according to Regulation (EC) No 1907/2006

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

## 1.1. Product identifier

ADDINOL Eco Gear 220 S

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

#### Use of the substance/mixture

Gearbox oil.

For industrial purposes only.

## 1.3. Details of the supplier of the safety data sheet

Manufacturer		
Company name:	ADDINOL Lube Oil GmbH	
	Gebäude 4609	
Street:	Am Haupttor	
Place:	D-06237 Leuna	
Telephone:	+49 (0) 3461 845-0	Telefax:+49 (0) 3461 845-555
E-mail:	info@addinol.de	
Contact person:	Application Technology	
Internet:	www.addinol.de	
Responsible Department:	ADDINOL Application Technology	
Supplier		
Company name:	GEM OILS LIMITED	
Place:	IRL-H12K298 Regaskin Co. Cavan	
Telephone:	+353 49 4378116	Telefax: +353 49 4368329
E-mail:	sales@gemoils.ie	
Contact person:	GEM OILS LIMITED	Telephone:+353 49 4378116
E-mail:	sales@gemoils.ie	
Internet:	https://gemoils.ie/	
1.4. Emergency telephone	Healthcare Professionals: +353 (1) 809	2566 (24 hour service)
number:		

## <u>number:</u>

## **SECTION 2: Hazards identification**

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

## Regulation (EC) No 1272/2008

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

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

## 2.2. Label elements

#### Regulation (EC) No 1272/2008

#### Hazard statements

H412

P273

P501

Harmful to aquatic life with long lasting effects.

#### **Precautionary statements**

Avoid release to the environment.

Dispose of contents/container to an appropriate recycling or disposal facility.

## Additional advice on labelling

Product is classified and labelled in accordance with EC regulations or the corresponding national laws.

## 2.3. Other hazards

according to Regulation (EC) No 1907/2006

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Prolonged/repetitive skin contact may cause skin defattening or dermatitis. Spilled product must not leak into the ground. Do not allow uncontrolled leakage of product into the environment.

## **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

## Relevant ingredients

CAS No	Chemical name	Quantity			
	EC No	Index No	REACH No		
	Classification (Regulation (EC) N	o 1272/2008)	•		
68937-96-2	Di-tert-butyl-Polysulfides			0.5 - < 1 %	
	273-103-3		01-2119540515-43		
	Skin Sens. 1B, Aquatic Chronic 3	H317 H412			
	Molybdenum trioxide, reaction pro	oducts with bis[O,O-bis(2-e	thylhexyl)] hydrogen dithiophosphate	0.5 - < 1 %	
	947-946-9		01-2120772600-59		
	Skin Irrit. 2, Skin Sens. 1B, Aquat	ic Chronic 4; H315 H317 H	413		
	Reaction products of bis(4-methy propylene oxide and amines, C12	pentan-2-yl)dithiophosphoric acid with phosphorus oxide, -14-alkyl (branched)		0.3 - < 0.5 %	
	931-384-6		01-2119493620-38		
	Acute Tox. 4, Eye Irrit. 2, Skin Sei	ns. 1, Aquatic Chronic 2; H	302 H319 H317 H411		
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene			0.3 - < 0.5 %	
	270-128-1		01-2119491299-23		
	Repr. 2, Aquatic Chronic 3; H361				
722503-68-6	Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts			0.1 - < 0.3 %	
	682-816-2		01-2119985162-35		
	Skin Sens. 1B; H317				
121158-58-5	Phenol, dodecyl-, branched			< 0.1 %	
	310-154-3	604-092-00-9	01-2119513207-49		
	Repr. 1B, Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H360F H314 H318 H400 H410				

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

## 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	Di-tert-butyl-Polysulfides	0.5 - < 1 %	
	Skin Sens. 1B	; H317: >= 46 - 100		
	931-384-6	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	0.3 - < 0.5 %	
		= > 2000 mg/kg; oral: LD50 = > 2000 mg/kg Eye Irrit. 2; H319: >= 50 - 100 Skin : >= 9,39 - 100		
68411-46-1	270-128-1	0-128-1 Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene		
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg			
121158-58-5	158-58-5 310-154-3 Phenol, dodecyl-, branched		< 0.1 %	
		= ca. 15000 mg/kg; oral: LD50 = 2100 mg/kg  Aquatic Acute 1; H400: M=10 ic 1; H410: M=10		

## **Further Information**

DMSO-Extract < 3 %; IP 346. Classification system: The classification corresponds to the current EC lists and is completed by information from specialist literature and company information.

