



# Endurox HD SAE 50

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

**MADE IN HOLLAND**

Date of issue: 27-1-2016 Revision date: 25-7-2018 Supersedes: 27-1-2016 Version: 2.0

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

#### 1.1. Product identifier

Product form : Mixture  
Product code : Lub002009  
Type of product : Lubricant

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

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only  
Industrial  
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

Rymax b.v.  
Delweg 8  
6902 PJ Zevenaar  
T +31 (0)316 740840 - F +31 (0)316 740844  
[info@rymax-lubricants.com](mailto:info@rymax-lubricants.com) - [www.rymax-lubricants.com](http://www.rymax-lubricants.com)

#### 1.4. Emergency telephone number

Emergency number : +31 (0)316 740840

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Not classified

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

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

#### 2.2. Label elements

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

EUH-statements : EUH210 - Safety data sheet available on request.

#### 2.3. Other hazards

Other hazards not contributing to the classification : Flammable liquids. Repeated or prolonged contact may cause skin irritation. Spills of this product present a serious slipping hazard.

### 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).]	(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

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Residual oils (petroleum), solvent-dewaxed; Baseoil—unspecified; [A complex combination of hydrocarbons obtained by removal of long, branched chain hydrocarbons from a residual oil by solvent crystallization. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approximately 400 °C (752 °F).]	(CAS-No.) 64742-62-7 (EC-No.) 265-166-0 (EC Index-No.) 649-471-00-X (REACH-no) 01-2119480472-38	25 - 50	Not classified
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	0,5 - 5	Not classified
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	(CAS-No.) 68411-46-1 (EC-No.) 270-128-1 (REACH-no) 01-2119491299-23	0,05 - 0,5	Aquatic Chronic 3, H412
PPD		0,1 - 0,5	Not classified
diphenylamine	(CAS-No.) 122-39-4 (EC-No.) 204-539-4 (EC Index-No.) 612-026-00-5 (REACH-no) 01-2119488966-13	< 0,01	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
ethyl acrylate	(CAS-No.) 140-88-5 (EC-No.) 205-438-8 (EC Index-No.) 607-032-00-X (REACH-no) 01-2119459301-46	< 0,01	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Skin Sens. 1, H317

### 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	(C >= 3) Eye Dam. 1, H318 (C >= 15) Skin Irrit. 2, H315
ethyl acrylate	(CAS-No.) 140-88-5 (EC-No.) 205-438-8 (EC Index-No.) 607-032-00-X (REACH-no) 01-2119459301-46	(C >= 5) STOT SE 3, H335 (C >= 5) Eye Irrit. 2, H319 (C >= 5) Skin Irrit. 2, H315

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

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 eyes with water as a precaution.
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.
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

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

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### 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 : Ventilate spillage area.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.  
Methods for cleaning up : Take up liquid spill into absorbent material.  
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. Wear personal protective equipment.  
Hygiene measures : 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 in a well-ventilated place. Keep cool.  
Storage temperature : 45 °C  
Storage area : Store away from heat. Store in a well-ventilated place.  
Special rules on packaging : Keep only in original container. Store in a closed container.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

**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	IOELV TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>

#### **diphenylamine (122-39-4)**

EU	IOELV TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
EU	IOELV TWA (ppm)	0,7 ppm
EU	IOELV STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
EU	IOELV STEL (ppm)	1,4 ppm
Austria	MAK (ppm)	1,4 ppm
Austria	MAK Short time value (ppm)	0,7 ppm
Belgium	Limit value (mg/m <sup>3</sup> )	10 8 Hrs
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> 8 Hrs
Czech Republic	Expoziční limity (PEL) (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup>
Czech Republic	Expoziční limity (NPK-P) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> 8 Hrs
Denmark	Grænseværdie (langvarig) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Estonia	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> 8 Hrs
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Finland	HTP-arvo (15 min)	10 mg/m <sup>3</sup>
France	VME (mg/m <sup>3</sup> )	21 mg/m <sup>3</sup>
France	VME (ppm)	5 ppm

