Eni Arum HT 220

Safety Data Sheet

According to Regulation (EU) No. 830/2015

Revision date: 20/07/2020 Supersedes: 04/12/2018 Version: 4.0

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Eni Arum HT 220
Product code	:	7345
Type of product	:	Lubricants
Formula	:	0049-2004
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 Used in closed systems
Use of the substance/mixture	:	Lubricant for gears ---- Do not use the product for any purposes that have not been advised by the manufacturer.
Function or use category	:	Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ENI S.p.A.

P.le E. Mattei 1 - 00144 Rome Italy

Phone: (+39) 06 59821

www.eni.com

Contact:

Refining & Marketing

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]

Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

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

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS09

CLP Signal word : [None]

Hazard statements (CLP) : H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.
P391 - Collect spillage.
P501 - Dispose of contents and container to according to national or local regulations.

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. A potential risk may arise from the release of hydrogen sulfide, when the product is stored or handled at high temperature. Hydrogen sulfide may accumulate in the tanks or other confined spaces, with danger to the workers that enter the spaces. In these cases overexposure to hydrogen sulfide may cause irritation to airways, nausea, dizziness, loss of consciousness and death.

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

Not applicable

3.2. Mixtures

Notes : Composition/ Information on ingredients:
Esters
Polymers
Mineral base oil, severely refined
Additives

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]
Mineral base oil, severely refined (For identification of the substance, see note [*] , see note [**])		3 - 7	Asp. Tox. 1, H304
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (Additive)	(CAS-No.) 125643-61-0 (EC-No.) 406-040-9 (EC Index-No.) 607-530-00-7 (REACH-no) 01-0000015551-76	1 - 2	Aquatic Chronic 4, H413
Phenol, isopropylated, phosphate (3:1) (Additive)	(CAS-No.) 68937-41-7 (EC-No.) 273-066-3 (EC Index-No.) N/A (REACH-no) 01-2119535109-41	0,5 - 0,9	Repr. 2, H361fd STOT RE 2, H373 Aquatic Chronic 1, H410 (M=10)

Notes : [*] Note: this product may be formulated with one or more of the following severely refined mineral base oils (not classified as hazardous):
CAS 64742-54-7/EC 265-157-1/REACH Reg. # 01-2119484627-25-xxxx; CAS 64742-65-0/EC 265-169-7/REACH Reg. # 01-2119471299-27-xxxx; CAS 64742-70-7/EC 265-174-4/REACH Reg. # 01-2119487080-42-xxxx.
All these substances have a value < 3 % wt of DMSO extract, according to IP 346/92 (Nota L - Annex VI Reg (CE) 1272/2008, # 1.1.3)

Note [**]:

substance with occupational exposure limits for some EU countries affecting the category of mineral oils (finely refined mineral base oil mists; see section 8.1)

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In case of doubt or persistent symptoms, consult always a physician.

First-aid measures after inhalation : Remove to fresh air, keep the casualty warm and at rest. In the case of a degradation of the product owing to bacterial contamination, check the atmosphere also for presence and concenyration of H2S and other sulphur compounds. In case of exposure to H2S, bring the victim to a hospital as soon as possible. If necessary use artificial respiration. Give oxygen, if available. See also section 4.3.

First-aid measures after skin contact : Remove contaminated clothing and shoes. Wash skin with soap and water. If skin irritation occurs: Get medical advice/attention.

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.

First-aid measures after ingestion : Rinse mouth thoroughly with water. Give water to drink if victim completely conscious/alert. Do not induce vomiting.

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

Symptoms/effects after inhalation : None under normal conditions at ambient temperatures.

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

Treat symptomatically. 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 : Dry chemical, CO2, or water spray or regular foam.

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 : Not flammable.

Explosion hazard : None.

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 (SO2 and SO3) and Hydrogen sulphide H2S. Oxygenated compounds (aldehydes, etc.). POx.

5.3. Advice for firefighters

Firefighting instructions : Shut off source of product, if possible. Move undamaged containers from immediate hazard area if it can be done safely. Spilled product which is not burning should be covered with sand or foam. Use water sprays to cool containers and surfaces exposed to the flames. If the fire cannot be controlled, evacuate area.

Special protective equipment for firefighters : Personal protection equipment for firefighters (see also sect. 8). In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. EN 443. EN 469. EN 659.

