

Safety Data Sheet

according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 06.04.2023

Product code: 30502

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

1.1. Product identifier

HIGHTEC LHM-PLUS

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

Use of the substance/mixture

Central hydraulic motor

1.3. Details of the supplier of the safety data sheet

Company name:	ROWE Mineralölwerk GmbH	
Street:	Langgewann 101	
Place:	D-67547 Worms	
Telephone:	+49 (0)6241 5906-0	Telefax: +49 (0)6241 5906-999
E-mail:	info@rowe-oil.com	
Contact person:	Product Compliance	
E-mail:	sdb@rowe-oil.com	
Internet:	www.rowe-oil.com	

1.4. Emergency telephone number:

Ireland: Public (8am-10pm) +353 180 921 66, Healthcare Professionals +353 1809 2566 other Countries: Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin Irrit. 2; H315
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:



Hazard statements

H315 Causes skin irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P103 Read carefully and follow all instructions.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352 IF ON SKIN: Wash with plenty of Water and soap.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container to of the disposal according to local regulations.

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Special labelling of certain mixtures

EUH208

Contains 3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid, 1-H benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-methyl. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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Relevant ingredients

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification (Regulation (EC) No 1272/2008)	
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic; Baseoil - unspecified	30 - < 60 %
	265-156-6	
	649-466-00-2	
	01-2119480375-34	
	Asp. Tox. 1; H304	
64742-46-7	Distillates (petroleum), hydrotreated middle; Gasoil - unspecified	15 - < 30 %
	265-148-2	
	649-221-00-X	
	01-2119489867-12	
	Acute Tox. 4, Skin Irrit. 2, Asp. Tox. 1, Aquatic Chronic 2; H332 H315 H304 H411	
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified	15 - < 30 %
	265-158-7	
	649-468-00-3	
	01-2119487077-29	
	Asp. Tox. 1; H304	
72623-87-1	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil - unspecified	5 - < 15 %
	276-738-4	
	649-483-00-5	
	01-2119474889-13	
	Asp. Tox. 1; H304	
63150-07-2	2-Propenoic acid, 2-methyl-, C10-20-alkyl esters, polymers with Methyl methacrylate	5 - < 15 %
	Eye Irrit. 2; H319	
72623-86-0	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil - unspecified	2.5 - < 5 %
	276-737-9	
	649-482-00-X	
	01-2119474878-16	
	Asp. Tox. 1; H304	
128-39-2	2,6-di-tert-butylphenol	0.3 - < 1 %
	204-884-0	
	01-2119490822-33	
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 1; H315 H400 H410	
268567-32-4	3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid	0.1 - < 0.3 %
	434-070-2	
	01-2119658068-31	
	Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 3; H318 H317 H412	
	Reaction mass of 1H-Benzotriazole-1-methanamine, N, N-bis (2-ethylhexyl) -6-methyl- and 2H-Benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -5-methyl- and N, N-bis (2-ethylhexyl) -4-methyl-1H-benzotriazole-1-methylamine and 2H-benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -4-methyl- and N, N-bis (2-ethylhexyl) -5-methyl-1H-benzotriazole-1-methylamine	0.1 - < 0.3 %
	939-700-4	
	01-2119982395-25	
	Skin Irrit. 2, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H315 H317 H400 H411	
	Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9-C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione	0.1 - < 0.3 %
	947-263-6	
	01-2120761103-66	
	Repr. 2, Skin Irrit. 2, Aquatic Chronic 4; H361fd H315 H413	

Full text of H and EUH statements: see section 16.

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Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
64742-53-6	265-156-6	Distillates (petroleum), hydrotreated light naphthenic; Baseoil - unspecified dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	30 - < 60 %
64742-46-7	265-148-2	Distillates (petroleum), hydrotreated middle; Gasoil - unspecified inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg	15 - < 30 %
64742-55-8	265-158-7	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	15 - < 30 %
72623-87-1	276-738-4	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil - unspecified dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	5 - < 15 %
72623-86-0	276-737-9	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil - unspecified dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	2.5 - < 5 %
128-39-2	204-884-0	2,6-di-tert-butylphenol oral: LD50 = > 5000 mg/kg Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1	0.3 - < 1 %
268567-32-4	434-070-2	3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg	0.1 - < 0.3 %
	939-700-4	Reaction mass of 1H-Benzotriazole-1-methanamine, N, N-bis (2-ethylhexyl) -6-methyl- and 2H-Benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -5-methyl- and N, N-bis (2-ethylhexyl) -4-methyl-1H-benzotriazole-1-methylamine and 2H-benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -4-methyl- and N, N-bis (2-ethylhexyl) -5-methyl-1H-benzotriazole-1-methylamine dermal: LD50 = > 2000 mg/kg; oral: LD50 = 3313 mg/kg Aquatic Acute 1; H400: M=1	0.1 - < 0.3 %
	947-263-6	Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9-C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione oral: LD50 = > 2000 mg/kg	0.1 - < 0.3 %

Further Information

According to EC directives or the corresponding national regulations the product does not have to be labelled.