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<b>diphenylamine (122-39-4)</b>		
France	VLE (mg/m <sup>3</sup> )	42 mg/m <sup>3</sup>
France	VLE (ppm)	10 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Germany	TRGS 900 Limitation of exposure peaks (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Greece	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> 8Hrs
Greece	OEL TWA (ppm)	1,42 ppm 8 Hrs
Greece	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup> 15 min
Greece	OEL STEL (ppm)	2,84 ppm 15 Min
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Ireland	OEL (15 min ref) (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup>
Lithuania	IPRV (mg/m <sup>3</sup> )	12 mg/m <sup>3</sup> 15 min
Lithuania	TPRV (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup> 8 Hrs
Romania	OEL TWA (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup> 8 Hrs
Romania	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> 15 min
Slovakia	NPHV (priemerná) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> 8 Hrs
Slovenia	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> 8 Hrs
Spain	VLA-ED (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> 8 Hrs
Sweden	nivågränsvärde (NVG) (mg/m <sup>3</sup> )	12 mg/m <sup>3</sup>
Sweden	takgränsvärde (TGV) (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup>
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup>
Norway	Grenseverdier (AN) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Norway	Grenseverdier (Korttidsverdi) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Switzerland	MAK (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
USA - ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
<b>ethyl acrylate (140-88-5)</b>		
EU	Local name	Ethylacrylate
EU	IOELV TWA (mg/m <sup>3</sup> )	21 mg/m <sup>3</sup>
EU	IOELV TWA (ppm)	5 ppm
EU	IOELV STEL (mg/m <sup>3</sup> )	42 mg/m <sup>3</sup>
EU	IOELV STEL (ppm)	10 ppm
EU	Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU
Austria	MAK (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup>
Austria	MAK (ppm)	5 ppm
Austria	MAK Short time value (mg/m <sup>3</sup> )	40 mg/m <sup>3</sup>
Austria	MAK Short time value (ppm)	10 ppm
Denmark	Grænseværdie (langvarig) (mg/m <sup>3</sup> )	21
Denmark	Grænseværdie (langvarig) (ppm)	5
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	21
Finland	HTP-arvo (8h) (ppm)	5
Finland	HTP-arvo (15 min)	42 mg/m <sup>3</sup>
Finland	HTP-arvo (15 min) (ppm)	10 ppm
France	VME (mg/m <sup>3</sup> )	21 mg/m <sup>3</sup>
France	VME (ppm)	5 ppm
France	VLE (mg/m <sup>3</sup> )	42 mg/m <sup>3</sup>
France	VLE (ppm)	10 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	21 mg/m <sup>3</sup>
Germany	TRGS 900 Occupational exposure limit value (ppm)	5 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m <sup>3</sup> )	42 mg/m <sup>3</sup>
Germany	TRGS 900 Limitation of exposure peaks (ppm)	10 ppm
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup>
Ireland	OEL (8 hours ref) (ppm)	5 ppm
Ireland	OEL (15 min ref) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup>

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ethyl acrylate (140-88-5)		
Ireland	OEL (15 min ref) (ppm)	60 ppm
Netherlands	Local name	Ethylacrylaat
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	21 mg/m <sup>3</sup>
Netherlands	Grenswaarde TGG 15MIN (mg/m <sup>3</sup> )	42 mg/m <sup>3</sup>
Netherlands	Regulatory reference	Arbeidsomstandighedenregeling 2018
Spain	VLA-ED (mg/m <sup>3</sup> )	21 mg/m <sup>3</sup>
Spain	VLA-ED (ppm)	5 ppm
Spain	VLA-EC (mg/m <sup>3</sup> )	42 mg/m <sup>3</sup>
Spain	VLA-EC (ppm)	10 ppm
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	21
United Kingdom	WEL TWA (ppm)	5
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	42 mg/m <sup>3</sup>
United Kingdom	WEL STEL (ppm)	10 ppm
Switzerland	MAK (mg/m <sup>3</sup> )	40 mg/m <sup>3</sup>
Switzerland	MAK (ppm)	10 ppm
Switzerland	KZGW (mg/m <sup>3</sup> )	40 mg/m <sup>3</sup>
Switzerland	KZGW (ppm)	10 ppm
USA - ACGIH	ACGIH TWA (ppm)	5 ppm
USA - ACGIH	ACGIH STEL (ppm)	15 ppm

### 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:

Time of penetration is to be checked with the glove producer

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
	Nitrile rubber (NBR), Neoprene rubber (HNBR)	5 (> 240 minutes)	0.7	3 (> 0.65)	EN 374
	Polyvinylchloride (PVC)	2 (> 30 minutes)	0.4	3 (> 0.65)	EN 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):



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### 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
Appearance	: Characteristics.
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	: -15 °C
Boiling point	: No data available
Flash point	: > 220 °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	: 904,1 kg/m <sup>3</sup> @15°C
Solubility	: insoluble in water.
Log Pow	: No data available
Viscosity, kinematic	: 213,5 mm <sup>2</sup> /s @40°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

Other properties : See Product Data Sheet for detailed information.

