

according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 1 of 19

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

<u>1.4. Emergency telephone</u> Ireland: Public (8am-10pm) +353 180 921 66, Healthcare Professionals +353

number: 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

P102 Keep out of reach of children.

P264 Wash hands thoroughly after handling. P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P501 Dispose of contents/container to of the disposal according to local regulations.

Special labelling of certain mixtures

EUH208 Contains 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,



Safety Data Sheet

according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 2 of 19

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, 3-(Diisobutoxy-thiophosphorylsulfanyl)-2 -methyl-propionic acid. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 3 of 19

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	
	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.



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 4 of 19

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Cond	c. Limits, M-factors and ATE	
64742-53-6	265-156-6	Distillates (petroleum), hydrotreated light naphthenic; Baseoil - unspecified	30 - < 60 %
	dermal: LD5	0 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	
64742-46-7	265-148-2	Distillates (petroleum), hydrotreated middle; Gasoil - unspecified	15 - < 30 %
	I	TE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = g; oral: LD50 = > 5000 mg/kg	
64742-55-8	265-158-7	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified	15 - < 30 %
	dermal: LD5	0 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	
72623-87-1	276-738-4	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based; Baseoil - unspecified	5 - < 15 %
	dermal: LD5	0 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	
72623-86-0	276-737-9	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil - unspecified	2.5 - < 5 %
	dermal: LD5	0 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	
128-39-2	204-884-0	2,6-di-tert-butylphenol	0.3 - < 1 %
		> 5000 mg/kg Aquatic Acute 1; H400: M=1 nic 1; H410: M=1	
268567-32-4	434-070-2	3-(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid	0.1 - < 0.3 %
	dermal: LD5	0 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg	
	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	0.1 - < 0.3 %
	dermal: LD5	0 = > 2000 mg/kg; oral: LD50 = 3313 mg/kg Aquatic Acute 1; H400: M=1	
	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	0.1 - < 0.3 %
	oral: LD50 =	> 2000 mg/kg	

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 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.



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 5 of 19

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. 2

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



Safety Data Sheet

according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 6 of 19

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



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 7 of 19

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
64742-53-6	Distillates (petroleum), hydrotreat	ed light naphthenic; Baseoil - unspecified		
Worker DNEL,	long-term	inhalation	systemic	2,73 mg/m³
Worker DNEL,	long-term	inhalation	local	5,58 mg/m³
Worker DNEL,	long-term	dermal	systemic	0,97 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	local	1,19 mg/m³
Consumer DN	EL, long-term	oral	systemic	0,74 mg/kg bw/day
64742-46-7	Distillates (petroleum), hydrotreat	ed middle; Gasoil - unspecified		
Worker DNEL,	long-term	inhalation	systemic	16,4 mg/m³
Worker DNEL, acute		inhalation	systemic	5002,67 mg/m ³
Worker DNEL,	long-term	dermal	systemic	2,91 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	4,85 mg/m³
Consumer DN	EL, acute	inhalation	systemic	3001,6 mg/m ³
Consumer DN	EL, long-term	dermal	systemic	1,25 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	1,25 mg/kg bw/day
64742-55-8	Distillates (petroleum), hydrotreat	ed light paraffinic; Baseoil - unspecified		
Worker DNEL,	long-term	inhalation	systemic	2,73 mg/m³
Worker DNEL,	long-term	inhalation	local	5,58 mg/m³
Worker DNEL,	long-term	dermal	systemic	0,97 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	local	1,19 mg/m³
Consumer DN	EL, 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/m³
Worker DNEL,	long-term	inhalation	local	5,58 mg/m³
Worker DNEL,	long-term	dermal	systemic	0,97 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	local	1,19 mg/m³
Consumer DN	EL, 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/m³
Worker DNEL,	long-term	dermal	systemic	11,25 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	20,9 mg/m ³
Consumer DN	EL, long-term	dermal	systemic	6,75 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	6,75 mg/kg bw/day



