986) |
| LC50 Inhalation - Rat | ≥ 2,18 mg/l/4h (OECD 403, CAS 64742-53-6, API 1987) |

Skin corrosion/irritation : Not classified (Conclusive but not sufficient for classification)
pH: Not applicable

Additional information : On basis of test data: (CAS 64742-53-6)
(OECD 404)
Not irritating

Serious eye damage/irritation : Not classified (Conclusive but not sufficient for classification)
pH: Not applicable

Additional information : On basis of test data: (CAS 64742-53-6)
(OECD 405)
Not irritating to eyes

Respiratory or skin sensitisation : Not classified (Conclusive but not sufficient for classification)
Additional information : On basis of test data: (CAS 64742-53-6)
(OECD 406)

not sensitising.

Germ cell mutagenicity : Not classified (Conclusive but not sufficient for classification)
Additional information : On basis of test data: (Blackburn GR, Deitch RA, Schreiner CA, Mackerer CR 1986)
(OECD 471 - Ames test)

Not mutagenic

Carcinogenicity : Not classified (Conclusive but not sufficient for classification)
Additional information : On basis of test data: (Chasey, K.L. and McKee, R.H. 1993)
(OECD 453)

No carcinogenic effect
this product has a value of DMSO extract < 3 % wt, according to IP 346/92. According to the criteria laid out by the EU (note L, Annex VI of Regulation (CE) 1272/2008), this product must be regarded as non carcinogenic.

Reproductive toxicity : Not classified (Conclusive but not sufficient for classification)
Additional information : On basis of test data: (WIL Research Laboratories 1995)
(OECD 421)

Not classified as toxic to reproduction

STOT-single exposure : Not classified (Conclusive but not sufficient for classification)

STOT-repeated exposure : Not classified (Conclusive but not sufficient for classification)

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|--|--|
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight/day (OECD 408, CAS 64742-04-7, Mobil 1990) |
| LOAEL (dermal, rat/rabbit, 90 days) | 100 mg/kg bodyweight/day (OECD 453, Chasey, K.L. and McKee, R.H. 1993) |
| NOAEL (dermal, rat/rabbit, 90 days) | 30 – 2000 mg/kg bodyweight/day (CONCAWE 2019) |
| NOAEC (inhalation, rat, vapour, 90 days) | > 980 mg/m ³ (OECD 412, Dalbey W, Osimitz T, Kommineni C, Roy T, Feuston M and Yang J 1991) |

Aspiration hazard : Not classified (Conclusive but not sufficient for classification)

Additional information : Viscosity, kinematic: > 20,5 mm²/s (40 °C) (ASTM D 445)

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|----------------------|--|
| Viscosity, kinematic | 28,7 mm ² /s (40 °C) (ASTM D 445) |
|----------------------|--|

Potential adverse human health effects and symptoms : Contact with eyes may cause temporary reddening and irritation.

SECTION 12: Ecological information

12.1. Toxicity

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

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

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

Hazardous to the aquatic environment, short-term (acute) : Not classified (Conclusive but not sufficient for classification)

Hazardous to the aquatic environment, long-term (chronic) : Not classified (Conclusive but not sufficient for classification)

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|--------------------|--|
| LC50 fish 1 | > 100 mg/l (LL50, OECD 203, Exxon 1995) |
| EC50 Daphnia 1 | > 10000 mg/l (EL50, OECD 202, Shell 1988) |
| EC50 72h algae (1) | 100 mg/l |
| NOEC (chronic) | 10 mg/l (NOEL, 21d, OECD 211, Shell 1995) |
| NOEC chronic fish | ≥ 1000 mg/l (NOELR, 14d, QSAR, Redman, A. et al. 2010) |

12.2. Persistence and degradability

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|-------------------------------|--|
| Persistence and degradability | The most significant constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions. |
| Biodegradation | 31 % (28d) |

12.3. Bioaccumulative potential

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|---------------------------|---------------------------|
| Log Kow | ≈ 3,9 |
| Bioaccumulative potential | Bioaccumulation unlikely. |

12.4. Mobility in soil

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|----------------|---|
| Ecology - soil | This product is not soluble in water. It floats on water and forms a film on the surface. |
|----------------|---|

12.5. Results of PBT and vPvB assessment

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

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

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

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

Results of PBT-vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB. The product should be considered prudentially as "Persistent" in the environment, according to the REACH Annex XIII criteria (point 1.1)

12.6. Other adverse effects

Other adverse effects

: None.

Additional information

: This product has no specific properties for inhibition of bacterial activity. In any case, wastewater containing this product should be treated in plants that are suited for the specific purpose.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Do not dispose of the product, either new or used, by discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector.

Sewage disposal recommendations

: Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

Product/Packaging disposal recommendations

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

Additional information

: Empty containers may contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been cleaned, and declared safe.

