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

1.1 Product identifier		
Product name	:	PETAMO GHY 133 N (H)
Article-No.	:	094148
1.2 Relevant identified uses of the	e si	ubstance or mixture and uses advised against
Use of the Sub- stance/Mixture	:	Grease
Recommended restrictions on use	:	Restricted to professional users.
1.3 Details of the supplier of the s	safe	ety data sheet
Company	:	Klüber Lubrication München Geisenhausenerstr. 7 81379 München Deutschland Tel: +49 (0) 89 7876 0 Fax: +49 (0) 89 7876 333 info@klueber.com
E-mail address of person responsible for the SDS	:	mcm@klueber.com Material Compliance Management
National contact	:	Klüber Lubrication Nordic A/S Literbuen 9, 2740 Skovlunde Denmark Tel: +45 70 234277 Fax: +45 70 234200 klueber.dk@dk.klueber.com
1.4 Emergency telephone numbe	r	
Emergency telephone num- ber	:	+45 82 12 12 12 (Giftlinjen, Bispebjerg Hospital)
		+49 89 7876 700 (24 hrs)

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

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Long-term (chronic) aquatic hazard, Category 2 H411: Toxic to aquatic life with long lasting effects.

#### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :		
Hazard statements :	H411	Toxic to aquatic life with long lasting effects.
Precautionary statements :	Prevention: P273 Response:	Avoid release to the environment.
	P391	Collect spillage.

### **Additional Labelling**

EUH208

Contains Condensation products of fatty acids, tall oil with 2-amino-2ethylpropanediol. May produce an allergic reaction.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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

#### 3.2 Mixtures

Chemical nature

Mineral oil. Synthetic hydrocarbon oil polyurea

#### Components

Chemical name	CAS-No.	Classification	specific concen-	Concentration
	EC-No.		tration limit	(% w/w)
			M-Factor	
	Index-No.		Notes	



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	Registration number		Acute toxicity	
	0		estimate	
reaction product of diphenylme- thanediisocyanate, octylamine, oleyla-	430-980-9	Aquatic Chronic4; H413		>= 2,5 - < 10
mine and cyclohexyl- amine (1:1.58:0.32:0.097)	01-0000017722-71- 0001 01-0000017722-71- 0002			
	01-0000017722-71- 0000			
Phenol, isopropylated, phosphate (3:1)	68937-41-7 273-066-3	Repr.2; H361 STOT RE2; H373 Aquatic Chronic1;	M-Factor: /10	>= 1 - < 2,5
	01-2119535109-41- XXXX	H410		
Condensation prod- ucts of fatty acids, tall oil with 2-amino-2- ethylpropanediol	946-010-7	Skin Sens.1; H317		>= 0,1 - < 1
	01-2120770934-44- XXXX			
triphenyl phosphate	115-86-6 204-112-2	Aquatic Acute1; H400 Aquatic Chronic2; H411	M-Factor: 1/1	>= 0,25 - < 1
Substances with a work	place exposure limit :	1	1	
residual oils (petrole- um), hydrotreated	64742-57-0 265-160-8	Not classified	Natal	>= 50 - < 70
	649-470-00-4 01-2119489287-22- XXXX		Note L	

For explanation of abbreviations see section 16.

## **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

If inhaled

: Obtain medical attention.

Remove person to fresh air. If signs/symptoms continue, get medical attention.



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				Keep patient warm and at rest. If unconscious, place in recovery advice. Keep respiratory tract clear. If breathing is irregular or stopped tion.	
	In case	e of skin contact	:	Take off all contaminated clothing Get medical attention immediately persists. Wash clothing before reuse. Thoroughly clean shoes before re Wash off immediately with plenty	y if irritation develops and euse.
	In case	e of eye contact	:	Rinse immediately with plenty of for at least 10 minutes. If eye irritation persists, consult a	
If swallowed		:	Move the victim to fresh air. If unconscious, place in recovery advice. Keep respiratory tract clear. Do not induce vomiting without m Obtain medical attention. Never give anything by mouth to	edical advice.	
4.2	Most im	portant symptoms a	nd e	ffects, both acute and delayed	
	Sympto	oms	:	Allergic appearance	
	Risks		:	May cause an allergic skin reaction	on.
4.3 I	ndicati	on of any immediate	mec	lical attention and special treatn	nent needed
	Treatm	-	:	The first aid procedure should be with the doctor responsible for inc	established in consultation
SEC	CTION	5: Firefighting mea	sure	es	
5.1 I	Extingu	iishing media			
	-	e extinguishing media	:	Use water spray, alcohol-resistan bon dioxide.	t foam, dry chemical or car-
	Unsuita media	able extinguishing	:	High volume water jet	
5.2 \$	Special	hazards arising from	n the	substance or mixture	
	-	lous combustion prod-		Carbon oxides Nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus	