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 8 of 19

Worker DNEL,	long-term	inhalation	systemic	4,4 mg/m³
Worker DNEL,	acute	inhalation	systemic	4,4 mg/m³
Worker DNEL,	long-term	dermal	systemic	1,25 mg/kg bw/day
Consumer DNI	EL, long-term	inhalation	systemic	1,1 mg/m³
Consumer DNI	EL, acute	inhalation	systemic	1,1 mg/m³
Consumer DNI	EL, long-term	dermal	systemic	0,6 mg/kg bw/day
Consumer DNI	EL, long-term	oral	systemic	0,6 mg/kg bw/day
	Reaction mass of 1H-Benzotriazole-1-methanamine, N, N-I 2H-Benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -4-methyl-1H-benzotriazole-1-methylamine and 2H-benzotriathyl-and N, N-bis (2-ethylhexyl) -5-methyl-1H-benzot	5-methyl- and N, N-bis iazole-2-methanamine,	(2-ethylhexyl))
Worker DNEL,	long-term	inhalation	systemic	1,3 mg/m³
Worker DNEL,	long-term	dermal	systemic	0,4 mg/kg bw/day
Consumer DNI	EL, long-term	inhalation	systemic	0,3 mg/m³
Consumer DNI	EL, long-term	dermal	systemic	0,2 mg/kg bw/day
Consumer DNI	EL, long-term	oral	systemic	0,2 mg/kg bw/day
	Reaction products of fatty acids, C16-18, C18 unsatd. with fraction and 3-(C9–C15, C12 rich, alk-1-enyl)dihydro-2,5-fu		oly-, triethylenetetramii	ne
Worker DNEL,	long-term	inhalation	systemic	3,72 mg/m³
Worker DNEL, long-term		dermal	systemic	1,04 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,1 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,625 mg/kg bw/day
Consumer DNI	EL, long-term	oral	systemic	0,625 mg/kg bw/day



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 9 of 19

PNEC values

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



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Product code: 30501 Revision date: 27.07.2023 Page 10 of 19

3935351,65 mg/kg Soil

8.2. Exposure controls



Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eve/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: green Odour: characteristic

Test method

Melting point/freezing point: not determined Boiling point or initial boiling point and not determined

boiling range:

Not readily combustible. Flammability: 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: ~ 6,3 mm²/s DIN 51562 (at 100 °C)

Water solubility:

practically insoluble

(at 20 °C)

Solubility in other solvents

Soluble in hydrocarbons (mineral oil.)

Partition coefficient n-octanol/water: not determined

Vapour pressure: <0,1 hPa calculated.

(at 20 °C)

Density (at 15 °C): ~ 0,867 g/cm3 DIN 51757

Relative vapour density: not determined Particle characteristics: not relevant



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 11 of 19

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate:
Solid content:

Pour point: ~ -51 °C

DIN ISO 3016

not determined

not determined

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) 55,28 mg/l; ATE (inhalation dust/mist) 7,538 mg/l



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 12 of 19

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
64742-53-6	Distillates (petroleum), hy	/drotreated lig	ght naphthei	nic; Baseoil - unspecified	•	•
	oral	LD50 mg/kg	> 5000	Rat	Study report (1982)	OECD 401
	dermal	LD50 mg/kg	> 5000	Rabbit	Study report (1982)	OECD 402
64742-46-7	Distillates (petroleum), hy	/drotreated m	iddle; Gaso	il - unspecified		
	oral	LD50 mg/kg	> 5000	Rat	Study report (1982)	OECD Guideline 401
	dermal	LD50 mg/kg	> 2000	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), hy	drotreated lig	ght paraffinio	c; Baseoil - unspecified		
	oral	LD50 mg/kg	> 5000	Rat	REACh Dossier	OECD 401
	dermal	LD50 mg/kg	> 5000	Rabbit	REACh Dossier	OECD 402
72623-87-1	Lubricating oils (petroleur	m), C20-50, h	nydrotreated	l neutral oil-based; Baseoi	I - unspecified	
	oral	LD50 mg/kg	> 5000	Rat	Study report (1982)	OECD Guideline 401
	dermal	LD50 mg/kg	> 5000	Rabbit	Study report (1982)	OECD Guideline 402
72623-86-0	Lubricating oils (petroleur	m), C15-30, h	ydrotreated	l neutral oil-based; Baseoi	I - unspecified	
	oral	LD50 mg/kg	> 5000	Rat	REACh Dossier	OECD 401
	dermal	LD50 mg/kg	> 5000	Rabbit	REACh Dossier	OECD 402
128-39-2	2,6-di-tert-butylphenol					
	oral	LD50 mg/kg	> 5000	Rat	Study report (1991)	OECD Guideline 401
268567-32-4	3-(Diisobutoxy-thiophosp	horylsulfanyl)	-2-methyl-p	ropionic acid		
	oral	LD50 mg/kg	> 2000	Rat	Study report (2000)	OECD Guideline 423
	dermal	LD50 mg/kg	> 2000	Rat	Study report (1999)	OECD Guideline 402
	2H-Benzotriazole-2-meth -4-methyl-1H-benzotriazo	anamine, N, l ble-1-methyla	N-bis (2-eth mine and 2l	ne, N, N-bis (2-ethylhexyl) ylhexyl) -5-methyl- and N, H-benzotriazole-2-methan H-benzotriazole-1-methyla	N-bis (2-ethylhexyl) amine, N, N-bis (2-ethylhe	exyl)
	oral	LD50 mg/kg	3313	Rat	Study report (1981)	OECD Guideline 401
	dermal	LD50 mg/kg	> 2000	Rat	Study report (2012)	OECD Guideline 402
	Reaction products of fatty fraction and 3-(C9–C15,	y acids, C16-			ylenepoly-, triethylenetetra	nmine
	oral	LD50 mg/kg	> 2000	Rat	Study report (2016)	OECD Guideline 423
	•				•	•



Safety Data Sheet

according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 13 of 19

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 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, 3-

(Diisobutoxy-thiophosphorylsulfanyl)-2-methyl-propionic acid. 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.



