eni Simblum 5/A

Safety Data Sheet
According to Regulation (EC) No. 453/2010

Revision date: **01/07/2013** **Version: 2.1**

Supersedes: **06/08/2004**

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

1.1. Product identifier

Product form	: Mixture
Trade name	: eni Simblum 5/A
EC index no	: N/A
EC no	: N/A
CAS No	: N/A
REACH registration No	: N/A
Product code	: 3401
Formula	: 0312-1998
Product group	: Trade product

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

1.2.1. Relevant identified uses

Main use category	: Industrial use,Professional use
Industrial/Professional use spec	: Wide dispersive use
Use of the substance/mixture	: Metalworking fluid
Use of the substance/mixture	: Functional fluids ---- Do not use the product for any purposes that have not been advised by the manufacturer. In that case, the user could be exposed to unpredictable risks.
Function or use category	: Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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

Contact:
Refining & Marketing Division
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): qualt-t@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 [CLP]

Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

Adverse physicochemical, human health and environmental effects

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

2.2. Label elements

According to EC directives or the corresponding national regulations there is no labelling obligation for this product.

General advice: "Use adequate gloves when handling the product. Deliver used/leftover product and container to a waste collection point. Protect the environment.".

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	: In exceptional cases (i.e prolunged storage in tanks contaminated with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H2S.,See Heading 16

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. Substances

Not applicable

3.2. Mixture

Composition/information on ingredients : Mineral base oil, severely refined
Additives
All the mineral base oils contained in this product have a value < 3 % wt of DMSO extract, according to IP 346/92

Hazardous ingredients and/or with relevant occupational exposure limits : See table

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Mineral base oil, severely refined (Main component)		95 - 99	Not classified
Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate (Additive)	(CAS No) 125643-61-0 (EC no) 406-040-9 (EC index no) 607-530-00-7 (REACH-no) N/D	0,3 - 0,49	R53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Mineral base oil, severely refined (Main component)		95 - 99	Not classified
Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate (Additive)	(CAS No) 125643-61-0 (EC no) 406-040-9 (EC index no) 607-530-00-7 (REACH-no) N/D	0,3 - 0,49	Aquatic Chronic 4, H413

Full text of R-, H- and EUH-phrases: see section 16

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 aspired 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. See also Point 4.3.

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 inconscious, place in the recovery position. Do not give anything by mouth to an unconscious person. 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/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	: Accidental ingestion of small quantities of the product may cause irritation, nausea and gastric disturbances. Taking into account the taste of the product, however, ingestion of dangerous quantites is very unlikely.
Symptoms/injuries upon intravenous administration	: No information available.

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

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.

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, NOx, H2S and SOx,Oxygenated compounds (aldehydes, etc.),CaOx,POx.

5.3. Advice for firefighters

Firefighting instructions	: Shut off source of product, if possible. 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 : In case of fire, do not discharge residual product, waste materials and runoff water: collect separately and use a proper treatment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.1.1. For non-emergency personnel

Protective equipment : See Section 8.

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

6.1.2. For emergency responders

Protective equipment : Small spillages: normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material. if necessary heat resistant and insulated. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Gloves made of PVA are not water-resistant, and are not suitable for emergency use. If contact with hot product is possible or anticipated, gloves should be heat-resistant and thermally insulated. Work helmet. Antistatic non-skid safety shoes or boots. Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory protection: A half or full-face respirator with filter(s) for organic vapours (and when applicable for H2S). A Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.

Emergency procedures : Notify local authorities according to relevant regulations.

6.2. Environmental precautions

Do not let the product flow into sewers, water courses or underground spaces. In case of soil contamination, remove contaminated soil and treat 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. Water: Confine the spillage. Remove from surface by skimming or suitable floating absorbents. Collect recovered product and other waste materials in suitable waterproof, oil resistant containers. Recover or dispose of according to local regulations. Do not use solvents or dispersants, unless specifically advised by an expert, and, if required, approved by local authorities.

Other information : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions.

6.4. Reference to other sections

Refer to chapter 16.

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, flammability, and the presence of sulphur compounds. See also Section 16, "Other information".

