

**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 1 of 21

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

153 Gearbox treatment MP15300125A

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

Additive

**1.3. Details of the supplier of the safety data sheet****Manufacturer**

Company name:	TUNAP GmbH & Co. KG	
Street:	Bürgermeister-Seidl-Str. 2	
Place:	D-82515 Wolfratshausen	
Telephone:	+ 49 (0) 8171/1600 - 0	Telefax: + 49 (0) 8171/1600 - 40
E-mail:	sdb@tunap.com	
Internet:	www.tunap.com	

**Supplier**

Company name:	TUNAP (UK) Limited
Street:	Unit 12 Tonbridge Trade Park, Ingot Way
Place:	GB Tonbridge, Kent. TN9 1GN
Telephone:	+44 (0)1732 365163
E-mail:	sdb@tunap.com
Internet:	www.tunap.co.uk

**1.4. Emergency telephone number:** 111 NHS (National Health Service)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Aerosol 3; H229  
Skin Irrit. 2; H315  
Eye Dam. 1; H318  
Skin Sens. 1; H317  
Repr. 2; H361f  
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****GB CLP Regulation****Hazard components for labelling**

Polysulfides, di-tert-butyl  
Phosphorodithionsäure, gemischte O,OBis(2-ethylhexyl und Isobutyl und Isopropyl)ester, Zinksalze  
Benzenamine, N-phenyl-,reaction products with 2,4,4-trimethylpentene  
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)  
Diisododecylphenyl phosphite  
reaction product of 1,3,4-thiadiazolidine-2,5-dithione,formaldehyde and phenol, heptylderivs.  
Triisodecyl phosphite  
Isodecyl diphenyl phosphite

**Safety Data Sheet**

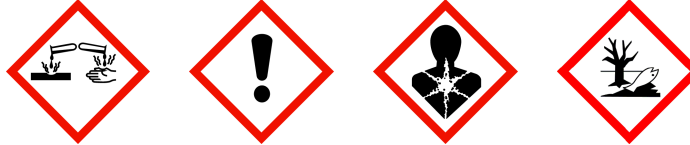
according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 2 of 21

**Signal word:** Danger**Pictograms:****Hazard statements**

H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H361f	Suspected of damaging fertility.
H411	Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P273	Avoid release to the environment.
P280	Wear protective gloves.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**Special labelling of certain mixtures**

11 % by mass of the contents are flammable.

**2.3. Other hazards**

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

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

**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 3 of 21

**Relevant ingredients**

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
68937-96-2	Polysulfides, di-tert-butyl			5 - < 10 %
	273-103-3		01-2119540515-43	
	Skin Sens. 1B, Aquatic Acute 1, Aquatic Chronic 1; H317 H400 H410			
85940-28-9	Phosphorodithionsäure, gemischte O,O-Bis(2-ethylhexyl und Isobutyl und Isopropyl)ester, Zinksalze			3 - < 5 %
	288-917-4		01-2119521201-61	
	Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 2; H315 H318 H411			
68411-46-1	Benzenamine, N-phenyl-,reaction products with 2,4,4-trimethylpentene			3 - < 5 %
	270-128-1		01-2119491299-23	
	Repr. 2, Aquatic Chronic 3; H361f H412			
	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)			3 - < 5 %
	931-384-6		01-2119493620-38	
	Acute Tox. 4, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H302 H319 H317 H411			
64742-47-8	Distillates (petroleum), hydrotreated light, Kerosine - unspecified			1 - < 3 %
	265-149-8			
	Asp. Tox. 1; H304			
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines			1 - < 3 %
	627-034-4		01-2119473797-19	
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H302 H314 H318 H335 H373 H304 H400 H410			
25550-98-5	Reaction products of triphenyl phosphite and isodecanol (1:2)			0.1 - < 1 %
	701-374-4		01-2119962888-14	
	Skin Sens. 1, Aquatic Chronic 3; H317 H412			
29964-84-9	Isodecylmethacrylate			0.1 - < 1 %
	249-978-2		01-2119894925-17	
	Aquatic Chronic 1; H410			

