



eni Obi 12

Safety Data Sheet

According to Regulation (EC) No. 830/2015

Revision date: **26/10/2015**

Version: **2.1**

Supersedes: **13/03/2012**

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

1.1. Product identifier

Product form : Substance (UVCB)
Trade name : eni Obi 12
Chemical name : White mineral oil (petroleum)
EC index no : N/A
EC no : 232-455-8
CAS No : 8042-47-5
REACH registration No : 01-2119487078-27
Product code : 4510
Type of product : Mixture of hydrocarbons
Formula : 0016-2011
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
Use of the substance/mixture : General purpose lubricant
Agrochemicals
Rubber extender
Cosmetics
Explosives manufacture
Metalworking fluid
Function or use category : Lubricants and additives, Cosmetics, Adhesives, binding agents, Explosive substances and articles, Fuels, Hydraulic fluids and additives, Laboratory chemicals, Softeners

Title	Use descriptors
ES01 - Manufacture of substance (1)	SU3, SU8, SU9, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC15, ERC1, ERC4, ESVOC SPERC 1.1.v1, (ENV), (ERC)
ES02 - Use as an intermediate (1B)	SU3, SU8, SU10, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC15, ERC6a, ESVOC SPERC 6.1a.v1
ES03 - Distribution of substance (1A)	SU3, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC15, ERC1, ERC2, ERC3, ERC4, ERC5, ERC6a, ERC6b, ERC6c, ERC6d, ERC7, ESVOC SPERC 1.1b.v1
ES04 - Formulation & (re)packing of substances and mixtures (2)	SU3, SU10, PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC14, PROC15, ERC2, ESVOC SPERC 2.2.v1
ES05 - Uses in Coatings (3)	SU3, PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC15, ERC4, ESVOC SPERC 4.3a.v1
ES08 - Use in Cleaning Agents (4)	SU3, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13, ERC4, ESVOC SPERC 4.4a.v1
ES11 - Use in Metal working fluids / rolling oils (7)	SU3, PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, ERC4, ESVOC SPERC 4.7a.v1
ES13 - Use as binders and release agents (10)	SU3, PROC1, PROC2, PROC3, PROC4, PROC6, PROC7, PROC8b, PROC10, PROC13, PROC14, ERC4, ESVOC SPERC 4.10a.v1
ES17 - Rubber production and processing (19)	SU3, SU10, SU11, PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC13, PROC14, PROC15, PROC21, ERC1, ERC4, ERC6d, ESVOC SPERC 4.19.v1

Title	Use descriptors
ES18 - Use in Polymer processing (23)	SU10, PROC1, PROC2, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC13, PROC14, PROC21, ERC4, ESVOC SPERC 4.21a.v1
ES20 - Lubricants (6)	SU3, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18, ERC4, ERC7, ESVOC SPERC 4.6a.v1
ES25 - Use in laboratories (17)	SU3, PROC10, PROC15, ERC2, ERC4, ERC
ES27 - Use in water treatment chemicals (21)	SU10, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC13, ERC3, ERC4, ESVOC SPERC 3.22a.v1
ES30 - Use as Functional Fluids (13)	SU3, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, ERC7, ESVOC SPERC 7.13a.v1
ES06 - Uses in Coatings (3)	SU22, PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19, ERC8a, ERC8d, ESVOC SPERC 8.3b.v1
ES09 - Use in Cleaning Agents (4)	SU22, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13, ERC8a, ERC8d, ESVOC SPERC 8.4b.v1
ES12 - Use in Metal working fluids / rolling oils (7)	SU22, PROC1, PROC2, PROC3, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, ERC8a, ERC8d, ESVOC SPERC 8.7c.v1
ES14 - Use as binders and release agents (10)	SU22, PROC1, PROC2, PROC3, PROC4, PROC6, PROC8a, PROC8b, PROC10, PROC11, PROC14, ERC8a, ERC8d, ESVOC SPERC 8.10b.v1
ES15 - Use in Agrochemicals (11)	SU22, PROC1, PROC2, PROC4, PROC8a, PROC8b, PROC11, ERC8a, ERC8d, ESVOC SPERC 8.11a.v1
ES21 - Lubricants (6)	SU22, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20, ERC9a, ERC9b, ESVOC SPERC 9.6b.v1
ES22 - Lubricants (6)	SU22, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20, ERC8a, ERC8d, ESVOC SPERC 8.6c.v1
ES26 - Use in laboratories (17)	SU22, PROC10, PROC15, ERC8a, ESVOC SPERC 8.17.v1
ES28 - Use in water treatment chemicals (21)	SU22, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC13, ERC8f, ESVOC SPERC 8.22b.v1
ES29 - Explosives manufacture & use (18)	SU22, PROC1, PROC3, PROC5, PROC8a, PROC8b, ERC8e, ERC
ES31 - Use as Functional Fluids (13)	SU22, PROC1, PROC2, PROC3, PROC8a, PROC9, PROC20, ERC9a, ERC9b, ESVOC SPERC 9.13b.v1