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#### SECTION 4: First aid measures

## 4.1. Description of first aid measures

#### **General information**

Self-protection of the first aider. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

#### After inhalation

Move victim to fresh air. Put victim at rest and keep warm. Seek medical attention if problems persist.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. In case of skin irritation, seek medical treatment.

#### After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

#### After ingestion

Do NOT induce vomiting.

Rinse mouth thoroughly with water. Call a physician immediately.

#### 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

First Aid, decontamination, treatment of symptoms.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

#### Suitable extinguishing media

Foam. Extinguishing powder. Carbon dioxide (CO2). Atomized water.

#### Unsuitable extinguishing media

High power water jet.

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

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2). Sulfur oxides. Phosphorus oxides. Nitrogen oxides (NOx). carbon black.

#### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers. In case of fire and/or explosion do not breathe fumes. Contaminated fire-fighting water must be collected separately.

## **SECTION 6: Accidental release measures**

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

#### General advice

High slip hazard because of leaking or spilled product. Remove all sources of ignition. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Avoid contact with skin, eyes and clothes.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Prevent spread over a wide area (e.g. by containment or oil barriers).

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

according to Regulation (EC) No 1907/2006

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## 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. 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 Section 12: Ecological Information (non-mandatory) Disposal: see section 13

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

Work in well-ventilated zones or use proper respiratory protection. Avoid oil mist If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid contact with skin, eyes and clothes.

#### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Take off immediately all contaminated clothing. Wash contaminated clothing prior to re-use. Do not eat, drink, smoke or sneeze at the workplace.

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

#### Requirements for storage rooms and vessels

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity. Keep container tightly closed in a cool place. Keep/Store only in original container.

#### Hints on joint storage

Keep away from food, drink and animal feedingstuffs. Keep away from: Oxidizing agent

### Further information on storage conditions

Protect against: UV-radiation/sunlight. frost. heat. Recommended storage temperature: 5 - 40°C

## 7.3. Specific end use(s)

Further information: see technical data sheet.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

according to Regulation (EC) No 1907/2006

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## **DNEL/DMEL** values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
68937-96-2	Di-tert-butyl-Polysulfides			
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 DN	NEL, long-term	inhalation	systemic	0,58 mg/m³
Consumer DN	IEL, long-term	dermal	systemic	1,67 mg/kg bw/day
Consumer DN	NEL, long-term	oral	systemic	0,167 mg/kg bw/day
	Molybdenum trioxide, reaction products wi	th bis[O,O-bis(2-ethylhexyl)] hydroge	n dithiophosphate	
Worker DNEL	., long-term	inhalation	systemic	4,93 mg/m <sup>3</sup>
Worker DNEL	., long-term	dermal	systemic	1,4 mg/kg bw/day
Consumer DN	NEL, long-term	inhalation	systemic	0,87 mg/m³
Consumer DN	NEL, long-term	dermal	systemic	0,5 mg/kg bw/day
Consumer DN	NEL, long-term	oral	systemic	0,5 mg/kg bw/day
	Reaction products of bis(4-methylpentan-2 amines, C12-14-alkyl (branched)	2-yl)dithiophosphoric acid with phospl	horus oxide, propyle	ne oxide and
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 DN	NEL, long-term	inhalation	systemic	1,09 mg/m <sup>3</sup>
Consumer DN	IEL, long-term	dermal	systemic	6,25 mg/kg bw/day
Consumer DN	NEL, long-term	oral	systemic	0,25 mg/kg bw/day
68411-46-1	Benzenamine, N-phenyl-, reaction product	ts with 2,4,4-trimethylpentene		
Worker DNEL	., long-term	inhalation	systemic	0,31 mg/m³
Worker DNEL	., long-term	dermal	systemic	0,44 mg/kg bw/day
Consumer DN	NEL, long-term	inhalation	systemic	0,08 mg/m³
Consumer DN	NEL, long-term	dermal	systemic	0,22 mg/kg bw/day
Consumer DN	NEL, long-term	oral	systemic	0,05 mg/kg bw/day
121158-58-5	Phenol, dodecyl-, branched			
Worker DNEL	., acute	inhalation	systemic	44,18 mg/m <sup>3</sup>
Worker DNEL	., long-term	dermal	systemic	0,25 mg/kg bw/day
Worker DNEL	., acute	dermal	systemic	166 mg/kg bw/da
Consumer DN	NEL, long-term	inhalation	systemic	0,79 mg/m³
Consumer DN	NEL, acute	inhalation	systemic	13,26 mg/m <sup>3</sup>
Consumer DN	IEL, long-term	dermal	systemic	0,075 mg/kg bw/day
Consumer DN	NEL, acute	dermal	systemic	50 mg/kg bw/day