Handling temperature : 0 - 65 °C

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 : 0 - 55 °C

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

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

Packaging materials : For containers, or container linings use materials specifically approved for use with this product. 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

Mineral base oil, severely refined		
Austria	MAK (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO <3% m/m)
Belgium	Limit value (mg/m³)	5 mg/m³ (Mineral base oil mist, severely refined, DMSO <3% m/m)

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

Mineral base oil, severely refined	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	= 5,4 mg/m³/day (DNEL, Mineral base oil mist, severely refined, DMSO <3% m/m)
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	= 1,2 mg/m³/day (DNEL, Mineral base oil mist, severely refined, DMSO <3% m/m)

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

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

8.2. Exposure controls

Appropriate engineering controls	:	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. Materials that are presumably adequate: nitrile (NBR) or PVC with a protection index > 5 (permeation time > 240 mins). Use gloves respecting all the conditions and within the limits set by the manufacturer. Replace gloves immediately in case of cuts, holes or other signs of damages or degradation. If necessary, refer to the EN 374 standard.
Eye protection	:	When there is a risk of contact with the eyes, use safety goggles or other means of protection (face shield). If necessary, refer to national standards or to the EN 166 standard.
Skin and body protection	:	Long-sleeved overalls. If necessary, refer to the EN 340 and related standards, for definition of characteristics and perfomance 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. 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	:	No special requirements necessary, if handled at room temperature.

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
Appearance	: Liquid, bright & clear.
Molecular mass	: Not applicable for mixtures
Colour	: Yellow-brown.
Odour	: Slight odour of petroleum.
Odour threshold	: There are no data available on the preparation/mixture itself.
pH	: Not applicable
Relative evaporation rate (butylacetate=1)	: Negligible.
Melting point	: Pour point °C N/D (ASTM D 97)
Freezing point	: No data available
Boiling point	: ≥ 200 °C (ASTM D 1160)
Flash point	: ≥ 210 °C (ASTM D 93)
Self ignition temperature	: ≥ 300 °C (DIN 51794)
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: ≤ 0,1 hPa (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: ≤ 890 kg/m³ (15 °C) (ASTM D 1298)
Solubility	: Water: Immiscible and insoluble
Log Pow	: Not applicable for mixtures
Log Kow	: No data available
Viscosity, kinematic	: 60 - 63,5 mm²/s (40 °C) (ASTM D 445)

Viscosity, dynamic	: No data available
Explosive properties	: None.
Oxidising properties	: None.
Explosive limits	: LEL ≥ 45 g/m³ (Aerosol)

9.2. Other information

VOC content : = 0 % (EU, CH)

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

None (in normal conditions of storage and handling). Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard. 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

In exceptional cases (i.e prolonged storage in tanks contaminated with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H2S. See also Section 16, "Other information".

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

eni Simblum 5/A (N/A)	
LD50 oral rat	≥ 2000 mg/kg (Calculated data).
LD50 dermal rat	≥ 2000 mg/kg (Calculated data).
LC50 inhalation rat (mg/l)	≥ 5 mg/l/4h (Calculated data).

Mineral base oil, severely refined	
LD50 oral rat	> 5000 mg/kg (OECD 401)
LD50 dermal rat	> 5000 mg/kg (OECD 402)

Mineral base oil, severely refined	
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (OECD 403)

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

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

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
(according to composition)
This product does not contain any significant amounts of substances classified as sensitizers (in any case < 0.1 % wt)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
(according to composition)
This product does not contain any significant amounts of substances classified as mutagenic by the EU (in any case < 0.1 % wt)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
(according to composition)
None of the components of this product are listed as carcinogen by NTP, IARC, OSHA, EU or others.
All the mineral base oils contained in this product have a value < 3 % wt of DMSO extract, according to IP 346/92 (Nota L - Dir. 94/69/CE - Reg (CE) 1272/2008)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
(according to composition)
This product does not contain any significant amounts of substances classified as Toxic for Reproduction by the EU (in any case < 0.1 % wt)

Specific target organ toxicity (single exposure) : Not classified (Based on available data, the classification criteria are not met)
(according to composition)

Specific target organ toxicity (repeated exposure) : Not classified (Based on available data, the classification criteria are not met)
(according to composition)

Mineral base oil, severely refined	
LOAEL (oral,rat,90 days)	= 125 mg/kg bodyweight/day (OECD TG 408)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)
Viscosity, kinematic: > 20,5 mm2/s (40 °C) (ASTM D 445)

Potential Adverse human health effects and symptoms : Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect. Contact with eyes may cause temporary reddening and irritation.

Other information : None.

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)

eni Simblum 5/A (N/A)	
LC50 fish 1	≥ 100 mg/l (Calculated data). This evaluation is based on the real characteristics of the components and their combination, taking into account the information provided by the suppliers.
EC50 Daphnia 1	≥ 100 mg/l (Calculated data). This evaluation is based on the real characteristics of the components and their combination, taking into account the information provided by the suppliers.
ErC50 (algae)	≥ 100 mg/l (Calculated data). This evaluation is based on the real characteristics of the components and their combination, taking into account the information provided by the suppliers.