Other information : In case of fire, do not discharge residual product, waste materials and runoff water: collect separately and use a proper treatment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.1.1. For non-emergency personnel

Protective equipment : See Section 8.

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

6.1.2. For emergency responders

Protective equipment	:	Standard EN 469 - Protective clothing for firefighters. Standard - EN 659: Protective gloves for firefighters. 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 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 (A) (or A+B when applicable for H2S), or a Self-contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
Emergency procedures	:	Notify local authorities according to relevant regulations.

6.2. Environmental precautions

Prevent liquid from entering sewers, watercourses, underground or low areas. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	:	Contain and absorb spilled liquid with absorbent inert material (for example sand, earth, vermiculite, diatomaceous earth).
Methods for cleaning up	:	Transfer recovered product and other materials to suitable tanks or containers and store/dispose according to relevant regulations.
Other information	:	Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air/water temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. Local regulations may also prescribe or limit actions to be taken. For this reason, local experts should be consulted when necessary.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	This material is combustible, but will not ignite readily. Keep away from heat/sparks/open flames/hot surfaces. Use and store only outdoors or in a well-ventilated area. Ensure good ventilation of the work station. 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. 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, if opportune, the presence of sulphur compounds. The product may release Hydrogen Sulphide: a specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances. See also Section 16, "Other information".
Hygiene measures	:	Ensure that proper housekeeping measures are in place. Avoid contact with skin. Do not breathe fume/ mist/ vapours. Do not ingest. Do not smoke. Do not eat and do not drink during use. Do not clean hands with dirty or oil-soaked rags. Do not re-use clothes, if they are still contaminated. Keep away from food and beverages. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Separate working clothes from town clothes. Launder separately.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Store in dry, well ventilated area. Keep away from open flames, hot surfaces and sources of ignition. Do not smoke.
Incompatible products	:	Strong oxidizing agents.
Storage area	:	Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation. Storage installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.
Packages and containers:	:	If the product is supplied in containers: Keep containers tightly closed and properly labelled. Keep only in the original container or in a suitable container for this kind of product.
Packaging materials	:	For containers, or container linings use materials specifically approved for use with this product. Compatibility should be checked with the manufacturer.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

Phenol, isopropylated, phosphate (3:1) (68937-41-7)		
Austria	MAK (mg/m³)	3 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
Austria	MAK Short time value (mg/m³)	6 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
Belgium	Limit value (mg/m³)	3 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
Denmark	Grænseværdi (langvarig) (mg/m³)	3 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
Denmark	Grænseværdi (kortvarig) (mg/m³)	6 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
Finland	HTP-arvo (8h) (mg/m³)	3 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
Finland	HTP-arvo (15 min) (mg/m³)	6 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
France	VME (mg/m³)	3 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
Ireland	OEL (8 hours ref) (mg/m³)	3 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
Spain	VLA-ED (mg/m³)	3 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
United Kingdom	WEL TWA (mg/m³)	3 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)

Phenol, isopropylated, phosphate (3:1) (68937-41-7)		
USA - ACGIH	ACGIH TLV®-TWA (mg/m³)	3 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
USA - NIOSH	NIOSH REL (TWA) (mg/m³)	3 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)
USA - OSHA	OSHA PEL (TWA) (mg/m³)	3 mg/m³ (Reference: CAS 115-86-6, Triphenylphosphate)

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.

Eni Arum HT 220	
DNEL/DMEL (additional information)	
Additional information	Not applicable
PNEC (additional information)	
Additional information	Not applicable

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	20 mg/kg bodyweight/day
Acute - systemic effects, inhalation	1750 mg/m³
Acute - local effects, dermal	1 mg/cm²
Long-term - systemic effects, dermal	8,6 mg/kg bodyweight/day
Long-term - local effects, dermal	0,006 mg/cm²
Long-term - systemic effects, inhalation	3 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	50 mg/kg bodyweight
Acute - local effects, dermal	8,33 mg/cm²
Long-term - systemic effects,oral	0,43 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0,74 mg/m³
Long-term - systemic effects, dermal	4,3 mg/kg bodyweight/day
Long-term - local effects, inhalation	875 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	4,3 µg/l
PNEC aqua (marine water)	1,8 µg/l
PNEC aqua (intermittent, freshwater)	43 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,37 mg/kg dwt
PNEC sediment (marine water)	0,037 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,632 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	33 µg/kg
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	2000 mg/kg bodyweight/day
Acute - systemic effects, inhalation	20,1 mg/m³
Acute - local effects, dermal	16 mg/cm²
Long-term - systemic effects, dermal	0,417 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0,145 mg/m³
Long-term - local effects, inhalation	700 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	100 mg/kg bodyweight
Acute - systemic effects, inhalation	350 mg/m³
Acute - systemic effects, oral	50 mg/kg bodyweight
Acute - local effects, dermal	8 mg/cm²
Long-term - systemic effects,oral	0,04 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0,07 mg/m³