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Consumer DNE	L, long-term		oral	systemic	0,075 mg/kg bw/day
Consumer DNE	L, acute		oral	systemic	1,26 mg/kg bw/day
PNEC values				·	
CAS No	Substance				
Environmental c	ompartment				Value
68937-96-2	Di-tert-butyl-Polysulfides				
Freshwater					0,00024 mg/l
Freshwater (inte	rmittent releases)				0,002 mg/l
Marine water					0,000024 mg/l
Freshwater sedi	ment				0,94 mg/kg
Marine sedimen	t				0,094 mg/kg
Secondary poise	oning				6,66 mg/kg
Micro-organisms	s in sewage treatment plants (STP)				4,51 mg/l
Soil					0,0181 mg/kg
	Reaction products of bis(4-methylpentan- amines, C12-14-alkyl (branched)	2-yl)dithiophospho	oric acid with p	hosphorus oxide, propyle	ne oxide and
Freshwater					0,0024 mg/l
Freshwater (inte	rmittent releases)				0,15 mg/l
Marine water					0,00024 mg/l
Freshwater sedi	ment				0,0129 mg/kg
Marine sedimen	0,00129 mg/kg				
Secondary poise	oning				10 mg/kg
Micro-organisms	s in sewage treatment plants (STP)				24,33 mg/l
Soil					0,00117 mg/kg
68411-46-1	Benzenamine, N-phenyl-, reaction produc	cts with 2,4,4-trime	ethylpentene		
Freshwater					0,034 mg/l
Freshwater (inte	rmittent releases)				0,51 mg/l
Marine water					0,003 mg/l
Freshwater sedi	ment				0,446 mg/kg
Marine sedimen	t				0,045 mg/kg
Secondary poise	oning				0,833 mg/kg
Micro-organisms	s in sewage treatment plants (STP)				10 mg/l
Soil					17,6 mg/kg
121158-58-5	Phenol, dodecyl-, branched				
Freshwater					0,000074 mg/l
Freshwater (inte	rmittent releases)				0,00037 mg/l
Marine water					0,000007 mg/l
Freshwater sedi	ment				0,226 mg/kg
Marine sedimen	t				0,027 mg/kg
Secondary poise	oning				4 mg/kg
Micro-organisms	s in sewage treatment plants (STP)				100 mg/l
Soil					0,118 mg/kg

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## Additional advice on limit values

Recommended limit value for oil mist

TWA: 5 mg/m<sup>3</sup> STEL: 10 mg/m<sup>3</sup>

The product does not contain any relevant quantities of substances with legally established exposure limitation.

## 8.2. Exposure controls



## Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

#### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN ISO 16321

#### Hand protection

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): EN ISO 374

Duration of wearing with permanent contact: 480 min Suitable material: NBR (Nitrile rubber). Thickness of glove material: 0.7 mm.

Wearing time with occasional contact (splashes): 30 min Suitable material: NBR (Nitrile rubber). Thickness of glove material: 0.4 mm

Protect skin by using skin protective cream.