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### 5.3 Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Exposure to decomposi- tion products may be a hazard to health.
Further information	:	Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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

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

Personal precautions	:	Evacuate personnel to safe areas. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Do not breathe vapours, aerosols. Refer to protective measures listed in sections 7 and 8.
6.2 Environmental precautions		
Environmental precautions	:	Do not allow contact with soil, surface or ground water. If the product contaminates rivers and lakes or drains inform respective authorities.
6.3 Methods and material for con	tai	nment and cleaning up
Methods for cleaning up	:	Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For personal protection see section 8.

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

### 7.1 Precautions for safe handling

Advice on safe handling	<ul> <li>Avoid contact with skin and eyes. For personal protection see section 8. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.</li> <li>Smoking, eating and drinking should be prohibited in the application area. Wash hands and face before breaks and immediately after handling the product.</li> </ul>
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			Do not get in eyes or mouth or on Do not get on skin or clothing. Do not ingest. Do not repack. These safety instructions also app may still contain product residues. Keep container closed when not in	ly to empty packaging which
Hygiene measures :		:	Wash face, hands and any expose handling.	ed skin thoroughly after
7.2 Condi	tions for safe storag	e, incl	uding any incompatibilities	
	irements for storage and containers	:	Store in original container. Keep c use. Keep in a dry, cool and well-w which are opened must be careful to prevent leakage. Store in accord national regulations. Keep in proper	ventilated place. Containers ly resealed and kept upright dance with the particular
-	f <b>ic end use(s)</b> ific use(s)	:	Specific instructions for handling, r	not required.

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

## 8.1 Control parameters

## Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
residual oils (petro- leum), hydrotreat- ed	64742-57-0	GV (mist and particles)	1 mg/m3	DK OEL (2011-12-08)
triphenyl phos- phate	115-86-6	GV	3 mg/m3	DK OEL (2005-04-01)

## Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health ef- fects	Value
residual oils (petrole- um), hydrotreated	Workers	Inhalation	Long-term systemic effects	2,7 mg/m3
	Workers	Inhalation	Acute systemic ef- fects	5,6 mg/m3
	Workers	Skin contact	Long-term systemic effects	1 mg/kg
O,O,O-triphenyl phosphorothioate	Workers	Inhalation	Long-term systemic effects	1,39 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,4 mg/kg
Phenol, isopropylated, phosphate (3:1)	Workers	Inhalation	Long-term systemic effects	0,145 mg/m3



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		Workers	Inhalation	Acute systemic ef- fects	700 mg/m3
		Workers	Skin contact	Long-term systemic effects	0,416 mg/kg bw/day
		Workers	Skin contact	Acute systemic ef- fects	2000 mg/kg bw/day
		Workers	Skin contact	Acute local effects	16 mg/cm2

	WUIKEI3	Okin contact	Acute systemic er-	2000 mg/kg
			fects	bw/day
	Workers	Skin contact	Acute local effects	16 mg/cm2
Condensation prod- ucts of fatty acids, tall oil with 2-amino-2- ethylpropanediol	Workers	Dermal	Long-term systemic effects	8,33 mg/kg bw/day
triphenyl phosphate	Workers	Inhalation	Long-term systemic effects	5,2 mg/m3
	Workers	Skin contact	Long-term systemic effects	5,55 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
O,O,O-triphenyl phosphorothio- ate	Sewage treatment plant	1 mg/l
	Soil	2,37 mg/l
Phenol, isopropylated, phosphate (3:1)	Fresh water	0 mg/l
	Intermittent use/release	0,015 mg/l
	Marine water	0 mg/l
	Sewage treatment plant	100 mg/kg
	Fresh water sediment	0,185 mg/kg dry weight (d.w.)
	Marine sediment	0,018 mg/kg dry weight (d.w.)
	Soil	2,5 mg/kg dry weight (d.w.)
	Oral	1,85 mg/kg
triphenyl phosphate	Fresh water	0,004 mg/l
	Intermittent use/release	0,003 mg/l
	Marine water	0,0004 mg/l
	Sewage treatment plant	5 mg/l
	Fresh water sediment	1,103 mg/kg dry weight (d.w.)
	Marine sediment	0,11 mg/kg dry weight (d.w.)
	Soil	0,218 mg/kg dry weight (d.w.)
	Oral	16,667 mg/kg