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

**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 4 of 21

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
68937-96-2	273-103-3	Polysulfides, di-tert-butyl	5 - < 10 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg	
85940-28-9	288-917-4	Phosphorodithionsäure, gemischte O,OBis(2-ethylhexyl und Isobutyl und Isopropyl)ester, Zinksalze	3 - < 5 %
		dermal: LD50 = >20000 mg/kg; oral: LD50 = >2000 mg/kg	
68411-46-1	270-128-1	Benzenamine, N-phenyl-,reaction products with 2,4,4-trimethylpentene	3 - < 5 %
		inhalation: LC50 = >5 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg	
	931-384-6	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	3 - < 5 %
		oral: LD50 = > 2000 mg/kg Eye Irrit. 2; H319: >= 50,01 - 100	
64742-47-8	265-149-8	Distillates (petroleum), hydrotreated light, Kerosine - unspecified	1 - < 3 %
		inhalation: LC50 = > 20 mg/l (vapours); dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg	
1213789-63-9	627-034-4	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated) -alkylamines	1 - < 3 %
		inhalation: LC50 = >20 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1689 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=10	
25550-98-5	701-374-4	Reaction products of triphenyl phosphite and isodecanol (1:2)	0.1 - < 1 %
		dermal: LD50 = >5000 mg/kg; oral: LD50 = >5000 mg/kg	
29964-84-9	249-978-2	Isodecylmethacrylate	0.1 - < 1 %
		dermal: LD50 = > 3000 mg/kg; oral: LD50 = > 5000 mg/kg	

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

**After inhalation**

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

**After contact with skin**

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

**After ingestion**

Rinse mouth immediately and drink plenty 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.

**SECTION 5: Firefighting measures**



## Safety Data Sheet

according to UK REACH Regulation

### 153 Gearbox treatment MP15300125A

Revision date: 14.09.2023

Product code: 1102290

Page 5 of 21

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

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

##### **Unsuitable extinguishing media**

High power water jet.

#### **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**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

##### **For non-emergency personnel**

First aider: Pay attention to self-protection!

##### **For emergency responders**

Fight fire with normal precautions from a reasonable distance.

#### **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**

Prevent spread over a wide area (e.g. by containment or oil barriers).

##### **For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

##### **Other information**

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.

#### **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**

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 or drink.

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



## Safety Data Sheet

according to UK REACH Regulation

### 153 Gearbox treatment MP15300125A

Revision date: 14.09.2023

Product code: 1102290

Page 6 of 21

#### Requirements for storage rooms and vessels

Keep container tightly closed.

#### Hints on joint storage

No special measures are necessary.

#### Further information on storage conditions

Protect from frost. Protect from direct sunlight. Store in a cool dry place. Observe legal regulations and provisions.

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

No information available.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters



## Safety Data Sheet

according to UK REACH Regulation

### 153 Gearbox treatment MP15300125A

Revision date: 14.09.2023

Product code: 1102290

Page 7 of 21

#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
68937-96-2	Polysulfides, di-tert-butyl			
Worker DNEL, long-term		inhalation	systemic	3,29 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	4,67 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,58 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	1,67 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,167 mg/kg bw/day
68411-46-1	Benzenamine, N-phenyl-,reaction products with 2,4,4-trimethylpentene			
Worker DNEL, long-term		inhalation	systemic	0,6 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	0,08 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,14 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	0,04 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,04 mg/kg bw/day
	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)			
Worker DNEL, long-term		inhalation	systemic	4,28 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	12,5 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,09 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	6,25 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,25 mg/kg bw/day
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines			
Worker DNEL, long-term		inhalation	systemic	0,38 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	1 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	1 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	0,035 mg/m <sup>3</sup>
Consumer DNEL, long-term		oral	systemic	0,04 mg/kg bw/day
25550-98-5	Reaction products of triphenyl phosphite and isodecanol (1:2)			
Worker DNEL, long-term		inhalation	systemic	70,5 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	50 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	35 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	25 mg/kg bw/day
29964-84-9	Isodecylmethacrylate			
Worker DNEL, long-term		inhalation	systemic	2,5 mg/m <sup>3</sup>



## Safety Data Sheet

according to UK REACH Regulation

### 153 Gearbox treatment MP15300125A

Revision date: 14.09.2023

Product code: 1102290

Page 8 of 21

Worker DNEL, long-term	dermal	systemic	5 mg/kg bw/day
------------------------	--------	----------	----------------