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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

Contact:
Refining & Marketing and Chemicals
Via Laurentina 449 00142 ROMA Italy
Tel (+39) 06 59881 Fax (+39) 06 59885700

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

1.4. Emergency telephone number

Emergency number : CNIT +39 0382 24444 (24h) (IT + EN)

Poison centre (UK):
National Poisons Information Service Edinburgh (24h)
(+44) 844 892 0111
0870 600 6266 (UK only)
(Source: UN-WHO)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]**

Asp. Tox. 1 H304

Full text of classification categories and H statements : see section 16

Adverse physicochemical, human health and environmental effects

Aspiration into lungs can cause a chemical pneumonia.

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

Hazard pictograms (CLP) :



GHS08

CLP Signal word

: Danger

Hazard statements (CLP)

: H304 - May be fatal if swallowed and enters airways

Precautionary statements (CLP)

: P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician
P331 - Do NOT induce vomiting
P405 - Store locked up
P501 - Dispose of contents/container to according to national or local regulations

Child-resistant fastening

: No

Tactile warning

: No

Other:

General advice

: (Not applicable - Classified as dangerous according to (EC) No 1272/2008)

2.3. Other hazards (not relevant for classification)

Physical/chemical

: 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.

Health

: If the product is handled or used at high temperature, contact with hot product or vapours may cause burns.,Any material 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.

Environment

: None.

Contaminants

: None.

(air contaminants or other substances)

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

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

SECTION 3: Composition/information on ingredients**3.1. Substance**

Composition - General information

: White mineral oil (petroleum)

Hazardous constituents and/or with relevant occupational exposure limits.	:	
Substance type	:	UVCB
Chemical name	:	White mineral oil (petroleum)
CAS No	:	8042-47-5
EC no	:	232-455-8
EC index no	:	N/A

Name	Product identifier	%
White mineral oil (petroleum)	(CAS No) 8042-47-5 (EC no) 232-455-8 (EC index no) N/A (REACH-no) 01-2119487078-27	100

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In case of spontaneous vomiting, transport the victim to a hospital, to verify the possibility that the product has been aspirated into the lungs.
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.
First-aid measures after skin contact	: Take off contaminated clothing and shoes. Wash thoroughly with soap and water. If inflammation or irritation persists, seek medical advice. 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 persists, seek medical advice. 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 to avoid aspiration into the lungs. If the person is conscious, rinse mouth with water without swallowing. Keep at rest. Call for medical assistance or bring to an hospital. If the casualty is unconscious, place in the recovery position. In case of spontaneous vomiting, keep head low, to avoid the risk of aspiration into the lungs. Do not give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms / injuries (general indications)	: For all low-viscosity petroleum products (less than 20,5 mm ² /s at 40 °C), there is the risk of aspiration into the lungs. This may occur directly after ingestion, or subsequently in case of vomiting (spontaneous or induced). In this case there is the possibility of an inflammation of the lung tissues (chemical pneumonia). This is a serious condition requiring medical treatment.
Symptoms/injuries 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/injuries after skin contact	: Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect. Contact with hot product may cause thermal burns.
Symptoms/injuries after eye contact	: Contact with eyes may cause a light transient irritation. Contact with hot product or vapours may cause burns.
Symptoms/injuries after ingestion	: Few or no symptoms expected. If any, nausea and diarrhoea might occur.
Symptoms/injuries 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