Mineral base oil, severely refined	
LC50 fish 1	> 100 mg/l (LL 50)
EC50 Daphnia 1	> 10000 mg/l WAF, 48 h (OECD 202)

Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
LC50 fish 1	> 74 mg/l (OECD 203, 96h, Brachydanio rerio)
EC50 Daphnia 1	> 100 mg/l (OECD 202, 24h)
ErC50 (algae)	≥ 3 mg/l (OECD 201, 72 h, Scenedesmus subspicatus)

12.2. Persistence and degradability

eni Simblum 5/A (N/A)	
Persistence and degradability	The most significant constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.

Mineral base oil, severely refined	
Persistence and degradability	The most significant constituents of the product should be considered as "inherently biodegradable", but not "readily biodegradable", and they may be moderately persistent, particularly in anaerobic conditions.

12.3. Bioaccumulative potential

eni Simblum 5/A (N/A)	
Log Pow	Not applicable for mixtures

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

eni Simblum 5/A (N/A)	
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	The components in this formulation do not meet the criteria for classification as PBT or vPvB. The product should be considered prudentially as "Persistent" in the environment, according to the REACH Annex XIII criteria (point 1.1)

Mineral base oil, severely refined	
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.

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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

Waste disposal recommendations : European Waste Catalogue code(s) (Decision 2001/118/CE): 12 01 07* (mineral-based machining oils free of halogens (except emulsions and solutions)). 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.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

No dangerous good in sense of transport regulations

14.2. UN proper shipping name

Proper Shipping Name : Not applicable

14.3. Transport hazard class(es)

Subsidiary risk (IMDG) : --

Subsidiary risk (IATA) : --

14.4. Packing group

Packing group (UN) : --

14.5. Environmental hazards

Other information : None.

14.6. Special precautions for user

Special transport precautions : None.

14.6.1. Overland transport

State during transport (ADR-RID) : Liquid

Classification code : --

Limited quantities (ADR) :

14.6.2. Transport by sea

Port Regulation Law : Not applicable.

Limited quantities (IMDG) : Not applicable

EmS-No. (1) : --

MFAG-No : --

14.6.3. Air transport

Instruction "cargo" (ICAO) : Not applicable

Instruction "passenger" (ICAO) : Not applicable

Instruction "passenger" - Limited quantities (ICAO) : Not applicable

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

No REACH Annex XVII restrictions

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

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) Directives 96/82/CE and 2003/105/CE (Control of major-accident hazards involving dangerous substances) Directive 2004/42/CE (Limitation of emissions of Volatile Organic Compounds) Labelling according to directives 67/548/EEC and 1999/45/EC
VOC content	: = 0 % (EU, CH)
EURAL code (EWC)	: 12 01 07*

15.1.2. National regulations

Maladies professionelles (F)	: RG 36 - Affections provoquées par les huiles et graisses d'origine minérale ou de synthèse
Water hazard class (WGK) (D)	: 1 (according to composition)
WGK remark	: Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS)
Storage class (LGK) (D)	: LGK 12 - Non-flammable liquids in non-flammable packages
VbF class (D)	: Not applicable.
Regional legislation	: 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 (96/82/CE - 2003/105/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.

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out
Mineral base oil, severely refined

SECTION 16: Other information

Indication of changes	: Modification according to Regulation (EC) nr. 1907/2006 and nr. 453/2010. Name.

Data sources	:	This Safety Data Sheet is based on the real characteristics of the components and their combination, taking into account the information provided by the suppliers. Complete text of the phrases H and R quoted in this Safety Data Sheet. These phrases are reported here for information only, and MAY NOT correspond to the classification of the product.
Abbreviations and acronyms	:	Complete text of the phrases H and R quoted in this Safety Data Sheet. These phrases are reported here for information only, and MAY NOT correspond to the classification of the product. N/A = Not applicable. N/D = Not available 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.
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	:	In exceptional cases (i.e prolunged storage in tanks contaminated with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H2S. This situation is especially relevant in all those circumstances which require to enter a confined space, with direct exposure to the vapours. If this possibility is suspected, a specific assessment of inhalation risks from the presence of H2S in confined spaces must be made, to help determine prevention measures and controls (i.e. PPE) appropriate to local circumstances, and adequate emergency procedures. If there is any suspicion of inhalation of H2S (hydrogen sulphide), Rescuers must wear breathing apparatus, belt and safety rope, and follow rescue procedures. Send patient to hospital. Immediately begin artificial respiration if breathing has ceased. Administer oxygen if necessary.

Full text of R-, H- and EUH-phrases::

Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4

H413	May cause long lasting harmful effects to aquatic life
R53	May cause long-term adverse effects in the aquatic environment

SDS EU (Annex II) GENERAL

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