### Safety Data Sheet

according to UK REACH Regulation

#### 153 Gearbox treatment MP15300125A

Revision date: 14.09.2023

Product code: 1102290

Page 9 of 21

#### PNEC values

CAS No	Substance	Value
Environmental compartment		
68937-96-2	Polysulfides, di-tert-butyl	
Freshwater		0,00024 mg/l
Freshwater (intermittent releases)		0,002 mg/l
Marine water		0,000024 mg/l
Freshwater sediment		0,94 mg/kg
Marine sediment		0,094 mg/kg
Secondary poisoning		6,66 mg/kg
Micro-organisms in sewage treatment plants (STP)		4,51 mg/l
Soil		0,0181 mg/kg
68411-46-1	Benzenamine, N-phenyl-,reaction products with 2,4,4-trimethylpentene	
Freshwater		0,034 mg/l
Freshwater (intermittent releases)		0,51 mg/l
Marine water		0,003 mg/l
Freshwater sediment		0,446 mg/kg
Marine sediment		0,045 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		1,76 mg/kg
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)		
Freshwater		0,0024 mg/l
Freshwater (intermittent releases)		0,15 mg/l
Marine water		0,00024 mg/l
Freshwater sediment		0,0129 mg/kg
Marine sediment		0,00129 mg/kg
Secondary poisoning		10 mg/kg
Micro-organisms in sewage treatment plants (STP)		24,33 mg/l
Soil		0,00117 mg/kg
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	
Freshwater		0,00026 mg/l
Freshwater (intermittent releases)		0,0016 mg/l
Marine water		0,000026 mg/l
Freshwater sediment		3,76 mg/kg
Marine sediment		0,376 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,55 mg/l
Soil		10 mg/kg
29964-84-9	Isodecylmethacrylate	
Freshwater		0,00024 mg/l
Freshwater (intermittent releases)		0,000169 mg/l
Marine water		0,000024 mg/l
Freshwater sediment		0,042 mg/kg

**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 10 of 21

Marine sediment	0,004 mg/kg
Micro-organisms in sewage treatment plants (STP)	50 mg/l
Soil	0,008 mg/kg

**Additional advice on limit values**

- a no restriction
- b End of exposure or end of shift
- c at long-term exposure:
- d before next shift

blood (B)  
Urine (U)

**8.2. Exposure controls****Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear eye/face protection.

**Hand protection**

Protect skin by using skin protective cream. 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.  
Suitable material: NBR (Nitrile rubber) Breakthrough time: 480min  
Thickness of the glove material 0,45 mm  
EN ISO 374

**Skin protection**

Wear suitable protective clothing.

**Respiratory protection**

With correct and proper use, and under normal conditions, breathing protection is not required.

**Environmental exposure controls**

Observe legal regulations and provisions.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state: Aerosol  
Colour: red  
Odour: mild

**Test method**

Melting point/freezing point: not determined  
Boiling point or initial boiling point and boiling range: >100 °C  
Flammability: not applicable  
Lower explosion limits: not applicable DIN 51649  
Upper explosion limits: not applicable DIN 51649  
Flash point: > 150 °C  
Auto-ignition temperature: >300 °C  
Decomposition temperature: not determined  
pH-Value (at 20 °C): not applicable DIN 19268

**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 11 of 21

Viscosity / kinematic:	1100 mm <sup>2</sup> /s
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density:	0,91 g/cm <sup>3</sup> DIN 51757
Relative vapour density:	not determined

**9.2. Other information****Information with regard to physical hazard classes**

Sustaining combustion:	No data available
Self-ignition temperature	
Solid:	not applicable
Gas:	not applicable
Oxidizing properties	
Not oxidising.	

**Other safety characteristics**

Evaporation rate:	not determined
Solid content:	not determined
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not determined

**Further Information**

Data apply to technical substance: Relative density, Colour, Odour, Viscosity, pH.

**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**

Protect from frost.

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

No known hazardous decomposition products.

**Further information**

Do not mix with other chemicals.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.



## Safety Data Sheet

according to UK REACH Regulation

### 153 Gearbox treatment MP15300125A

Revision date: 14.09.2023

Product code: 1102290

Page 12 of 21

#### Acute toxicity

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

#### ATEmix calculated

ATE (oral) 14631 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 13 of 21

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
68937-96-2	Polysulfides, di-tert-butyl				
	oral	LD50 > 2000 mg/kg	Rat		
	dermal	LD50 > 2000 mg/kg	Rat		
85940-28-9	Phosphorodithionsäure, gemischte O,O-Bis(2-ethylhexyl und Isobutyl und Isopropyl)ester, Zinksalze				
	oral	LD50 >2000 mg/kg	Rat		
	dermal	LD50 >20000 mg/kg	Rat		
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1982)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1988)	OECD Guideline 402
	inhalation (4 h) dust/mist	LC50 >5 mg/l	Rat		
	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)				
	oral	LD50 > 2000 mg/kg	Rat	Study report (1995)	OECD Guideline 401
64742-47-8	Distillates (petroleum), hydrotreated light, Kerosine - unspecified				
	oral	LD50 >2000 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 > 20 mg/l	Rat		
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines				
	oral	LD50 1689 mg/kg	Rat	Study report (1993)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1985)	OECD Guideline 402
	inhalation (4 h) vapour	LC50 >20 mg/l	Rat		
25550-98-5	Reaction products of triphenyl phosphite and isodecanol (1:2)				
	oral	LD50 >5000 mg/kg	Rat		
	dermal	LD50 >5000 mg/kg	Rabbit		
29964-84-9	Isodecylmethacrylate				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1973)	other: OSHA Toxicity Screening Test
	dermal	LD50 > 3000 mg/kg	Rabbit	Study report (1973)	other: OSHA Toxicity Screening Test