#### 8.2 Exposure controls

## **Engineering measures**

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

#### Personal protective equipment

Eye protection : Safety glasses with side-shields



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Ma Br	protection aterial eak through time otective index	<ul> <li>Nitrile rubber</li> <li>&gt; 10 min</li> <li>Class 1</li> </ul>	
Re	emarks	<ul> <li>Wear protective gloves. The break through time of amongst other things on the material, the thickne type of glove and therefore has to be measured f case.</li> <li>The selected protective gloves have to satisfy the tions of Regulation (EU) 2016/425 and the standard derived from it.</li> </ul>	ess and the for each e specifica-
Resp	iratory protection	: Not required; except in case of aerosol formation	
Fil	lter type	: Filter type P	
Prote	ctive measures	<ul> <li>The type of protective equipment must be selected to the concentration and amount of the dangerous at the specific workplace.</li> <li>Choose body protection in relation to its type, to the tration and amount of dangerous substances, and cific work-place.</li> </ul>	the concen-

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

## 9.1 Information on basic physical and chemical properties

Physical state	:	paste
Colour	:	brown
Odour	:	characteristic
Odour Threshold	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flammability	:	Combustible Solids
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available



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F	Flash p	ooint	:	Not applicable	
ŀ	Auto-ig	nition temperature	:	No data available	
[		position temperature omposition tempera-	:	No data available	
þ	рH		:	Not applicable	
١	Viscosi Visc	ty cosity, dynamic	:	No data available	
	Visc	cosity, kinematic	:	Not applicable	
5	Solubili Wat	ty(ies) er solubility	:	insoluble	
	Solu	ubility in other solvents	6 :	No data available	
	Partitio octanol	n coefficient: n- /water	:	No data available	
١	Vapour	pressure	:	< 0,001 hPa (20 °C)	
F	Relative	e density	:	0,900 (20 °C) Reference substance: Water The value is calculated	
[	Density	/	:	0,90 g/cm3 (20 °C)	
E	Bulk de	ensity	:	No data available	
F	Relative	e vapour density	:	No data available	
9.2 O	ther in	formation			
E	Explosi	ves	:	Not explosive	
(	Oxidizir	ng properties	:	No data available	
S	Self-igr	nition	:	No data available	
E	Evapor	ation rate	:	No data available	
S	Sublima	ation point	:	No data available	



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SECTION 40. Stability and reactivity					
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: No dangerous reaction known under conditions of normal use.

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No hazards to be specially mentioned.

#### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

10.4	Conditio	ons to a	avoid

Hazardous reactions

Conditions to avoid	: No conditions to be specially mention	ed.
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### 10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

### **10.6 Hazardous decomposition products**

No decomposition if stored and applied as directed.

## **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

#### Acute toxicity

#### Product:

Acute oral toxicity	:	Remarks: This information is not available.
Acute inhalation toxicity	:	Remarks: This information is not available.
Acute dermal toxicity	:	Symptoms: Redness, Local irritation

### **Components:**

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Acute oral toxicity	:	LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 423 GLP: yes Assessment: The substance or mixture has no acute oral tox- icity
Acute dermal toxicity	:	LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity



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Phen	ol, isopropylated, p	hosphate	(3:1):	
Acute	e oral toxicity	: L[	050 (Rat): > 5.000 mg/kg	
Acute	inhalation toxicity	E	C50 (Rat): > 200 mg/l kposure time: 1 h est atmosphere: dust/mist	
Acute	e dermal toxicity		D50 (Rabbit): > 10.000 mg/kg LP: no	
Cond	lensation products	of fatty ac	ids, tall oil with 2-amino-2-eth	ylpropanediol:
Acute	e oral toxicity	M As	D50 (Rat): > 2.000 mg/kg ethod: OECD Test Guideline 42 ssessment: The substance or m ty	
Acute	e dermal toxicity	M As	D50 (Rat): > 2.000 mg/kg ethod: OECD Test Guideline 40 ssessment: The substance or m xicity	
tripho	enyl phosphate:			
Acute	e oral toxicity		050 (Rat): > 20.000 mg/kg ethod: OECD Test Guideline 40	)1
Acute	e inhalation toxicity	EX Te M As	C50 (Rat): > 200 mg/l kposure time: 1 h est atmosphere: dust/mist ethod: OECD Test Guideline 40 ssessment: The substance or m on toxicity	
Acute	e dermal toxicity		050 (Rabbit): > 10.000 mg/kg ethod: OECD Test Guideline 40	02
resid	ual oils (petroleum)	, hydrotre	ated:	
	e oral toxicity	: L[	D50 (Rat): > 5.000 mg/kg ethod: OECD Test Guideline 40	)1
Acute	e dermal toxicity		D50 (Rat): > 5.000 mg/kg ethod: OECD Test Guideline 40	02
Skin	corrosion/irritation			
<u>Prod</u> Rema		: TI	nis information is not available.	



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#### **Components:**

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

	:	Rabbit No skin irritation OECD Test Guideline 404
Result	:	No skin irritation
GLP	:	yes

#### Phenol, isopropylated, phosphate (3:1):

Species	:	Rabbit
Exposure time	:	72 h
Assessment	:	No skin irritation
Result	:	No skin irritation
GLP	:	no

#### Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Species	:	reconstructed human epidermis (RhE)
Assessment	:	No skin irritation
Result	:	No skin irritation

#### triphenyl phosphate:

Species	:	Rabbit
Assessment	:	No skin irritation
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
GLP	:	yes

#### residual oils (petroleum), hydrotreated:

Species	: Rabbit
Assessment	: No skin irritation
Method	: OECD Test Guideline 404
Result	: No skin irritation

#### Serious eye damage/eye irritation

#### Product:

Remarks

: This information is not available.

#### **Components:**

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Result	:	No eye irritation
GLP	:	yes



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### Phenol, isopropylated, phosphate (3:1):

Species	:	Rabbit
Assessment	:	No eye irritation
Result	:	No eye irritation
GLP	:	no

### Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Species	:	Rabbit
Assessment	:	No eye irritation
Result	:	No eye irritation

#### triphenyl phosphate:

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Result	:	No eye irritation
GLP	:	yes

#### residual oils (petroleum), hydrotreated:

Rabbit
No eye irritation
OECD Test Guideline 405
No eye irritation
1

#### Respiratory or skin sensitisation

#### Product:

Remarks

: This information is not available.

#### Components:

#### reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Test Type	:	Maximisation Test
Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.
GLP	:	yes

#### Phenol, isopropylated, phosphate (3:1):

Species :	:	Mouse
Assessment :	:	Did not cause sensitisation on laboratory animals.
Method :		OECD Test Guideline 429
Result :	:	Did not cause sensitisation on laboratory animals.
GLP :	:	yes



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ea pig s not cause skin sensitisation. D Test Guideline 406 s not cause skin sensitisation. ed: ea pig s not cause skin sensitisation. D Test Guideline 406 s not cause skin sensitisation. s not cause respiratory sensitisation. s not cause respiratory sensitisation.
<ul> <li>a not cause skin sensitisation.</li> <li>D Test Guideline 406</li> <li>a not cause skin sensitisation.</li> <li>ea pig</li> <li>a not cause skin sensitisation.</li> <li>D Test Guideline 406</li> <li>a not cause skin sensitisation.</li> <li>a not cause skin sensitisation.</li> </ul>
D Test Guideline 406 s not cause skin sensitisation. ed: ea pig s not cause skin sensitisation. D Test Guideline 406 s not cause skin sensitisation. s not cause respiratory sensitisation.
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D Test Guideline 406 s not cause skin sensitisation. s not cause respiratory sensitisation.
s not cause skin sensitisation. s not cause respiratory sensitisation.
s not cause respiratory sensitisation.
arks: No data available
arks: No data available
ediisocyanate, octylamine, oleylamine and cyclohexyl
Type: Ames test
system: Salmonella typhimurium
od: OECD Test Guideline 471
ult: negative
Turney Obvernegene about the test in with
Type: Chromosome aberration test in vitro system: Chinese hamster cells
nod: OECD Test Guideline 473
Ilt: negative
s on bacterial or mammalian cell cultures did not show
tth tth tth

## Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Genotoxicity in vitro	:	Remarks: In vitro tests did not show mutagenic effects
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-	enyl phosphate: toxicity in vitro		Test Type: reverse mutation assa	N/
Geno		•	Test system: Salmonella typhimu Metabolic activation: with and wit Method: OECD Test Guideline 47 Result: negative	rium hout metabolic activation
Germ sessr	cell mutagenicity- As- nent	:	Tests on bacterial or mammalian mutagenic effects.	cell cultures did not show
Carci	nogenicity			
Prod	uct:			
Rema	arks	:	No data available	
<u>Com</u>	ponents:			
-	enyl phosphate:			
Carci ment	nogenicity - Assess-	:	No evidence of carcinogenicity in	animal studies.
resid	ual oils (petroleum), ł	nydro	otreated:	
Carci ment	nogenicity - Assess-	:	Not classifiable as a human carci	nogen.
Repr	oductive toxicity			
Prod	uct:			
Effect	ts on fertility	:	Remarks: No data available	
Effect ment	ts on foetal develop-	:	Remarks: No data available	
<u>Com</u>	ponents:			
Phen	ol, isopropylated, pho	osph	ate (3:1):	
-	oductive toxicity - As-	:	- Fertility -	
sessr	nent		Some evidence of adverse effect fertility, and/or on development, b - Teratogenicity -	
			Some evidence of adverse effect fertility, and/or on development, b	
	-	fatty	v acids, tall oil with 2-amino-2-etl	nylpropanediol:
Repro sessr	oductive toxicity - As-	:	- Fertility -	
00331			Animal testing did not show any e	effects on fertility.
				a brand of



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#### triphenyl phosphate:

Effects on foetal develop- ment	:	Species: Rabbit Application Route: Oral General Toxicity Maternal: NOAEL: >= 200 mg/kg body weight Teratogenicity: NOAEL: >= 200 mg/kg body weight Developmental Toxicity: NOAEL: >= 200 mg/kg body weight Embryo-foetal toxicity: NOAEL: >= 200 mg/kg body weight Method: OECD Test Guideline 414 Result: No effects on fertility and early embryonic develop- ment were detected.
Reproductive toxicity - As-	:	- Fertility -
sessment		No toxicity to reproduction - Teratogenicity -
		No effects on or via lactation

#### STOT - single exposure

#### Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

#### STOT - repeated exposure

Components:

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexyl-
amine (1:1.58:0.32:0.097):

Assessment	:	The substance or mixture is not classified as specific target
		organ toxicant, repeated exposure.

### Phenol, isopropylated, phosphate (3:1):

Exposure routes	:	Ingestion
Target Organs	:	ovaries, Testes, Liver, Adrenal gland
Assessment	:	The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

#### Repeated dose toxicity

### Product:

Remarks : This information is not available.



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#### **Components:**

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Species	:	Rat
NOAEL	:	1.000 mg/kg
Application Route	:	Oral
Method	:	OECD Test Guideline 407

#### triphenyl phosphate:

Species NOAEL Application Route Method	::	Rat 105 mg/kg Oral OECD Test Guideline 408
Species NOAEL Application Route	:	Rabbit 1.000 mg/kg Dermal

### Aspiration toxicity

#### Product:

This information is not available.

### **Components:**

reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

No aspiration toxicity classification

## Phenol, isopropylated, phosphate (3:1):

No aspiration toxicity classification

### triphenyl phosphate:

No aspiration toxicity classification

### residual oils (petroleum), hydrotreated:

No aspiration toxicity classification

### **Further information**

### Product:

Remarks

: Information given is based on data on the components and the toxicology of similar products.