#### Skin protection

Wear suitable protective clothing. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

## **Respiratory protection**

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Cosaint riospráide le scagaire i gcoinne gás orgánach agus gaile cineál A - fiuchphointe> 65 ° C: A1: <1000 ppm; A2: <5000 ppm; A3: <10,000 ppm.

#### **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state: Colour: Odour:	liquid brown characteristic
Odour threshold: Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range: Flammability:	
Lower explosion limits: Upper explosion limits:	

No data available not determined

No data available No data available No data available

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Flash point:	240 °C	DIN EN ISO 2592	
Auto-ignition temperature:	not determined		
Decomposition temperature:	No data available		
pH-Value:	No data available		
Viscosity / kinematic:	220 mm²/s	ASTM D 7042	
(at 40 °C)			
Water solubility:	virtually insoluble		
Solubility in other solvents No data available			
Partition coefficient n-octanol/water:	No data available		
Vapour pressure:	No data available		
Density (at 15 °C):	0,876 g/cm³	DIN 51757	
Relative vapour density:	No data available		
Particle characteristics:	No data available		
9.2. Other information			
Information with regard to physical hazard classe	S		
Explosive properties			
No data available			
Self-ignition temperature			
Solid:	No data available		
Gas:	No data available		
Oxidizing properties			
No data available			
Other safety characteristics			
Evaporation rate:	No data available		
Pour point:	-42 °C	ASTM D 7346	
SECTION 10: Stability and reactivity			

## 10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

#### 10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

#### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4. Conditions to avoid

Refer to chapter 7 No further action is necessary.

Do not overheat to avoid decomposition by heat.

#### 10.5. Incompatible materials

Reacts with : Oxidising agent, strong

#### 10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2). Sulfur oxides. Phosphorus oxides. Nitrogen oxides (NOx). carbon black.

## **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. Mixture not tested.

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#### 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

CAS No	Chemical name									
	Exposure route	Dose	Species	Source	Method					
		Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)								
	oral	LD50 > 200 mg/kg	0 Rat	Study report (1995)	OECD Guideline 401					
	dermal	LD50 > 200 mg/kg	0 Rabbit							
68411-46-1	Benzenamine, N-phenyl-,	reaction products	with 2,4,4-trimethylpentene	e						
	oral	LD50 > 500 mg/kg	0 Rat	Study report (1982)	OECD Guideline 401					
	dermal	LD50 > 200 mg/kg	0 Rat	Study report (1988)	OECD Guideline 402					
121158-58-5	Phenol, dodecyl-, branche	ed								
	oral	LD50 2100 mg/kg	Rat	Publication (1978)	OECD Guideline 401					
	dermal	LD50 ca. 15 mg/kg	5000 Rabbit	Study report (1968)	OECD Guideline 402					

#### Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met. 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.

## Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met. Carcinogenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: 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.

Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

## Aspiration hazard

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

## 11.2. Information on other hazards

#### **Endocrine disrupting properties**

not applicable

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Harmful to aquatic life with long lasting effects. Mixture not tested.