SECTION 4: First aid measures
4.1. Description of first aid measures
After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink 1 glass of water.

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

No information available.

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

Treat symptomatically.

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SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.

Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Avoid contact with skin, eyes and clothes. Do not breathe mist/vapours/spray.

For non-emergency personnel

Provide adequate ventilation. Use personal protection equipment. Remove persons to safety.

For emergency responders

Wear personal protection equipment (refer to section 8).

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up**For containment**

Stop leak if safe to do so. Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

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Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Central hydraulic motor

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic; Baseoil - unspecified			
Worker DNEL, long-term		inhalation	systemic	2,73 mg/m ³
Worker DNEL, long-term		inhalation	local	5,58 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,97 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	1,19 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
64742-46-7	Distillates (petroleum), hydrotreated middle; Gasoil - unspecified			
Worker DNEL, long-term		inhalation	systemic	16,4 mg/m ³
Worker DNEL, acute		inhalation	systemic	5002,67 mg/m ³
Worker DNEL, long-term		dermal	systemic	2,91 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	4,85 mg/m ³
Consumer DNEL, acute		inhalation	systemic	3001,6 mg/m ³
Consumer DNEL, long-term		dermal	systemic	1,25 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	1,25 mg/kg bw/day
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified			
Worker DNEL, long-term		inhalation	systemic	2,73 mg/m ³
Worker DNEL, long-term		inhalation	local	5,58 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,97 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	1,19 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
72623-86-0	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil - unspecified			
Worker DNEL, long-term		inhalation	systemic	2,73 mg/m ³
Worker DNEL, long-term		inhalation	local	5,58 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,97 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	1,19 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
128-39-2	2,6-di-tert-butylphenol			
Worker DNEL, long-term		inhalation	systemic	70,61 mg/m ³
Worker DNEL, long-term		dermal	systemic	11,25 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	20,9 mg/m ³
Consumer DNEL, long-term		dermal	systemic	6,75 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	6,75 mg/kg bw/day
268567-32-4	3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid			

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Worker DNEL, long-term	inhalation	systemic	4,4 mg/m ³
Worker DNEL, acute	inhalation	systemic	4,4 mg/m ³
Worker DNEL, long-term	dermal	systemic	1,25 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	1,1 mg/m ³
Consumer DNEL, acute	inhalation	systemic	1,1 mg/m ³
Consumer DNEL, long-term	dermal	systemic	0,6 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,6 mg/kg bw/day
Reaction mass of 1H-Benzotriazole-1-methanamine, N, N-bis (2-ethylhexyl) -6-methyl- and 2H-Benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -5-methyl- and N, N-bis (2-ethylhexyl) -4-methyl-1H-benzotriazole-1-methylamine and 2H-benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -4-methyl- and N, N-bis (2-ethylhexyl) -5-methyl-1H-benzotriazole-1-methylamine			
Worker DNEL, long-term	inhalation	systemic	1,3 mg/m ³
Worker DNEL, long-term	dermal	systemic	0,4 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,3 mg/m ³
Consumer DNEL, long-term	dermal	systemic	0,2 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,2 mg/kg bw/day
Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9-C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione			
Worker DNEL, long-term	inhalation	systemic	3,72 mg/m ³
Worker DNEL, long-term	dermal	systemic	1,04 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	1,1 mg/m ³
Consumer DNEL, long-term	dermal	systemic	0,625 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,625 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic; Baseoil - unspecified	
Secondary poisoning		9,33 mg/kg
64742-46-7	Distillates (petroleum), hydrotreated middle; Gasoil - unspecified	
Secondary poisoning		17000 mg/kg
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified	
Secondary poisoning		9,33 mg/kg
72623-86-0	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil - unspecified	
Secondary poisoning		9,33 mg/kg
128-39-2	2,6-di-tert-butylphenol	
Freshwater		0,001 mg/l
Freshwater (intermittent releases)		0,004 mg/l
Marine water		0 mg/l
Freshwater sediment		0,317 mg/kg
Marine sediment		0,032 mg/kg
Secondary poisoning		60 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,697 mg/kg
268567-32-4	3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid	
Freshwater		0,036 mg/l
Freshwater (intermittent releases)		0,38 mg/l
Marine water		0,004 mg/l
Freshwater sediment		1,42 mg/kg
Marine sediment		0,142 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,496 mg/kg
Reaction mass of 1H-Benzotriazole-1-methanamine, N, N-bis (2-ethylhexyl) -6-methyl- and 2H-Benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -5-methyl- and N, N-bis (2-ethylhexyl) -4-methyl-1H-benzotriazole-1-methylamine and 2H-benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -4-methyl- and N, N-bis (2-ethylhexyl) -5-methyl-1H-benzotriazole-1-methylamine		
Freshwater		0,001 mg/l
Freshwater (intermittent releases)		0,01 mg/l
Marine water		0 mg/l
Micro-organisms in sewage treatment plants (STP)		0,69 mg/l
Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9-C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione		
Freshwater		0,496 mg/l
Freshwater (intermittent releases)		4,96 mg/l
Marine water		0,05 mg/l
Freshwater sediment		3772830,55 mg/kg
Marine sediment		377283,06 mg/kg
Secondary poisoning		5 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l