In case of ingestion, always assume that aspiration has occurred. Send the casualty immediately to hospital. Do not wait for symptoms to develop. If necessary, drain stomach by gastric lavage ONLY under qualified medical supervision. If there is any

suspicion of inhalation of H₂S (hydrogen sulphide). The casualty should be sent immediately to hospital. Immediately begin artificial respiration if breathing has ceased. Administer oxygen if necessary. Seek medical attention in all cases of serious burns.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Small-size fires: carbon dioxide, dry chemicals, foam, sand or earth. Large fires: foam or water fog (mist). These means should be used by trained personnel only. Other extinguishing gases (according to regulations).
- Unsuitable extinguishing media : Do not use water jets. They could cause splattering, and spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : This product is combustible, but not classified as Flammable. The creation of flammable vapour mixtures takes place at temperatures which are higher than normal ambient levels.
- Explosion hazard : In case of losses from pressurized circuits, the sprays may form mists. Take into account that in this case the lower explosion limit for mists is about 45 g/m³ of air.
- Combustion products : Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, NO_x (harmful/toxic gases), Oxygenated compounds (aldehydes, etc.)

5.3. Advice for firefighters

- Firefighting instructions : Stop or contain leak at the source, if safe to do so. If possible, move containers and drums away from danger area. Spilled product which is not burning should be covered with sand or foam. Use water 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). Self-contained breathing apparatus.
- Other information : None.

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 : 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: 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. a half or full-face respirator with filter(s) for organic vapours (AX), or a Self-contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure.
- Emergency procedures : Notify local authorities according to relevant regulations.

6.2. Environmental precautions

Do not let the product accumulate in confined or underground spaces. Do not let the product flow into sewers or water courses, or in any way contaminate the environment. In case of contamination of environment compartments (soil, subsoil, surface or underground waters), remove contaminated soil when possible, and in any case treat all involved compartments in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

- For containment : Soil. 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. 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. 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

See Section 8.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

- Precautions for safe handling : Ensure that all relevant regulations regarding handling and storage facilities of flammable products are followed. Do not use compressed air for filling, discharging, or handling operations. Keep away from heat/sparks/open flames/hot surfaces. Use and store only outdoors or in a well-ventilated area. During transfer and mixing operations, ensure that all equipment is correctly grounded. Avoid the build-up of electric charges. Emptied containers can contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been drained and cleaned. Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), carry out an adequate clean-up, and check the atmosphere for oxygen content and flammability.
- Handling temperature : This product can be handled at ambient temperatures.
- Hygiene measures : 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.

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. 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****White mineral oil (petroleum) (8042-47-5)**

Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	5 mg/m ³ (White oil, respirable fraction)
Germany	TRGS 900 Limitation of exposure peaks (mg/m ³)	20 mg/m ³ (15 m) (White oil)

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.

8.2. Exposure controls

Appropriate engineering controls : Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), carry out an adequate clean-up, and check the atmosphere for oxygen content and flammability.

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).

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). 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)

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.

Consumer exposure controls : Not applicable.

8.3. Hygiene measures

General protective and hygienic measures : Avoid contact with skin and eyes, Do not breathe vapours or mists., Do not clean hands with dirty or oil-soaked rags., Do not keep dirty rags in the overall pockets., Do not drink, eat or smoke with dirty hands., Wash hands with water and mild soap, do not use solvents or other irritant products which have a defatting effect on the skin., Do not re-use clothes, if they are still contaminated.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Molecular mass	: Not applicable (UVCB)
Colour	: Colourless.
Odour	: odourless.
Odour threshold	: (No specific data)
pH	: Not applicable
Relative evaporation rate (butylacetate=1)	: Negligible.
Melting point	: ≤ -12 °C (Pour point) (ASTM D 97)
Freezing point	: Not applicable
Boiling point	: ≥ 218 °C (ASTM D 1160)
Flash point	: ≥ 180 °C (ASTM D 93)
Self ignition temperature	: ≥ 325 °C (DIN 51794)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: ≤ 0,1 hPa (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)
Critical pressure	: Not applicable (UVCB)
Relative vapour density at 20 °C	: > 1 (according to composition)
Relative density	: No data available
Density	: 855 - 865 kg/m ³
Solubility	: Water: This product is not soluble in water. Ethanol: Complete. Ether: Complete. Organic solvent: Complete.
Log Pow	: The test methods for this endpoint are not applicable to UVCB substances
Log Kow	: The test methods for this endpoint are not applicable to UVCB substances
Viscosity, kinematic	: 13 - 17 mm ² /s (40 °C) (ASTM D 445)
Viscosity, dynamic	: No data available
Explosive properties	: None (according to composition).
Oxidising properties	: None (according to composition).
Explosive limits	: ≥ 45 g/m ³ (mineral oil mists)