Ecology - waste materials

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

EURAL code (EWC)

: 13 02 05* - Mineral-based non-chlorinated engine, gear and lubricating oils

SECTION 14: Transport information

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

| ADR | IMDG | IATA | ADN | RID |
|---|---------------|---------------|---------------|---------------|
| 14.1. UN number | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.2. UN proper 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 |
| No supplementary information available | | | | |

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

Inland waterway transport

Not regulated

Rail transport

Not regulated

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

IBC code : Not applicable.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Distillates (petroleum), hydrotreated heavy paraffinic is not on the REACH Candidate List

Distillates (petroleum), hydrotreated heavy paraffinic is not on the REACH Annex XIV List

Eni Alaria 3 HT is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Eni Alaria 3 HT is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Other information, restriction and prohibition regulations : Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). (et sequens). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (et sequens). Directives 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE, 93/88/CEE, 95/63/CE, 97/42/CE, 98/24/CE, 99/38/CE, 99/92/CE, 2001/45/CE, 2003/10/CE, 2003/18/CE (Health and safety on the workplace). Directive 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). Directive 2012/18/CE (Control of major-accident hazards involving dangerous substances). Directive 2004/42/CE (Limitation of emissions of Volatile Organic Compounds). Substances Depleting the Ozone layer (1005/2009) - Annex I Substances (ODP). Regulation EU (649/2012) - Export and Import of hazardous chemicals (PIC). POP (2019/1021) - Persistent Organic Pollutants.

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

Germany

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

Water hazard class (WGK) (D) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1; ID No. 9183)

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).

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

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

| | |
|---|--|
| National Rules and Recommendations | : TRGS 400: Risk 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 526: Laboratories TRGS 555: Working instruction and information for workers TRGS 800: Fire protection measures TRGS 900: Occupational Exposure Limits |
| Storage class (LGK) (D) | : LGK 10 - Combustible liquids |
| VbF class (D) | : Not applicable. |
| Netherlands | |
| Saneringsinspanningen | : C - Minimize discharge |
| SZW-lijst van kankerverwekkende stoffen | : The substance is not listed |
| SZW-lijst van mutagene stoffen | : The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding | : The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid | : The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling | : The substance is not listed |
| Denmark | |
| Danish National Regulations | : Young people under 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with it |

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP], so the drafting of exposure scenarios is not required according to Article 14, paragraph 4 of Regulation (EC) No. 1907/2006.

SECTION 16: Other information

Indication of changes:

SECTION 1 : Identification of the substance/mixture and of the company/undertaking. SECTION 2 : Hazards identification. SECTION 3 : Composition/information on ingredients. SECTION 4 : First aid measures. SECTION 5: Firefighting measures. SECTION 6: Accidental release measures. SECTION 7 : Precautions for safe handling. SECTION 8 : Exposure controls/personal protection. SECTION 9: Physical and chemical properties. SECTION 10: Stability and reactivity. SECTION 11: Toxicological information. SECTION 12: Ecological information. SECTION 13: Disposal considerations. SECTION 14: Transport information. SECTION 15: Regulatory information. SECTION 16: Other information.

Abbreviations and acronyms:

| | |
|------|---|
| | N/A = not applicable |
| | N/D = not available |
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC50 | Effective concentration for 50 percent of test population (median effective concentration) |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |

Eni Alaria 3 HT

Safety Data Sheet

According to Regulation (EU) No. 830/2015

| | |
|-------|--|
| 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 |
| TLM | Median Tolerance Limit |
| vPvB | Very Persistent and Very Bioaccumulative |

- Data sources : 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). Chemical safety assessment.
- Training advice : Provide adequate training to professional operators for the use of PPEs, according to the information contained in this Safety Data Sheet. The hazard of asphyxiation is often overlooked and must be stressed during operator training.
- Other information : Do not use the product for any purposes that have not been advised by the manufacturer. In exceptional cases (i.e prolonged storage in tanks contaminated with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H₂S. This situation is especially relevant in all those circumstances which require to enter a confined space, with direct exposure to the vapours. If this possibility is suspected, a specific assessment of inhalation risks from the presence of H₂S in confined spaces must be made, to help determine prevention measures and controls (i.e. PPE) appropriate to local circumstances, and adequate emergency procedures. If there is any suspicion of inhalation of H₂S (hydrogen sulphide), Rescuers must wear breathing apparatus, belt and safety rope, and follow rescue procedures. Send patient to hospital. Immediately begin artificial respiration if breathing has ceased. Administer oxygen if necessary. This situation is especially relevant for those operations which involve direct exposure to the vapours in the interior of tanks or other confined spaces. Therefore, it is very important to follow the above mentioned precautionary measures also with used oils.

SDS EU (REACH Annex II)

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