

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

### 1.1. Product identifier

Product form : Mixture  
Product name : **alpha ENGINE BOOSTER PLUS**  
Product code : 330159  
Type of product : Lubricant

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

#### 1.2.1. Relevant identified uses

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

Gulf Western Asia PTE Ltd  
105 Cecil Street, #24-02 The Octagon, Postal 069534  
Singapore

### 1.4. Emergency telephone number

Emergency number : Tel Nr +65 90302232

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category 1 H318  
Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412  
Full text of H statements : see section 16

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

May damage fertility or the unborn child. Causes serious eye damage. Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

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

Hazard pictograms (CLP) :



Signal word (CLP)	: Danger
Hazardous ingredients	: Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts
Hazard statements (CLP)	: H318 - Causes serious eye damage. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
UFI	: H5XR-M4SU-F109-H2A6

### 2.3. Other hazards

Other hazards not contributing to the classification	: Flammable liquids. Prolonged or repeated skin contact with the material will remove natural oils which leads to a dermatitis. Spills of this product present a serious slipping hazard.
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## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] substance with a Community workplace exposure limit (Note L)	(CAS-No.) 64742-65-0 (EC-No.) 265-169-7 (EC Index-No.) 649-474-00-6 (REACH-no) 01-2119471299-27	50 – 75	Not classified
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] substance with a Community workplace exposure limit (Note L)	(CAS-No.) 64742-54-7 (EC-No.) 265-157-1 (EC Index-No.) 649-467-00-8 (REACH-no) 01-2119484627-25	5 – 25	Not classified

Distillates (petroleum), hydrotreated light paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (Note L)	(CAS-No.) 64742-55-8 (EC-No.) 265-158-7 (EC Index-No.) 649-468-00-3 (REACH-no) 01-2119487077-29	5 – 25	Carc. Not classified Asp. Tox. 1, H304
Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts	(CAS-No.) 68457-79-4 (EC-No.) 270-608-0 (REACH-no) 01-2119493628-22	2,5 – 10	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50	(EC-No.) 701-251-5 (REACH-no) 01-2119524004-56	1 – 2,5	Aquatic Chronic 4, H413
Mineral oil substance with a Community workplace exposure limit		0,5 – 2,5	Not classified
Ethylene Glycol substance with a Community workplace exposure limit	(CAS-No.) 107-21-1 (EC-No.) 203-473-3 (EC Index-No.) 603-027-00-1 (REACH-no) 01-2119456816-28	0,1 – 1	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Phenol, dodecyl-, branched (Impurity)	(CAS-No.) 121158-58-5 (EC-No.) 310-154-3 (EC Index-No.) 604-092-00-9 (REACH-no) 01-2119513207-49	0,1 – 1	Repr. 1B, H360F Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts	(CAS-No.) 68457-79-4 (EC-No.) 270-608-0 (REACH-no) 01-2119493628-22	( 3 ≤C < 100) Eye Dam. 1, H318 ( 15 ≤C < 100) Skin Irrit. 2, H315

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3. Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after inhalation	: After adequate first aid, no further treatment is required unless symptoms reappear.

Symptoms/effects after skin contact	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after eye contact	: After adequate first aid, no further treatment is required unless symptoms reappear. Serious damage to eyes.
Symptoms/effects after ingestion	: After adequate first aid, no further treatment is required unless symptoms reappear.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment : Eliminate all ignition sources if safe to do so.  
Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye/face protection. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.  
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes.  
Handling temperature : 40 °C  
Hygiene measures : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.
Storage temperature	: 50 °C
Storage area	: Store in a well-ventilated place. Store away from heat.
Special rules on packaging	: Store in a closed container. Keep only in original container.

## 7.3. Specific end use(s)

No additional information available

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

Ethylene Glycol (107-21-1)	
EU - Occupational Exposure Limits	
Local name	Ethylene glycol
IOELV TWA (mg/m³)	52 mg/m³
IOELV TWA (ppm)	20 ppm
IOELV STEL (mg/m³)	104 mg/m³
IOELV STEL (ppm)	40 ppm
Notes	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
France - Occupational Exposure Limits	
VME (mg/m³)	125 mg/m³
Netherlands - Occupational Exposure Limits	
Local name	Ethaan-1,2-diol
Grenswaarde TGG 8H (mg/m³)	52 mg/m³ (damp)
Grenswaarde TGG 15MIN (mg/m³)	104 mg/m³ (damp)
Remark (MAC)	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2018
United Kingdom - Occupational Exposure Limits	
WEL TWA (mg/m³)	52 mg/m³ 8 Hrs
WEL STEL (mg/m³)	104 mg/m³ 15 Min

**Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)**

EU - Occupational Exposure Limits	
IOELV TWA (mg/m³)	5 mg/m³
IOELV STEL (mg/m³)	10 mg/m³
Bulgaria - Occupational Exposure Limits	
OEL TWA (mg/m³)	5 mg/m³
OEL STEL (mg/m³)	10 mg/m³

**Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)**

#### **Croatia - Occupational Exposure Limits**

GVI (granična vrijednost izloženosti) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

#### **Czech Republic - Occupational Exposure Limits**

Expoziční limit (PEL) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Expoziční limit (NPK-P) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

#### **Denmark - Occupational Exposure Limits**

Grænseværdie (langvarig) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
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#### **Netherlands - Occupational Exposure Limits**

Grenswaarde TGG 8H (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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### **Mineral oil**

#### **EU - Occupational Exposure Limits**

IOELV TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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#### **Belgium - Occupational Exposure Limits**

Limit value (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Short time value (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

#### **Bulgaria - Occupational Exposure Limits**

OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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#### **Czech Republic - Occupational Exposure Limits**

Expoziční limit (PEL) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Expoziční limit (NPK-P) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

#### **Finland - Occupational Exposure Limits**

HTP-arvo (8h) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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#### **Greece - Occupational Exposure Limits**

OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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#### **Latvia - Occupational Exposure Limits**

OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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#### **Lithuania - Occupational Exposure Limits**

IPRV (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
TPRV (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>

#### **Netherlands - Occupational Exposure Limits**

Grenswaarde TGG 8H (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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#### **Poland - Occupational Exposure Limits**

NDS (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
NDSch (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

#### **Spain - Occupational Exposure Limits**

VLA-ED (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
VLA-EC (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

## Mineral oil

### Sweden - Occupational Exposure Limits

nivågränsvärde (NVG) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
kortidsvärde (KTV) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>

### USA - ACGIH - Occupational Exposure Limits

ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
ACGIH STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

**Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)**

### EU - Occupational Exposure Limits

IOELV TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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### Belgium - Occupational Exposure Limits

Limit value (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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### Bulgaria - Occupational Exposure Limits

OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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### Croatia - Occupational Exposure Limits

GVI (granična vrijednost izloženosti) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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### Czech Republic - Occupational Exposure Limits

Expoziční limit (PEL) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Expoziční limit (NPK-P) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

### Denmark - Occupational Exposure Limits

Grænseværdie (langvarig) (mg/m <sup>3</sup> )	1
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### Netherlands - Occupational Exposure Limits

Grenswaarde TGG 8H (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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### USA - ACGIH - Occupational Exposure Limits

ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
ACGIH STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

**Distillates (petroleum), hydrotreated light paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-55-8)**

### Belgium - Occupational Exposure Limits

Limit value (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Short time value (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

### Netherlands - Occupational Exposure Limits

Grenswaarde TGG 8H (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
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## 8.2. Exposure controls

### Appropriate engineering controls:

Use adequate ventilation to keep oil mist below applicable standard. Use splash goggles when eye contact due to splashing is possible. Ocular shower with suitable liquid.

### Personal protective equipment:

Gloves. Safety glasses. Protective clothing. Avoid all unnecessary exposure.

#### Materials for protective clothing:

Wear suitable protective clothing

#### Hand protection:

Breakthrough time : refer to the recommendations of the supplier

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
	Nitrile rubber (NBR), Neoprene rubber (HNBR)	5 (> 240 minutes)	0.7		EN ISO 374
	Polyvinylchloride (PVC)	2 (> 30 minutes)	0.4		EN ISO 374

#### Eye protection:

Chemical goggles or safety glasses. Use splash goggles when eye contact due to splashing is possible. EN 166

#### Skin and body protection:

Avoid prolonged and repeated contact with skin. If repeated skin contact or contamination of clothing is likely, protective clothing should be worn

#### Respiratory protection:

Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment. Particle filter. EN 143

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



#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light brown.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: -27 °C
Boiling point	: No data available
Flash point	: 201 °C
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	: 926,6 kg/m <sup>3</sup> @ 15°C
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available



Viscosity, kinematic	: 49,25 mm <sup>2</sup> /s @ 100°C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

## 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Ethylene Glycol (107-21-1)	
LD50 oral (rat)	7712 mg/kg bodyweight
LD50 dermal	3500 mg/kg mouse
LC50 inhalation (rat) (mg/l)	> 2,5 mg/l

Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts (68457-79-4)	
LD50 oral	> 3600 mg/kg OECD 401
LD50 dermal	> 20000 mg/kg OECD 402

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
LD50 oral (rat)	> 5000 mg/kg bodyweight
LD50 dermal (rabbit)	> 5000 mg/kg

LC50 inhalation (rat) (Vapours - mg/l/4h)	> 5,53 mg/l/4h
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<b>Phenol, dodecyl-, branched (121158-58-5)</b>	
LD50 oral (rat)	2100 mg/kg bodyweight
LD50 dermal (rabbit)	≈ 15000 mg/kg bodyweight

<b>Mineral oil</b>	
LD50 oral (rat)	> 5000 mg/kg
LD50 dermal (rabbit)	> 5000 mg/kg
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5000 mg/l/4h

<b>Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)</b>	
LD50 oral (rat)	> 5000 mg/kg bodyweight
LD50 dermal (rabbit)	> 5000 mg/kg
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5,53 mg/l/4h

<b>Distillates (petroleum), hydrotreated light paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-55-8)</b>	
LD50 oral (rat)	> 5000 mg/kg
LD50 dermal (rabbit)	> 5000 mg/kg
LC50 inhalation (rat) (Vapours - mg/l/4h)	> 5,53 mg/l/4h

<b>Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50</b>	
LD50 oral (rat)	> 5000 mg/kg bodyweight
LD50 dermal (rabbit)	> 4000 mg/kg bodyweight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

<b>Ethylene Glycol (107-21-1)</b>	
NOAEL (chronic, oral, animal/male, 2 years)	1500 mg/kg bodyweight mouse, male

Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

**Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)**

LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight
NOAEL (dermal, rat/rabbit, 90 days)	≈ 1000 mg/kg bodyweight

**Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)**

LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight
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**Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50**

NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight
NOAEL (dermal, rat/rabbit, 90 days)	≈ 250 mg/kg bodyweight

Aspiration hazard : Not classified

#### Engine Oil Booster

Viscosity, kinematic	49,25 mm²/s @100°C
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## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.

#### Ethylene Glycol (107-21-1)

LC50 fish 1	72860 mg/l Test organisms (species): Pimephales promelas
EC50 Daphnia 1	> 100 mg/l Test organisms (species): Daphnia magna
EC50 96h algae (1)	3536 mg/l Test organisms (species): other:green algae
EC50 96h algae (2)	6500 – 13000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	≥ 1000 mg/l Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'
Threshold limit algae 1	10000 mg/l 168 Hrs
Threshold limit algae 2	2000 mg/l 192 Hrs

#### Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts (68457-79-4)

LC50 fish 1	4,5 mg/l Oncorhynchus mykiss
LC50 fish 2	46 mg/l Cyprinodon variegatus
EC50 Daphnia 1	23 mg/l Daphnia magna
EC50 72h algae (1)	21 mg/l Desmodesmus subspicatus

**Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)**

LC50 fish 1	100 mg/l
EC50 Daphnia 1	10000 mg/l
EC50 72h algae (1)	3 mg/l

#### **Phenol, dodecyl-, branched (121158-58-5)**

LC50 fish 1	40 mg/l
EC50 Daphnia 1	0,037 mg/l Daphnia magna
EC50 72h algae (1)	0,15 mg/l Desmodesmus subspicatus
EC50 72h algae (2)	0,36 mg/l Desmodesmus subspicatus
LOEC (chronic)	0,012 mg/l Daphnia magna
NOEC (chronic)	0,0037 mg/l Daphnia magna
NOEC chronic crustacea	3,7 µg/L
NOEC chronic algae	360 µg/L

#### **Mineral oil**

LC50 fish 1	> 100 mg/l Pimephales promelas
EC50 Daphnia 1	> 10000 mg/l
EC50 72h algae (1)	> 100 mg/l Scenedesmus quadricauda

**Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)**

LC50 fish 1	> 100 mg/l Pimephales promelas
EC50 Daphnia 1	> 10000 mg/l Daphnia magna
NOEC chronic fish	10 mg/l Oncorhynchus mykiss
NOEC chronic crustacea	10 mg/l Daphnia magna
NOEC chronic algae	> 100 mg/l Pseudokirchneriella subcapitata

**Distillates (petroleum), hydrotreated light paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-55-8)**

LC50 fish 1	> 100 mg/l Pimephales promelas
EC50 Daphnia 1	> 10000 mg/l Daphnia magna
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss
NOEC chronic crustacea	10 mg/l Daphnia magna
NOEC chronic algae	≥ 100 mg/l Pseudokirchneriella subcapitata

**Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50**

LC50 fish 1	1000 mg/kg
EC50 Daphnia 1	1000 mg/l
EC50 72h algae (1)	500 mg/l
NOEC chronic algae	500 mg/l

## 12.2. Persistence and degradability

### Ethylene Glycol (107-21-1)

Persistence and degradability	Readily biodegradable. easily degradable in the soil.
Biodegradation	90 %

### Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts (68457-79-4)

Persistence and degradability	Not readily biodegradable.
Biodegradation	1,5 % 28 DY, OECD TG 301B

**Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)**

Persistence and degradability	Not biodegradable.
Biodegradation	31 % 28 d OECD 301F

### Phenol, dodecyl-, branched (121158-58-5)

Biodegradation	7,8 % OESO 301B
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### Mineral oil

Biodegradation	31 %
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**Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)**

Persistence and degradability	Not readily biodegradable.
Biodegradation	31 % 28 d OECD 301F

**Distillates (petroleum), hydrotreated light paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-55-8)**

Biodegradation	31 % 28 d, OECD TG 301 F
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**Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50**

Persistence and degradability	Not readily biodegradable.
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Biodegradation	13,4 % 28 Days
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### 12.3. Bioaccumulative potential

Ethylene Glycol (107-21-1)	
Bioconcentration factor (BCF REACH)	10
Partition coefficient n-octanol/water (Log Kow)	-1,36 @25°C

Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts (68457-79-4)	
Partition coefficient n-octanol/water (Log Pow)	0,69

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
Bioconcentration factor (BCF REACH)	260
Partition coefficient n-octanol/water (Log Pow)	9,2

Phenol, dodecyl-, branched (121158-58-5)	
Bioconcentration factor (BCF REACH)	794,33
Partition coefficient n-octanol/water (Log Kow)	7,14

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
Partition coefficient n-octanol/water (Log Kow)	> 4

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50	
BCF fish 1	2,2 14 Days
Bioconcentration factor (BCF REACH)	2,2
Partition coefficient n-octanol/water (Log Pow)	9,5

### 12.4. Mobility in soil

Ethylene Glycol (107-21-1)	
Surface tension	0,048 N/m @20°C

Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts (68457-79-4)	
Ecology - soil	Adsorbs into the soil.

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50	
Ecology - soil	Adsorbs into the soil.

## 12.5. Results of PBT and vPvB assessment

### Component

Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts (68457-79-4)

vPvB: not relevant – no registration required

## 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

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

### 14.1. UN number

UN-No. (ADR) : Not applicable  
UN-No. (IMDG) : Not applicable  
UN-No. (IATA) : Not applicable  
UN-No. (ADN) : Not applicable  
UN-No. (RID) : Not applicable

### 14.2. UN proper shipping name

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

### 14.3. Transport hazard class(es)

**ADR**  
Transport hazard class(es) (ADR) : Not applicable  
**IMDG**  
Transport hazard class(es) (IMDG) : Not applicable  
**IATA**  
Transport hazard class(es) (IATA) : Not applicable  
**ADN**  
Transport hazard class(es) (ADN) : Not applicable  
**RID**  
Transport hazard class(es) (RID) : Not applicable

### 14.4. Packing group

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

### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

## 14.6. Special precautions for user

### Overland transport

Not applicable

### Transport by sea

Not applicable

### Air transport

Not applicable

### Inland waterway transport

Not applicable

### Rail transport

Not applicable

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. National regulations

##### Germany

Water hazard class (WGK)

: WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV)

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

##### Netherlands

Ministry's list of carcinogens

: Phenol, dodecyl-, branched, Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).], Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts, Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.], Distillates (petroleum), hydrotreated light paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] are listed



#### Ministry's list of mutagens

: Phenol, dodecyl-, branched, Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).], Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts, Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.], Distillates (petroleum), hydrotreated light paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] are listed

#### NON-exhaustive list of reproductive toxins -

: None of the components are listed

#### Breastfeeding

#### NON-exhaustive list of reproductive toxins - Fertility

: None of the components are listed

#### NON-exhaustive list of reproductive toxins -

: Phenol, dodecyl-, branched is listed

#### Evolution

#### Denmark

#### Danish National Regulations

: Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product  
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes:			
Section	Changed item	Change	Comments
3	Composition/information on ingredients	Modified	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration

LD50	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
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
PNEC	Predicted No-Effect Concentration
PBT	Persistent Bioaccumulative Toxic
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. Not classified	Carcinogenicity Not classified
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H360F	May damage fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

SDS EU (REACH Annex II)

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