9.2. Other information

VOC content : = 0 % (EU, CH)

The above data (9.1 - 9.2) are typical values and do not constitute a specification.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No additional information available

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. A mixture with nitrates or other strong oxidisers (e.g. chlorates, perchlorates, liquid oxygen) may create an explosive mass. Sensitivity to heat, friction or shock cannot be assessed in advance.

10.4. Conditions to avoid

Keep away from strong oxidizers. Keep away from open flames, hot surfaces and sources of ignition. Avoid the build-up of electrostatic charge.

10.5. Incompatible materials

Strong oxidants.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

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

White mineral oil (petroleum) (8042-47-5)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (OECD 402)
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (OECD 403)

Skin corrosion/irritation : Not classified (Conclusive but not sufficient for classification)
(OECD 404)

pH: Not applicable

Serious eye damage/irritation : Not classified (Conclusive but not sufficient for classification)
(OECD 405)

pH: Not applicable

Respiratory or skin sensitisation : Not classified (Conclusive but not sufficient for classification)
(OECD 406)

Germ cell mutagenicity : Not classified (Conclusive but not sufficient for classification)
(OECD 471 - Ames test)

Carcinogenicity : Not classified (Conclusive but not sufficient for classification)
(OECD 453)

Reproductive toxicity : Not classified (Conclusive but not sufficient for classification)
(OECD 421)

NOAEL= 1000 mg/kg (oral)

NOAEL= 2000 mg/kg (dermal)

Specific target organ toxicity (single exposure) : Not classified (Conclusive but not sufficient for classification)

Specific target organ toxicity (repeated exposure) : Not classified (Conclusive but not sufficient for classification)

Aspiration hazard : May be fatal if swallowed and enters airways. (Conclusive but not sufficient for classification)

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

White mineral oil (petroleum) (8042-47-5)	
Viscosity, kinematic	13 - 17 mm ² /s (40 °C) (ASTM D 445)

Potential Adverse human health effects and symptoms : Aspiration into lungs can cause a chemical pneumonia. Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect.

SECTION 12: Ecological information**12.1. Toxicity**

Ecology - general	: According to the components, and by comparison with other products of the same type and composition, it is expected that this product has a toxicity for aquatic organisms > 100 mg/l, and must not be regarded as dangerous to 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)

White mineral oil (petroleum) (8042-47-5)

LC50 fish 1	> 100 mg/l (LL50; Oncorhynchus mykiss - OECD 203)
LC50 other aquatic organisms 1	> 100 mg/l
EC50 Daphnia 1	> 100 mg/l (LL50, OECD 202)
EC50 72h Algae [mg/l] (1)	≥ 100 mg/l (OECD 201; NOEL- Pseudokirchneriella subcapitata)

12.2. Persistence and degradability**White mineral oil (petroleum) (8042-47-5)**

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.
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12.3. Bioaccumulative potential**White mineral oil (petroleum) (8042-47-5)**

Log Pow	The test methods for this endpoint are not applicable to UVCB substances
Log Kow	The test methods for this endpoint are not applicable to UVCB substances

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment**White mineral oil (petroleum) (8042-47-5)**

This substance/mixture does not meet the PBT criteria of REACH, annex XIII.	
This substance/mixture does not meet the vPvB criteria of REACH, 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. 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.
Waste 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 / RID / ADN / IMDG / ICAO / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (UN)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: None.

14.6. Special precautions for user

Special transport precautions : None.