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
Long-term - systemic effects, dermal	0,208 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,00031 mg/l
PNEC aqua (marine water)	0,000031 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,185 mg/kg dwt
PNEC sediment (marine water)	0,0185 mg/kg dwt
PNEC (Soil)	
PNEC soil	2,5 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

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:

Ensure good ventilation of the work station. Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), check the atmosphere for oxygen content, presence of hydrogen sulphide (H2S) and SOx, and flammability. See also Section 16, "Other information".

Personal protective equipment (for industrial or professional use):

Gloves. Protective clothing. Safety glasses. Safety shoes or boots. Gas mask.

Hand protection:

Hand protection is not required. In case of repeated or prolonged contact wear gloves. Adequate materials: nitrile (NBR), with a protection index ≥ 5 (permeation time ≥ 240 mins). Use gloves respecting all the conditions and within the limits set by the manufacturer. Replace gloves immediately in case of cuts, holes or other signs of damages or degradation. If necessary, refer to the EN 374 standard. Personal hygiene is a key element for an effective hand care. Gloves must be worn only with clean hands. After wearing gloves, hands must be carefully washed and dried.

Eye protection:

Not required for normal conditions of use. 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:

Protective apron. Non-skid safety shoes or boots, chemical resistant.

Respiratory protection:

Not necessary with sufficient ventilation. In case of inadequate ventilation wear respiratory protection (EN 136/140/145). Combination filter device (DIN EN 141). 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:

None in normal use conditions.

Environmental exposure controls:

Do not discharge the product into the environment. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed. Prevent discharge of undissolved substance to or recover from onsite wastewater. 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Clear liquid.
Colour	:	Yellow-brown.
Odour	:	characteristic.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	-45 °C (pour point) (ASTM D 97)
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	250 °C (ASTM D 92)
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	975 kg/m³ (15°C) (ASTM D 4052)
Solubility	:	This product is not soluble in water.
Log Pow	:	Not applicable for mixtures
Log Kow	:	Not applicable for mixtures
Viscosity, kinematic	:	220 mm²/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	:	No data available

9.2. Other information

Additional information : No data available

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).

10.4. Conditions to avoid

Heat. Open flame.

10.5. Incompatible materials

Strong oxidants.

10.6. Hazardous decomposition products

Thermal decomposition may produce : Toxic fumes. This product contains sulfur compounds which, in certain circumstances, may generate hydrogen sulfide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Mineral base oil, severely refined	
LD50 oral rat	≥ 5000 mg/kg bodyweight (OECD 401)
LD50 dermal rat	≥ 5000 mg/kg bodyweight (OECD 402)
LC50 inhalation rat (mg/l)	≥ 5 mg/l/4h (OECD 403)

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
LD50 oral rat	500 - 2000 mg/kg bodyweight
LD50 dermal rat	2000 mg/kg bodyweight

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
LD50 oral rat	≥ 5000 mg/kg
LD50 dermal rabbit	≥ 10000 mg/kg bodyweight
LC50 inhalation rat (mg/l)	≥ 200 mg/l/4h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
All the mineral base oils contained in this product have a value < 3 % wt of DMSO extract, according to IP 346/92 (Nota L - Annex VI Reg (CE) 1272/2008, # 1.1.3)
No carcinogenic effect
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
This product contains : Phenol, isopropylated, phosphate (3:1)
Suspected of damaging fertility. Suspected of damaging the unborn child.
The actual relevance of these effects in man is not certain.