### 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

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**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
LD50 dermal (rat)	5000 mg/kg
LC50 inhalation (rat) (mg/l)	5,53 mg/l/4h

### **Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)**

LD50 oral (rat)	> 5000 mg/kg
LD50 dermal (rat)	> 2000 mg/kg

### **diphenylamine (122-39-4)**

LD50 oral (rat)	> 600 mg/kg
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### **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

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

### **Endurox HD SAE 50**

Viscosity, kinematic	213,5 mm <sup>2</sup> /s @40°C
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## **SECTION 12: Ecological information**

### **12.1. Toxicity**

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: 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)**

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

### **Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)**

LC50 fish 1	100 mg/l Zebra Fish
EC50 Daphnia 1	51 mg/l Daphnia Magna
EC50 72h algae (1)	> 100 mg/l Green Algae
NOEC chronic crustacea	0,4 mg/l 21DAYS

### **diphenylamine (122-39-4)**

LC50 fish 1	3,79 mg/l
EC50 Daphnia 1	115 mg/l
EC50 72h algae (1)	0,18 mg/l

### **ethyl acrylate (140-88-5)**

LC50 fish 1	16 (10 - 22) mg/l Leuciscus idus
EC50 Daphnia 1	7,9 mg/l Daphnia magna
EC50 72h algae (1)	48 mg/l Desmodesmus subspicatus

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

LC50 fish 1	4,5 mg/l 96Hrs (OECD 203)
EC50 Daphnia 1	23 mg/l OECD 202

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<b>Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts (68457-79-4)</b>	
EC50 72h algae (1)	21 mg/l 3 Days

### 12.2. Persistence and degradability

**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.
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**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)**

Persistence and degradability	Not biodegradable.
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Biodegradation	1 % 28 D OECD Test Guideline 301B
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**diphenylamine (122-39-4)**

Biodegradation	26 % 28 Days 28 d, OECD TG 301 D
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**Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts (68457-79-4)**

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

**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
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Log Pow	9,2
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**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)**

Log Pow	> 6
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**diphenylamine (122-39-4)**

Log Kow	3,4
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**Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts (68457-79-4)**

Log Pow	0,69
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### 12.4. Mobility in soil

**Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)**

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

Ecology - soil	Adsorbs into the soil.
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### 12.5. Results of PBT and vPvB assessment

**Component**

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)	vPvB: not relevant – no registration required
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### 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



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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

#### 15.1.2. National regulations

##### Germany

Reference to AwSV : Water hazard class (WGK) 1, low hazard to water (Classification according to AwSV, Annex 1)

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12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

### Netherlands

Ministry's list of carcinogens : 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).],Residual oils (petroleum), solvent-dewaxed; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of ong, branched chain hydrocarbons from a residual oil by solvent crystalli zation. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approxi mately 400 °C (752 °F).],Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene,Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts are listed

Ministry's list of mutagens : 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).],Residual oils (petroleum), solvent-dewaxed; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of ong, branched chain hydrocarbons from a residual oil by solvent crystalli zation. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approxi mately 400 °C (752 °F).],Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene,Phosphorodithioic acid, mixed O,O-bis (iso-Bu and pentyl) esters, zinc salts are listed

NON-exhaustive list of reproductive toxins - Breastfeeding : None of the components are listed

NON-exhaustive list of reproductive toxins - Fertility : None of the components are listed

NON-exhaustive list of reproductive toxins - Evolution : None of the components are listed

### 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
	Supersedes	Added	
	Revision date	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

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### Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
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 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
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.
H412	Harmful to aquatic life with long lasting effects.
EUH210	Safety data sheet available on request.

SDS EU (REACH Annex II) RYMAX

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