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 14 of 19

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
4742-53-6	Distillates (petroleum), hy	drotreated I	ight naphther	nic; Base	oil - unspecified		
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Pimephales promelas (fathead minnow)	Study report (1995)	OECD 203
	Fish toxicity	NOEC mg/l	>= 1000	14 d	Oncorhynchus mykiss (Rainbow trout)	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
64742-46-7	Distillates (petroleum), hy	drotreated r	niddle; Gasoi	l - unspe	ecified		
	Acute fish toxicity	LL50 mg/l	1,13	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 mg/l	7,385	48 h	Daphnia magna	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
64742-55-8	Distillates (petroleum), hy	drotreated I	ight paraffinio	; Baseoi	I - unspecified		
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Pimephales promelas (fathead minnow)	REACh Dossier	OECD 203
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Pseudokirchneriella subcapitata	REACh Dossier	OECD 201
	Acute crustacea toxicity	EL50 mg/l	> 10000	48 h	Daphnia magna (Big water flea)	REACh Dossier	OECD 202
	Fish toxicity	NOEC mg/l	>= 1000	14 d	Oncorhynchus mykiss (Rainbow trout)	REACh Dossier	QSAR
	Crustacea toxicity	NOEC mg/l	> 1000	21 d	Daphnia magna (Big water flea)	REACh Dossier	OECD 211
72623-87-1	Lubricating oils (petroleur	n), C20-50,	hydrotreated	neutral o	oil-based; Baseoil - unspe	ecified	
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Pimephales promelas	Study report (1995)	OECD Guideline 203
	Fish toxicity	NOEC mg/l	>= 1000	14 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
72623-86-0	Lubricating oils (petroleur	n), C15-30,	hydrotreated	neutral o	oil-based; Baseoil - unspe	ecified	
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Pimephales promelas (fathead minnow)	REACh Dossier	OECD 203
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Pseudokirchneriella subcapitata	REACh Dossier	OECD 201
	Acute crustacea toxicity	EL50 mg/l	> 10000	48 h	Daphnia magna (Big water flea)	REACh Dossier	OECD 202
	Fish toxicity	NOEC mg/l	>= 1000	14 d	Oncorhynchus mykiss (Rainbow trout)	REACh Dossier	QSAR
	Algae toxicity	NOEC mg/l	>= 100	3 d	Pseudokirchneriella subcapitata	REACh Dossier	OECD 201
	Crustacea toxicity	NOEC mg/l	> 10	21 d	Daphnia magna (Big water flea)	REACh Dossier	OECD 211
128-39-2	2,6-di-tert-butylphenol						
	Acute crustacea toxicity	EC50 mg/l	0,45	48 h	Daphnia magna	REACh Registration Dossier	



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS Revision date: 27.07.2023 Product code: 30501 Page 15 of 19 Crustacea toxicity NOEC 0,035 21 d|Daphnia magna REACh OECD Guideline

	Crustacea toxicity	NOEC mg/l	0,035	21 d	'	REACh Registration Dossier	OECD Guideline 211
268567-32-4	3-(Diisobutoxy-thiophosph	-(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-methylam ine and 2H-benzotriazole-2-methanamine, N, N-bis (2-ethylhexyl) -4-methyl- and N, N-bis (2-ethylhexyl) -5-methyl-1H-benzotriazole-1-methylam ine	1676		EPIWIN (2011)

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment



Safety Data Sheet

according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 16 of 19

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

The product has not been tested.

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

Inland waterways transport (ADN)

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

Marine transport (IMDG)

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

Air transport (ICAO-TI/IATA-DGR)

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

14.5. Environmental hazards



Safety Data Sheet

according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 17 of 19

ENVIRONMENTALLY HAZARDOUS: No

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): 2 - obviously 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): 2,6,15.



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS

Revision date: 27.07.2023 Product code: 30501 Page 18 of 19

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.



according to Regulation (EC) No 1907/2006

HIGHTEC LHM-PLUS		
Revision date: 27.07.2023	Product code: 30501	Page 19 of 19
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 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, 3-(Diisobutoxy-thiophosphorylsulfanyl)-2 -methyl-propionic acid. 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.)