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
NOAEL (animal/male, F0/P)	400 mg/kg bodyweight (OECD 414)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
LOAEL (oral, rat)	5 mg/kg bw/day (28 d)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)

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

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
NOAEL (oral, rat, 90 days)	< 25 mg/kg bodyweight/day (OECD 408)

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

Eni Arum HT 220	
Viscosity, kinematic	220 mm²/s (40 °C) (ASTM D 445)

Potential adverse human health effects and symptoms : Contact with eyes may cause temporary reddening and irritation. Avoid all eye and skin contact and do not breathe vapour and mist.
Other information : None.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. An uncontrolled release to the environment may 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. Notify authorities if product enters sewers or public waters.

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)
Ecology - water	:	Toxic to aquatic life.
Hazardous to the aquatic environment, short-term (acute)	:	Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	:	Toxic to aquatic life with long lasting effects.

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-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
LC50 fish 1	> 74 mg/l (Brachydanio rerio, OECD 203)
EC50 Daphnia 1	> 100 mg/l (24h, OECD 202)
EC50 72h algae (1)	> 3 mg/l (Scenedesmus sp, OECD 201)
ErC50 (algae)	> 33,7 mg/l (OECD 201, 72 h, Pseudokirchnerella subspicata)
NOEC (acute)	33,7 mg/l (72 h, Pseudokirchnerella subspicata)
NOEC chronic crustacea	>= 1 mg/l (21d, Daphnia magna)

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
LC50 fish 1	1,6 mg/l (Oncorhynchus mykiss)
LC50 fish 2	10,8 mg/l (Pimephales promelas)
EC50 Daphnia 1	2,44 mg/l
NOEC chronic fish	0,0031 mg/l (33d, Pimephales promelas, OECD 210)
NOEC chronic crustacea	0,041 mg/l (21d, OECD 211)

12.2. Persistence and degradability

Eni Arum HT 220	
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.

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
Persistence and degradability	Not biodegradable.

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
Biodegradation	17,9 % (28d)

12.3. Bioaccumulative potential

Eni Arum HT 220	
Log Pow	Not applicable for mixtures
Log Kow	Not applicable for mixtures
Bioaccumulative potential	According to the characteristics of the components, the product has a low biodegradability in anaerobic conditions, and may be persistent. Some of the chemical compounds that are present in the product have a potential for bioaccumulation, and may be harmful to aquatic organisms.

reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate (125643-61-0)	
Bioconcentration factor (BCF REACH)	260 (35 d, Oncorhynchus mykiss, OECD 305)

12.4. Mobility in soil

Eni Arum HT 220	
Ecology - soil	Product adsorbs onto the soil.

12.5. Results of PBT and vPvB assessment

Eni Arum HT 220
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

Component	
Mineral base oil, severely refined ()	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 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 : No other effects known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

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

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

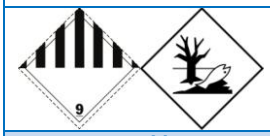
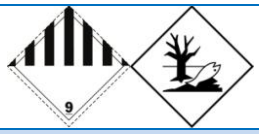
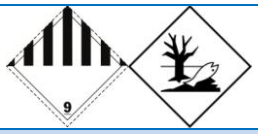
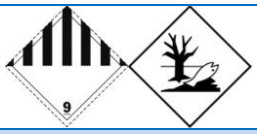
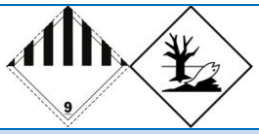
Product/Packaging disposal recommendations : European Waste Catalogue code(s) (Decision 2001/118/CE): 13 08 99* (oil wastes not otherwise specified - wastes not otherwise specified). This EWC code is only a general indication, and takes into account the original composition of the product and its intended use. The user has the responsibility of choosing the right EWC code, considering the actual use of the product, alterations and contaminations.

Ecology - waste materials : The product as it is does not contain halogenated substances.

EURAL code (EWC) : 13 08 99* - wastes not otherwise specified

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
3082	3082	3082	3082	3082
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol, isopropylated, phosphate (3:1)), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
None.				