- Overland transport

Transport regulations (ADR) : Not subject

- Transport by sea

Transport regulations (IMDG)	: Not subject
Limited quantities (IMDG)	: Not applicable
MFAG-No	: --

- Air transport

Transport regulations (IATA) : Not subject

- Inland waterway transport

Transport regulations (ADN) : Not subject

- Rail transport

Transport regulations (RID) : Not subject

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IBC code : None.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

Authorisations and/or restrictions on use (Annex XVII):

3.b. 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	White mineral oil (petroleum)
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White mineral oil (petroleum) is not on the REACH Candidate List

White mineral oil (petroleum) is not on the REACH Annex XIV List

Relevant EU Legislation : 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)

VOC content : = 0 % (EU, CH)

Other information, restriction and prohibition regulations : If this product is sold for use as lamp oil, it must be marked as follows (REACH Annex XVII): "Keep lamps filled with this liquid out of the reach of children." +. "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage.". If this product is sold for use as grill lighters, it must be marked as follows (REACH Annex XVII): "Just a sip of grill lighter may lead to lifethreatening lung damage.".

15.1.2. National regulations

National adoption of EU Directives concerning health and safety on the workplace.

National laws on classification and labeling of dangerous substances/preparations (Adoption of Directive 67/548/CE and subsequent Adaptations to Technical Progress - ATP, and Directive 1999/45/CE).

National adoption of EU Directives concerning control of major-accident hazards involving dangerous substances (2012/18/CE).

Relevant national laws on prevention of water pollution.

Relevant national laws on protection of the health of pregnant workers (National adoption of Dir. 92/85/EEC).

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

France

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

Germany

WGK remark	: Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS)
VbF class (D)	: Not applicable.
Storage class (LGK) (D)	: LGK 12 - Non-flammable liquids in non-flammable packages
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

The Netherlands

Saneringsinspanningen : C - Lozing minimaliseren

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

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

15.2. Chemical safety assessment

A chemical safety assessment has been carried out for the substance or the mixture by the supplier

EXPOSURE SCENARIOS

All exposure scenarios for this substance did not require a quantitative assessment of exposure, but only a qualitative one.

Considering the specific hazard properties (H304), the implementation of the relevant risk reduction measures ensures that the possibility of the event connected to the hazard of aspiration is negligible, and risk can be assumed as controlled.

Workers:

- Do not ingest
- Implement basic standard of occupation hygiene
- Avoid splashes and spills
- Avoid contact with contaminated objects and tools
- Management/supervision actions to check that the Risk Reduction Measures in place are being used correctly and Operating Conditions are followed.
- Training for staff on good practices
- Good standard of personal hygiene

SECTION 16: Other information**Indication of changes:**

Name. Modification according to Regulation (EC) nr. 830/2015. Industrial/Professional use spec.

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.

Safety Data Sheet

Revision date: 26/10/2015

According to Regulation (EC) No. 830/2015

Version: 2.1

N/A = Not applicable.
 N/D = Not available
 ACGIH = American Conference of Governmental Industrial Hygienists
 API = American Petroleum Institute
 CSR = Chemical Safety Report
 DNEL = Derived No Effect Level
 DMEL = Derived Minimum Effect Level
 EC50 = Effective Concentration, 50%
 EL50 = Effective Loading, 50 %
 EPA = Environmental Protection Agency
 IC50 = Inhibition Concentration, 50%
 LC50 = Lethal Concentration, 50%
 LD50 = Lethal Dose, 50%
 LL50 = Lethal Loading, 50%
 LOAEL = Low Observed Adverse Effects Level
 NOEL = No Observed Effects Level
 NOAEL = No Observed Adverse Effects Level
 OECD = Organization for Economic Cooperation and Development
 PNEC = Predicted No-Effect Concentration
 PBT = Persistent, Bioaccumulative, Toxic
 STOT = Single Target Organ Toxicity
 (STOT) RE = (Single Target Organ Toxicity) Repeated exposure
 (STOT) SE = (Single Target Organ Toxicity) Single exposure
 TLV@TWA = Threshold Limit Value® - Time-Weighted Average
 TLV@STEL = Threshold Limit Value® - Short Term Exposure Limit
 UVCB = Substance of Unknown or Variable composition, Complex reaction products or Biological materials
 vPvB = very Persistent, very Bioaccumulative
 WAF = Water Accommodated Fraction

Data sources : This Safety Data Sheet is based on the characteristics of the component(s), according to the information provided by the supplier(s).