## Safety Data Sheet

according to UK REACH Regulation

### 153 Gearbox treatment MP15300125A

Revision date: 14.09.2023

Product code: 1102290

Page 14 of 21

#### Irritation and corrosivity

Causes skin irritation.  
Causes serious eye damage.

#### Sensitising effects

May cause an allergic skin reaction. (Polysulfides, di-tert-butyl; Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched); Reaction products of triphenyl phosphite and isodecanol (1:2))

#### Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging fertility. (Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene)  
Germ cell mutagenicity: Based on available data, the classification criteria are not met.  
Carcinogenicity: Based on available data, the classification criteria are not met.  
No indications of human carcinogenicity exist.  
No indications of human germ cell mutagenicity exist.  
No indications of human reproductive toxicity exist.

#### 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.

#### Information on likely routes of exposure

Ingestion, Inhalation, Skin contact, Eye contact.  
Reference to other sections: 2.1, 4.2.

#### Specific effects in experiment on an animal

No information available.

#### 11.2. Information on other hazards

##### Endocrine disrupting properties

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

##### Other information

No information available.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Toxic to aquatic life with long lasting effects.



## Safety Data Sheet

according to UK REACH Regulation

### 153 Gearbox treatment MP15300125A

Revision date: 14.09.2023

Product code: 1102290

Page 15 of 21

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
68937-96-2	Polysulfides, di-tert-butyl					
	Acute fish toxicity	LC50 > 0,088 mg/l	96 h	Danio rerio (zebrafish)		
	Acute algae toxicity	ErC50 0,838 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 63 mg/l	48 h	Daphnia magna	Study report (2013)	OECD Guideline 202
85940-28-9	Phosphorodithionsäure, gemischte O,O-Bis(2-ethylhexyl und Isobutyl und Isopropyl)ester, Zinksalze					
	Acute fish toxicity	LC50 4,5 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 2,1 mg/l	96 h	Selenastrum capricornutum		
	Acute crustacea toxicity	EC50 5,4 mg/l	48 h	Daphnia magna		
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Danio rerio	Study report (1988)	OECD Guideline 203
	Acute algae toxicity	ErC50 > 100 mg/l	72 h	Desmodesmus subspicatus	Study report (2006)	OECD Guideline 201
	Acute crustacea toxicity	EC50 51 mg/l	48 h	Daphnia magna	Study report (2004)	OECD Guideline 202
	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)					
	Acute fish toxicity	LL50 ca. 24 mg/l	96 h	Oncorhynchus mykiss	REACH Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 6,4 mg/l	96 h	Pseudokirchneriella subcapitata	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EL50 ca. 91,4 mg/l	48 h	Daphnia magna	REACH Registration Dossier	OECD Guideline 202
	Acute bacteria toxicity	EC50 ca. 2433 mg/l ( )	3 h	activated sludge, domestic	REACH Registration Dossier	OECD Guideline 209
64742-47-8	Distillates (petroleum), hydrotreated light, Kerosine - unspecified					
	Acute fish toxicity	LC50 >1000 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 >1000 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 >1000 mg/l	48 h	Daphnia magna		
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines					
	Acute fish toxicity	LC50 0,84 mg/l	96 h	Danio rerio	Study report (2006)	OECD Guideline 203

**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 16 of 21

	Acute algae toxicity	ErC50 mg/l	0,39	72 h	Desmodesmus subspicatus	Study report (2002)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	0,32	48 h	Daphnia magna	Study report (2006)	OECD Guideline 202
	Crustacea toxicity	NOEC mg/l	0,013	21 d	Daphnia magna	Study report (2002)	OECD Guideline 211
	Acute bacteria toxicity	EC50 )	32 mg/l (	3 h	activated sludge of a predominantly domestic sewage	Study report (1989)	OECD Guideline 209
25550-98-5	Reaction products of triphenyl phosphite and isodecanol (1:2)						
	Acute algae toxicity	ErC50	45 mg/l	72 h	Desmodesmus subspicatus	Study report (1993)	other: 87/302/EEC, Algal inhibition test
29964-84-9	Isodecylmethacrylate						
	Acute algae toxicity	ErC50 mg/l	> 0,0169	72 h	Desmodesmus subspicatus	Study report (2010)	OECD Guideline 201
	Crustacea toxicity	NOEC mg/l	0,0542	21 d	Daphnia magna	Study report (2010)	OECD Guideline 211

**12.2. Persistence and degradability**

The product has not been tested.