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CAS No	Chemical name								
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method		
68937-96-2	Di-tert-butyl-Polysulfides								
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Raphidocelis subcapitata	Study report (2012)	OECD Guideline 201		
	Acute crustacea toxicity	EL50	63 mg/l	48 h	Daphnia magna	Study report (2013)	OECD Guideline 202		
	Molybdenum trioxide, rea	ction produc	ts with bis[O	,O-bis(2-	ethylhexyl)] hydrogen dit	hiophosphate			
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Raphidocelis subcapitata	REACh Registration Dossier	OECD Guideline 201		
	Acute bacteria toxicity	EC50 mg/l()	> 1000	3 h	activated sludge of a predominantly domestic sewag	REACh Registration Dossier	OECD Guideline 209		
	Reaction products of bis( amines, C12-14-alkyl (bra		tan-2-yl)dithi	ophosph	oric acid with phosphoru	s oxide, propylene c	oxide and		
	Acute fish toxicity	LL50 mg/l	ca. 24	96 h	Oncorhynchus mykiss	REACh Registration Dossier	OECD Guideline 203		
	Acute algae toxicity	ErC50	6,4 mg/l	96 h	Raphidocelis subcapitata	REACh Registration Dossier	OECD Guideline 201		
	Acute crustacea toxicity	EL50 mg/l	ca. 91,4	48 h	Daphnia magna	REACh Registration Dossier	OECD Guideline 202		
	Acute bacteria toxicity	EC50 mg/l()	ca. 2433	3 h	activated sludge, domestic	REACh Registration Dossier	OECD Guideline 209		
68411-46-1	Benzenamine, N-phenyl-,	reaction pro	oducts with 2	,4,4-trim	ethylpentene				
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Danio rerio	Study report (1988)	OECD Guideline 203		
	Acute algae toxicity	ErC50 mg/l	> 100	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		
	Fish toxicity	NOEC	10 mg/l	34 d	Danio rerio	Study report (2020)	OECD Guideline 210		
	Crustacea toxicity	NOEC mg/l	4,45	21 d	Daphnia magna	Study report (2020)	OECD Guideline 211		
121158-58-5	Phenol, dodecyl-, branche	ed							
	Acute fish toxicity	LL50	40 mg/l	96 h	Pimephales promelas	Study report (1994)	OECD Guideline 203		
	Acute algae toxicity	ErC50 mg/l	0,15	72 h	Desmodesmus subspicatus	Study report (2005)	OECD Guideline 201		
	Acute crustacea toxicity	EC50 mg/l	0,037	48 h	Daphnia magna	Study report (2005)	OECD Guideline 202		
	Crustacea toxicity	NOEC mg/l	0,004	21 d	Daphnia magna	Study report (2005)	OECD Guideline 211		
	Acute bacteria toxicity	EC50 mg/l()	> 1000	3 h	activated sludge of a predominantly industrial sew	Study report (2004)	OECD Guideline 209		

## 12.2. Persistence and degradability

Not easily bio-degradable (according to OECD-criteria). Do not allow to enter into surface water or drains.

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#### 12.3. Bioaccumulative potential

## No data available

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
68937-96-2	Di-tert-butyl-Polysulfides	
	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	< 0,3
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	7,11
121158-58-5	Phenol, dodecyl-, branched	7,14

BCF

CAS No	Chemical name	BCF	Species	Source
68937-96-2	Di-tert-butyl-Polysulfides	0,006	Lepomis macrochirus	Study report (2015)
	Reaction products of bis(4-methylpentan-2-yl)dithiophosphori c acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	436	Onchorhynchus mykiss	REACh Registration D
68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	411	Cyprinus carpio	Study report (2000)
121158-58-5	Phenol, dodecyl-, branched	289	Oncorhynchus mykiss	Study report (2006)

#### 12.4. Mobility in soil

Due to its low solubility in water the product is almost completely mechanically separated in biological waste water treatment plants.

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

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 data available

#### **Further information**

Do not allow uncontrolled leakage of product into the environment.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

#### **Disposal recommendations**

Must not be disposed of with domestic refuse. Do not allow to enter into surface water or drains.

## List of Wastes Code - residues/unused products

130206 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils; hazardous waste

#### Contaminated packaging

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Dispose of waste according to applicable legislation. Packing which cannot be properly cleaned must be thrown away.