14.6. Special precautions for user

- Overland transport

Transport regulations (ADR) : Subject to the provisions

Classification code (UN) : M6

Limited quantities (ADR)	:	5l
Excepted quantities (ADR)	:	E1
Transport category (ADR)	:	3
Hazard identification number (Kemler No.)	:	90
Orange plates	:	
Tunnel restriction code	:	-

- Transport by sea

Transport regulations (IMDG)	:	Subject to the provisions
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
IBC packing instructions (IMDG)	:	IBC03
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-F
Stowage category (IMDG)	:	A

- Air transport

Transport regulations (IATA)	:	Subject to the provisions
PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y964
PCA limited quantity max net quantity (IATA)	:	30kgG
PCA max net quantity (IATA)	:	450L
CAO max net quantity (IATA)	:	450L

- Inland waterway transport

Transport regulations (ADN)	:	Subject to the provisions
Classification code (ADN)	:	M6
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1

- Rail transport

Transport regulations (RID)	:	Subject to the provisions
Classification code (RID)	:	M6
Limited quantities (RID)	:	5L
Excepted quantities (RID)	:	E1
Transport category (RID)	:	3
Hazard identification number (RID)	:	90

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Mineral base oil, severely refined - Phenol, isopropylated, phosphate (3:1)
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	Eni Arum HT 220 - reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate - Phenol, isopropylated, phosphate (3:1)

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

Contains no REACH Annex XIV substances

Other information, restriction and prohibition regulations	:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). (et sequens). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (et sequens). Directives 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE, 93/88/CEE, 95/63/CE, 97/42/CE, 98/24/CE, 99/38/CE, 99/92/CE, 2001/45/CE, 2003/10/CE, 2003/18/CE (Health and safety on the workplace). Directive 2012/18/CE (Control of major-accident hazards involving dangerous substances). Directive 2004/42/CE (Limitation of emissions of Volatile Organic Compounds). Directive 98/24/EC (protection of the health and safety of workers from the risks related to chemical agents at work). Directive 92/85/CE (measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding). Substances Depleting the Ozone layer (1005/2009) - Annex I Substances (ODP). Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC. Regulation EU (649/2012) - Export and Import of hazardous chemicals (PIC).

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

France

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

Germany

Reference to AwSV	:	Water hazard class (WGK) (D) 3, Highly hazardous to water (Classification according to AwSV, Annex 1)
WGK remark	:	Classification is carried out on the basis of the Ordinance on facilities for handling substances that are hazardous to water (Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV)) of 18 April 2017 (BGBl 2017, Teil I, Nr. 22, Seite 905).
VbF class (D)	:	Not applicable.
Storage class (LGK) (D)	:	LGK 10 - Combustible liquids
Employment restrictions	:	Employment prohibitions for the protection of young people at work according to § 22 section 1(6) JArbSchG have to be observed.
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	:	Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)
Other information, restrictions and prohibition regulations	:	TRGS 400: Hazard assessment for activities involving Hazardous Substances TRGS 401: Risks resulting from skin contact - identification, assessment, measures TRGS 402: Identification and Assessment of the Risks from Activities involving Hazardous Substances: Inhalation Exposure TRGS 500: Protective measures TRGS 555: Working instruction and information for workers TRGS 800: Fire protection measures TRGS 900: Occupational Exposure Limits

Netherlands

Waterbezwaarlijkheid	:	7 - Toxic to aquatic organisms 6 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
Saneringsinspanningen	:	C - Minimize discharge
SZW-lijst van kankerverwekkende stoffen	:	None of the components are listed
SZW-lijst van mutagene stoffen	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	None of the components are listed

Denmark

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

15.2. Chemical safety assessment

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

A chemical safety assessment has been carried out for the following components of this mixture:
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate Phenol, isopropylated, phosphate (3:1)