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Soil	3935351,65 mg/kg
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8.2. Exposure controls



Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

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:	amber
Odour:	characteristic

	Test method
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	Not readily combustible.
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	~ 126 °C ISO 2592
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value:	not applicable DIN 51369
Viscosity / kinematic: (at 40 °C)	~ 21 mm ² /s DIN 51562
Water solubility: (at 20 °C)	practically insoluble
Solubility in other solvents Soluble in hydrocarbons (mineral oil.)	
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	<0,1 hPa calculated.
Density (at 15 °C):	~ 0,87 g/cm ³ DIN 51757
Relative vapour density:	not determined
Particle characteristics:	not relevant

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9.2. Other information**Other safety characteristics**

Pour point:

~ -51 °C

DIN ISO 3016

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

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic; Baseoil - unspecified				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1982)	OECD 401
	dermal	LD50 > 5000 mg/kg	Rabbit	Study report (1982)	OECD 402
64742-46-7	Distillates (petroleum), hydrotreated middle; Gasoil - unspecified				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1982)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (1982)	OECD Guideline 402
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified				
	oral	LD50 > 5000 mg/kg	Rat	REACH Dossier	OECD 401
	dermal	LD50 > 5000 mg/kg	Rabbit	REACH Dossier	OECD 402
72623-87-1	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil - unspecified				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1982)	OECD Guideline 401
	dermal	LD50 > 5000 mg/kg	Rabbit	Study report (1982)	OECD Guideline 402
72623-86-0	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil - unspecified				
	oral	LD50 > 5000 mg/kg	Rat	REACH Dossier	OECD 401
	dermal	LD50 > 5000 mg/kg	Rabbit	REACH Dossier	OECD 402
128-39-2	2,6-di-tert-butylphenol				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1991)	OECD Guideline 401
268567-32-4	3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid				
	oral	LD50 > 2000 mg/kg	Rat	Study report (2000)	OECD Guideline 423
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1999)	OECD Guideline 402
	Reaction mass of 1H-Benzotriazole-1-methanamine, N, N-bis (2-ethylhexyl) -6-methyl- and 2H-Benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -5-methyl- and N, N-bis (2-ethylhexyl) -4-methyl-1H-benzotriazole-1-methylamine and 2H-benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -4-methyl- and N, N-bis (2-ethylhexyl) -5-methyl-1H-benzotriazole-1-methylamine				
	oral	LD50 3313 mg/kg	Rat	Study report (1981)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2012)	OECD Guideline 402
	Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9-C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione				
	oral	LD50 > 2000 mg/kg	Rat	Study report (2016)	OECD Guideline 423

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Irritation and corrosivity

Causes skin irritation.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Contains 3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid, 1-H benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-methyl. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards**Other information**

No information available.

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

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

Harmful to aquatic life with long lasting effects.