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

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

Full text of H- and EUH-phrases:

Asp. Tox. 1	Aspiration hazard, Category 1
H304	May be fatal if swallowed and enters airways
(ENV)	Qualitative Assessment for Environment.
(ERC)	Release fractions defined by ERC
ERC	Release fractions defined by ERC
ERC1	Manufacture of substances
ERC2	Formulation of preparations
ERC3	Formulation in materials
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix
ERC6a	Industrial use resulting in manufacture of another substance (use of intermediates)
ERC6b	Industrial use of reactive processing aids
ERC6c	Industrial use of monomers for manufacture of thermo-plastics
ERC6d	Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers
ERC7	Industrial use of substances in closed systems
ERC8a	Wide dispersive indoor use of processing aids in open systems
ERC8d	Wide dispersive outdoor use of processing aids in open systems
ERC8e	Wide dispersive outdoor use of reactive substances in open systems
ERC8f	Wide dispersive outdoor use resulting in inclusion into or onto a matrix
ERC9a	Wide dispersive indoor use of substances in closed systems
ERC9b	Wide dispersive outdoor use of substances in closed systems
ESVOC SPERC 1.1.v1	Manufacture of substances: Industrial (SU8, SU9)
ESVOC SPERC 1.1b.v1	Distribution: Industrial (SU3)
ESVOC SPERC 2.2.v1	Formulation & (re)packing of substances and mixtures: Industrial (SU10)
ESVOC SPERC 3.22a.v1	Water treatment chemicals: Industrial (SU10)

ESVOC SPERC 4.10a.v1	Use as binders and release agents: Industrial (SU3)
ESVOC SPERC 4.19.v1	Rubber production and processing: Industrial (SU10)
ESVOC SPERC 4.21a.v1	Polymer production: Industrial (SU10)
ESVOC SPERC 4.3a.v1	Uses in Coatings: Industrial (SU3)
ESVOC SPERC 4.4a.v1	Use in Cleaning Agents: Industrial (SU3)
ESVOC SPERC 4.6a.v1	Lubricants: Industrial (SU3)
ESVOC SPERC 4.7a.v1	Use in Metal working fluids / rolling oils: Industrial (SU3)
ESVOC SPERC 6.1a.v1	Manufacture of substance: Industrial (SU8, SU9)
ESVOC SPERC 7.13a.v1	Use as Functional Fluids: Industrial (SU3)
ESVOC SPERC 8.10b.v1	Use as binders and release agents: Professional (SU22)
ESVOC SPERC 8.11a.v1	Use in Agrochemicals: Professional (SU22)
ESVOC SPERC 8.17.v1	Laboratory chemicals: Professional (SU22)
ESVOC SPERC 8.22b.v1	Water treatment chemicals: Professional (SU22)
ESVOC SPERC 8.3b.v1	Uses in Coatings: Professional (SU22)
ESVOC SPERC 8.4b.v1	Use in Cleaning Agents: Professional (SU22)
ESVOC SPERC 8.6c.v1	Lubricants: Professional (SU22) - high environmental release
ESVOC SPERC 8.7c.v1	Use in Metal working fluids / rolling oils: Professional (SU22) - high environmental release
ESVOC SPERC 9.13b.v1	Use as Functional Fluids: Professional (SU22)
ESVOC SPERC 9.6b.v1	Lubricants: Professional (SU22) - low environmental release
PROC1	Use in closed process, no likelihood of exposure
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC13	Treatment of articles by dipping and pouring
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC15	Use as laboratory reagent
PROC17	Lubrication at high energy conditions and in partly open process
PROC18	Greasing at high energy conditions
PROC19	Hand-mixing with intimate contact and only PPE available
PROC2	Use in closed, continuous process with occasional controlled exposure
PROC20	Heat and pressure transfer fluids in dispersive use but closed systems
PROC21	Low energy manipulation of substances bound in materials and/or articles
PROC3	Use in closed batch process (synthesis or formulation)
PROC4	Use in batch and other process (synthesis) where opportunity for exposure arises
PROC5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
PROC6	Calendering operations
PROC7	Industrial spraying
PROC8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
PROC8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
SU10	Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
SU11	Manufacture of rubber products
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU3	Industrial uses: Uses of substances as such or in preparations* at industrial sites
SU8	Manufacture of bulk, large scale chemicals (including petroleum products)
SU9	Manufacture of fine chemicals

SDS EU (REACH Annex II) eni 2015

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