## **SECTION 14: Transport information**

#### Land transport (ADR/RID)

14.1. UN number or ID number
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14.2. UN proper shipping name:

according to Regulation (EC) No 1907/2006

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14.3. Transport hazard class(es):	-	
14.4. Packing group:	-	
Inland waterways transport (ADN)		
14.1. UN number or ID number:	-	
<u>14.2. UN proper shipping name:</u> 14.3. Transport hazard class(es):	-	
14.4. Packing group:	-	
Marine transport (IMDG)		
14.1. UN number or ID number:	-	
14.2. UN proper shipping name:	-	
14.3. Transport hazard class(es):	-	
14.4. Packing group:	-	
Air transport (ICAO-TI/IATA-DGR)		
14.1. UN number or ID number:	-	
14.2. UN proper shipping name:	-	
<u>14.3. Transport hazard class(es):</u> <u>14.4. Packing group:</u>	-	
14.5. Environmental hazards		
	N	
ENVIRONMENTALLY HAZARDOUS:	No	
ENVIRONMENTALLY HAZARDOUS: 14.6. Special precautions for user		
ENVIRONMENTALLY HAZARDOUS: 14.6. Special precautions for user Unless specified otherwise, general	measures for safe transport must be followed.	
ENVIRONMENTALLY HAZARDOUS: <u>14.6. Special precautions for user</u> Unless specified otherwise, general <u>14.7. Maritime transport in bulk according</u>	measures for safe transport must be followed. g to IMO instruments	
ENVIRONMENTALLY HAZARDOUS: <u>14.6. Special precautions for user</u> Unless specified otherwise, general <u>14.7. Maritime transport in bulk according</u> No dangerous good in sense of thes	measures for safe transport must be followed. g to IMO instruments	
ENVIRONMENTALLY HAZARDOUS: <u>14.6. Special precautions for user</u> Unless specified otherwise, general <u>14.7. Maritime transport in bulk according</u>	measures for safe transport must be followed. g to IMO instruments	
ENVIRONMENTALLY HAZARDOUS: 14.6. Special precautions for user Unless specified otherwise, general 14.7. Maritime transport in bulk according No dangerous good in sense of thes SECTION 15: Regulatory information	measures for safe transport must be followed. g to IMO instruments	<u>e</u>
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ENVIRONMENTALLY HAZARDOUS: 14.6. Special precautions for user Unless specified otherwise, general 14.7. Maritime transport in bulk according No dangerous good in sense of thes SECTION 15: Regulatory information 15.1. Safety, health and environmental reg EU regulatory information Authorisations (REACH, annex XIV): Substances of very high concern, St Phenol, dodecyl-, branched Restrictions on use (REACH, annex XV	measures for safe transport must be followed. <u>a to IMO instruments</u> se transport regulations. <u>gulations/legislation specific for the substance or mixtur</u> VHC (REACH, article 59):	<u>e</u>
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ENVIRONMENTALLY HAZARDOUS: 14.6. Special precautions for user Unless specified otherwise, general 14.7. Maritime transport in bulk according No dangerous good in sense of thes SECTION 15: Regulatory information 15.1. Safety, health and environmental regulatory information Authorisations (REACH, annex XIV): Substances of very high concern, S <sup>T</sup> Phenol, dodecyl-, branched Restrictions on use (REACH, annex XV Entry 3, Entry 30, Entry 75 National regulatory information Water hazard class (D): 15.2. Chemical safety assessment	measures for safe transport must be followed. <b>a to IMO instruments</b> se transport regulations. <b>gulations/legislation specific for the substance or mixtur</b> VHC (REACH, article 59): II):	<u>e</u>

This data sheet contains changes from the previous version in section(s): 2,3,5,6,7,8,9,10,12,15,16.

according to Regulation (EC) No 1907/2006

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#### Abbreviations and acronyms

Acute Tox: Acute toxicity Skin Corr: Skin corrosion 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 For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations). ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road ; ADN -European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ASTM -American Society for the Testing of Materials; ATE - Acute Toxicity Estimates; bw - Body weight; CAO - Cargo Aircraft Only; CAS - Chemical Abstracts Service; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DNEL - Derived No-Effect Level; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); EG - European Union; EN - European standards; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n;o;s; - Not Otherwise Specified; NFPA -National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; OECD - Organization for Economic Co-operation and Development; PBT - Persistent, Bioaccumulative and Toxic substance; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA -Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulation concerning the International Carriage of Dangerous Goods by Rail; RQ -Reportable Quantity; SADT - Self- Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TSCA - Toxic Substances Control Act (United States); UN -United Nations; vPvB - Very Persistent and Very Bioaccumulative

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]
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Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method
Relevant H and EUH s	statements (number and full text)
H302	Harmful if swallowed.
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.
H360F	May damage fertility.
H361f	Suspected of damaging fertility.
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.

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

according to Regulation (EC) No 1907/2006

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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 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 receiver of our product is singularly responsible for adhering to existing laws and regulations.

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