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Notes
2.1	Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]	Modified	
2.1	Adverse physicochemical, human health and environmental effects	Modified	
2.2	Hazard pictograms (CLP)	Added	
2.2	Precautionary statements (CLP)	Modified	
2.2	Hazard statements (CLP)	Modified	
2.3	Other hazards not contributing to the classification	Modified	
3	Composition/information on ingredients	Modified	
3.2	Comments	Modified	
3.2	Notes	Modified	
4.1	First-aid measures after skin contact	Modified	
4.1	First-aid measures after eye contact	Modified	
4.2	Symptoms/effects after ingestion	Modified	
4.2	Symptoms/effects after skin contact	Modified	
4.2	Symptoms/effects after eye contact	Modified	
4.3	Other medical advice or treatment	Modified	
5.3	Firefighting instructions	Modified	
6.1	Protective equipment	Modified	
7.1	Precautions for safe handling	Modified	
7.1	Hygiene measures	Modified	
7.2	Packaging materials	Modified	
8.1	DNEL/DMEL and PNEC values	Added	
8.2	Appropriate engineering controls	Modified	
9.1	Log Kow	Added	
9.1	Log Pow	Added	
11.1	Potential adverse human health effects and symptoms	Modified	
12.1	Ecology - water	Modified	
12.1	Ecology - general	Modified	
12.3	Log Kow	Added	
12.3	Log Pow	Added	
14.1	UN-No. (ADN)	Added	
14.1	UN-No.	Added	
14.1	UN-No. (RID)	Added	
14.1	UN-No. (IMDG)	Added	
14.1	UN-No. (ICAO)	Added	
14.2	Proper Shipping Name (IATA)	Added	
14.2	Proper Shipping Name (ADN)	Added	
14.2	Proper Shipping Name (RID)	Added	
14.2	Proper Shipping Name (IMDG)	Added	
14.2	Proper Shipping Name	Modified	
14.3	Danger labels (ICAO)	Added	
14.3	Danger labels (ADN)	Added	
14.3	Danger labels (RID)	Added	
14.3	Danger labels (IMDG)	Added	
14.3	Danger labels (UN)	Added	
14.3	Class (UN)	Modified	

14.4	Packing group (IATA)	Modified	
14.4	Packing group (RID)	Modified	
14.4	Packing group (ADN)	Modified	
14.4	Packing group (IMDG)	Modified	
14.4	Packing group (UN)	Modified	
14.6	PCA max net quantity (IATA)	Added	
14.6	PCA limited quantity max net quantity (IATA)	Added	
14.6	PCA Limited quantities (IATA)	Added	
14.6	PCA Excepted quantities (IATA)	Added	
14.6	CAO max net quantity (IATA)	Added	
14.6	Limited quantities (RID)	Added	
14.6	Transport regulations (ADR)	Modified	
14.6	Transport regulations (ADN)	Modified	
14.6	Transport regulations (IATA)	Modified	
14.6	Transport regulations (IMDG)	Modified	
14.6	Transport regulations (RID)	Modified	
14.6	Excepted quantities (ADN)	Added	
14.6	Limited quantities (ADN)	Added	
14.6	Classification code (ADN)	Added	
14.6	Hazard identification number (RID)	Added	
14.6	Transport category (RID)	Added	
14.6	Excepted quantities (RID)	Added	
14.6	Classification code (RID)	Added	
14.6	EmS-No. (Spillage)	Added	
14.6	EmS-No. (Fire)	Added	
14.6	Limited quantities (IMDG)	Added	
14.6	Stowage category (IMDG)	Added	
14.6	IBC packing instructions (IMDG)	Added	
14.6	Excepted quantities (IMDG)	Added	
14.6	Transport category (ADR)	Added	
14.6	Limited quantities (ADR)	Added	
14.6	Hazard identification number (Kemler No.)	Added	
14.6	Classification code (UN)	Added	
14.6	Excepted quantities (ADR)	Added	
14.6	Tunnel restriction code	Modified	
15.1	Waterbezwaarlijkheid	Modified	
15.1	Other information, restrictions and prohibition regulations	Modified	
15.1	Water hazard class (WGK) (D)	Modified	
15.1	WGK remark	Modified	
15.1	REACH Annex XVII	Modified	
16	Other information	Modified	
16	Abbreviations and acronyms	Modified	
16	Data sources	Modified	
16	Indication of changes	Added	

Abbreviations and acronyms:

	Complete text of the H phrases quoted in this Safety Data Sheet. These phrases are reported here for information only, and MAY NOT correspond to the classification of the product.
	N/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
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Effective concentration for 50 percent of test population (median effective concentration)
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Lethal concentration for 50 percent of test population (median lethal concentration)

LD50	Lethal dose for 50 percent of test population (median lethal dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals, Regulation (EC) No 1907/2006
RID	Regulation concerning the International Carriage of Dangerous Goods by Railways
SDS	Safety Data Sheet
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative

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

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

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

Full text of H- and EUH-statements:

Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Repr. 2	Reproductive toxicity, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H304	May be fatal if swallowed and enters airways.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Aquatic Chronic 2	H411	Calculation method

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.