CAS No	Chemical name	Method	Value	d	Source
		Evaluation			
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines				
			44	28	

**12.3. Bioaccumulative potential**

The product has not been tested.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
68937-96-2	Polysulfides, di-tert-butyl	5,6
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	> 6
	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	< 0,3
1213789-63-9	(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	5,16
25550-98-5	Reaction products of triphenyl phosphite and isodecanol (1:2)	9,32
29964-84-9	Isodecylmethacrylate	>= 6,45



**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 17 of 21

**BCF**

CAS No	Chemical name	BCF	Species	Source
68937-96-2	Polysulfides, di-tert-butyl	0,006	Lepomis macrochirus	Study report (2015)
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	411	Cyprinus carpio	Study report (2000)
	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	436	Onchorhynchus mykiss	REACH Registration D
1213789-63-9	(Z)-octadec-9-enylamine, C16-18- (even numbered, saturated and unsaturated)-alkylamines	173		Environmental Toxico
25550-98-5	Reaction products of triphenyl phosphite and isodecanol (1:2)	606,5		US EPA (2009)
29964-84-9	Isodecylmethacrylate	37	Danio rerio	Study report (2006)

**12.4. Mobility in soil**

The product has not been tested.

**12.5. Results of PBT and vPvB assessment**

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

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**

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

**List of Wastes Code - used product**

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

**List of Wastes Code - contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

**Contaminated packaging**

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

**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 18 of 21

substance itself.

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS
<b>14.3. Transport hazard class(es):</b>	2
<b>14.4. Packing group:</b>	-
Hazard label:	2.2
Classification code:	5A
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0
Transport category:	3
Tunnel restriction code:	E

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS
<b>14.3. Transport hazard class(es):</b>	2
<b>14.4. Packing group:</b>	-
Hazard label:	2.2
Classification code:	5A
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS ((Z)-octadec-9-enylamine)
<b>14.3. Transport hazard class(es):</b>	2.2
<b>14.4. Packing group:</b>	-
Hazard label:	2.2
Marine pollutant:	yes
Special Provisions:	63, 190, 277, 327, 344, 959
Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS, non-flammable
<b>14.3. Transport hazard class(es):</b>	2.2
<b>14.4. Packing group:</b>	-
Hazard label:	2.2
Special Provisions:	A98 A145 A167 A802
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

**14.5. Environmental hazards**

**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 19 of 21

ENVIRONMENTALLY HAZARDOUS: Yes  
Danger releasing substance: (Z)-octadec-9-enylamine

**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

Directive 2010/75/EU on industrial emissions: No information available.

Directive 2004/42/EC on VOC in paints and varnishes: No information available.

**Additional information**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)  
Aerosol Directive (75/324/)

**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.

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 2,11.

**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 20 of 21

**Abbreviations and acronyms**

Aerosol: Aerosols  
Acute Tox: Acute toxicity  
Asp. Tox: Aspiration hazard  
Skin Corr: Skin corrosion  
Skin Irrit: Skin irritation  
Eye Dam: Eye damage  
Eye Irrit: Eye irritation  
Skin Sens: Skin sensitisation  
Repr: Reproductive toxicity  
STOT SE: Specific target organ toxicity - single exposure  
STOT RE: Specific target organ toxicity - repeated exposure  
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%

**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Aerosol 3; H229	On basis of test data
Skin Irrit. 2; H315	Bridging principle "Aerosols"
Eye Dam. 1; H318	Bridging principle "Aerosols"
Skin Sens. 1; H317	Bridging principle "Aerosols"
Repr. 2; H361f	Calculation method
Aquatic Chronic 2; H411	Calculation method

**Relevant H and EUH statements (number and full text)**

H229 Pressurised container: May burst if heated.  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H361f Suspected of damaging fertility.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product

**Safety Data Sheet**

according to UK REACH Regulation

**153 Gearbox treatment MP15300125A**

Revision date: 14.09.2023

Product code: 1102290

Page 21 of 21

named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

---

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