Harmful to aquatic life with long lasting effects.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic; Baseoil - unspecified					
	Acute fish toxicity	LL50 > 100 mg/l	96 h	Pimephales promelas (fathead minnow)	Study report (1995)	OECD 203
	Fish toxicity	NOEC >= 1000 mg/l	14 d	Oncorhynchus mykiss (Rainbow trout)	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
64742-46-7	Distillates (petroleum), hydrotreated middle; Gasoil - unspecified					
	Acute fish toxicity	LL50 1,13 mg/l	96 h	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
	Acute algae toxicity	ErC50 10 mg/l	72 h	Pseudokirchneriella subcapitata	Publication (2003)	OECD Guideline 201
	Acute crustacea toxicity	EL50 7,385 mg/l	48 h	Daphnia magna	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified					
	Acute fish toxicity	LL50 > 100 mg/l	96 h	Pimephales promelas (fathead minnow)	REACH Dossier	OECD 203
	Acute algae toxicity	ErC50 > 100 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Dossier	OECD 201
	Acute crustacea toxicity	EL50 > 10000 mg/l	48 h	Daphnia magna (Big water flea)	REACH Dossier	OECD 202
	Fish toxicity	NOEC >= 1000 mg/l	14 d	Oncorhynchus mykiss (Rainbow trout)	REACH Dossier	QSAR
	Crustacea toxicity	NOEC > 1000 mg/l	21 d	Daphnia magna (Big water flea)	REACH Dossier	OECD 211
72623-87-1	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil - unspecified					
	Acute fish toxicity	LL50 > 100 mg/l	96 h	Pimephales promelas	Study report (1995)	OECD Guideline 203
	Fish toxicity	NOEC >= 1000 mg/l	14 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
72623-86-0	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil - unspecified					
	Acute fish toxicity	LL50 > 100 mg/l	96 h	Pimephales promelas (fathead minnow)	REACH Dossier	OECD 203
	Acute algae toxicity	ErC50 > 100 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Dossier	OECD 201
	Acute crustacea toxicity	EL50 > 10000 mg/l	48 h	Daphnia magna (Big water flea)	REACH Dossier	OECD 202
	Fish toxicity	NOEC >= 1000 mg/l	14 d	Oncorhynchus mykiss (Rainbow trout)	REACH Dossier	QSAR
	Algae toxicity	NOEC >= 100 mg/l	3 d	Pseudokirchneriella subcapitata	REACH Dossier	OECD 201
	Crustacea toxicity	NOEC > 10 mg/l	21 d	Daphnia magna (Big water flea)	REACH Dossier	OECD 211
128-39-2	2,6-di-tert-butylphenol					
	Acute crustacea toxicity	EC50 0,45 mg/l	48 h	Daphnia magna	REACH Registration Dossier	

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	Crustacea toxicity	NOEC mg/l	0,035	21 d	Daphnia magna	REACH Registration Dossier	OECD Guideline 211
268567-32-4	3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid						
	Acute fish toxicity	LC50	38 mg/l	96 h	Danio rerio	Study report (2000)	EU Method C.1
	Acute crustacea toxicity	EC50	53 mg/l	48 h	Daphnia magna	Study report (2000)	EU Method C.2

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified			
	OECD 301B	31 %	28	REACH Dossier
	Not easily bio-degradable (according to OECD-criteria).			
72623-86-0	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil - unspecified			
	OECD 301F	31 %	28	REACH Dossier
	Not easily bio-degradable (according to OECD-criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
128-39-2	2,6-di-tert-butylphenol	4,5
268567-32-4	3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid	3,9
	Reaction mass of 1H-Benzotriazole-1-methanamine, N, N-bis (2-ethylhexyl) -6-methyl- and 2H-Benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -5-methyl- and N, N-bis (2-ethylhexyl) -4-methyl-1H-benzotriazole-1-methylamine and 2H-benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -4-methyl- and N, N-bis (2-ethylhexyl) -5-methyl-1H-benzotriazole-1-methylamine	6,56

BCF

CAS No	Chemical name	BCF	Species	Source
128-39-2	2,6-di-tert-butylphenol	135 - 360	Cyprinus carpio	Publication (1992)
268567-32-4	3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid	> 1 - < 2	Cyprinus carpio	Study report (2000)
	Reaction mass of 1H-Benzotriazole-1-methanamine, N, N-bis (2-ethylhexyl) -6-methyl- and 2H-Benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -5-methyl- and N, N-bis (2-ethylhexyl) -4-methyl-1H-benzotriazole-1-methylamine and 2H-benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -4-methyl- and N, N-bis (2-ethylhexyl) -5-methyl-1H-benzotriazole-1-methylamine	1676		EPIWIN (2011)

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

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The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

130205 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils; hazardous waste

List of Wastes Code - used product

130205 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

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14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Information according to Directive
2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

Additional information

According to EC directives or the corresponding national regulations the product does not have to be labelled.

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile
work protection guideline' (94/33/EC).

Water hazard class (D):

1 - slightly hazardous to water

Skin resorption/Sensitization:

Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 1,2,9,12,16.

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Abbreviations and acronyms

Acute Tox: Acute toxicity
 Asp. Tox: Aspiration hazard
 Skin Irrit: Skin irritation
 Eye Dam: Eye damage
 Eye Irrit: Eye irritation
 Skin Sens: Skin sensitisation
 Repr: Reproductive toxicity
 Aquatic Acute: Acute aquatic hazard
 Aquatic Chronic: Chronic aquatic hazard
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 CLP: Classification, labelling and Packaging
 REACH: Registration, Evaluation and Authorization of Chemicals
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
 UN: United Nations
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety
 assessment, chapter R.20 (Table of terms and abbreviations).

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H304 May be fatal if swallowed and enters airways.

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H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
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.
EUH208	Contains 3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid, 1-H benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-methyl. May produce an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above data are intended to describe our product in terms of any safety requirements to be observed. They reflect the state of our current knowledge and experience and shall not be construed as warranted characteristics. Any warranty for accuracy and completeness shall be expressly excluded.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)