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## **SECTION 12: Ecological information**

### 12.1 Toxicity

Product:		
Toxicity to fish	:	Remarks: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available
Toxicity to algae/aquatic plants	:	Remarks: No data available
Toxicity to microorganisms	:	Remarks: No data available

#### **Components:**

#### reaction product of diphenylmethanediisocyanate, octylamine, oleylamine and cyclohexylamine (1:1.58:0.32:0.097):

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): > 100 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 GLP: yes
Toxicity to microorganisms	:	EC50 (activated sludge): > 1.000 mg/l Exposure time: 3 h Test Type: Respiration inhibition Method: OECD Test Guideline 209 GLP: yes

### Phenol, isopropylated, phosphate (3:1):

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 1,6 mg/l Exposure time: 96 h Test Type: static test Remarks: Information given is based on tests on the mixture itself.



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	xicity to daphnia and other latic invertebrates	· :	EC50 (Daphnia magna (Water fl Exposure time: 48 h Test Type: semi-static test Remarks: Information given is ba itself.	
To> pla	ticity to algae/aquatic nts	:	EC50 (Pseudokirchneriella subc mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 2 GLP: yes Remarks: Information given is ba itself.	201
To» icity	<pre>kicity to fish (Chronic tox- /)</pre>	:	NOEC: 0,0031 mg/l Exposure time: 33 d Species: Pimephales promelas ( Method: OECD Test Guideline 2	
aqu	cicity to daphnia and other natic invertebrates (Chron- oxicity)		NOEC: 0,0415 mg/l Exposure time: 21 d Species: Daphnia magna (Wate Method: OECD Test Guideline 2	
	Factor (Chronic aquatic city)	:	10	
trip	henyl phosphate:			
-	ticity to fish	:	LC50 (Oncorhynchus mykiss (ra Exposure time: 96 h	inbow trout)): 0,4 mg/l
	cicity to daphnia and other natic invertebrates	· :	EC50 (Daphnia magna (Water fl Exposure time: 48 h Test Type: static test	lea)): 0,36 mg/l
To» pla	ticity to algae/aquatic nts	:	NOEC (Pseudokirchneriella sub mg/l Exposure time: 96 h Method: OECD Test Guideline 2	
			EL10 (Pseudokirchneriella subc mg/l Exposure time: 96 h Method: OECD Test Guideline 2	
M-F icity	Factor (Acute aquatic tox- /)	:	1	
To>	cicity to microorganisms	:	NOEC (activated sludge): 100 m Exposure time: 28 h	ng/l



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Toxicity icity)	v to fish (Chronic tox-	:	NOEC: 0,037 mg/l Exposure time: 30 d Species: Oncorhynchus mykiss (	(rainbow trout)
	v to daphnia and other invertebrates (Chron- ty)		NOEC: 0,254 mg/l Exposure time: 21 d Species: Daphnia magna (Water Method: OECD Test Guideline 2	
M-Facto toxicity)	or (Chronic aquatic	:	1	
residua	al oils (petroleum), h	vdro	treated:	
Toxicity			LC50 (Pimephales promelas (fat Exposure time: 96 h Test Type: static test	head minnow)): > 100 mg/l
	to daphnia and other invertebrates	:	EC50 (Daphnia magna (Water fle Exposure time: 48 h Test Type: Immobilization	ea)): > 10.000 mg/l
2.2 Persist	tence and degradabi	lity		
Produc	<u>:t:</u>			
Biodegr	radability	:	Remarks: No data available	
Physico ity	-chemical removabil-	:	Remarks: No data available	
<u>Compo</u>	onents:			
	n product of dipheny (1:1.58:0.32:0.097):	/Ime	thanediisocyanate, octylamine,	oleylamine and cyclohexyl
	radability	:	Test Type: aerobic Inoculum: activated sludge Result: Not readily biodegradable Biodegradation: 23,9 % Exposure time: 28 d Method: OECD Test Guideline 30 GLP: yes	
Phenol	, isopropylated, pho	spha	ate (3:1):	
Biodegr	radability	:	Result: Not rapidly biodegradable Biodegradation: 17,9 % Exposure time: 28 d Method: OECD Test Guideline 3 GLP: yes	

## Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:



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E	Biodeg	radability	:	Result: Not rapidly biodegradable	
t	ripher	yl phosphate:			
E	Biodeg	radability	:	Test Type: aerobic Inoculum: activated sludge Result: Readily biodegradable. Biodegradation: 83 - 94 % Exposure time: 28 d Method: OECD Test Guideline 301C	
r	residu	al oils (petroleum), l	nydro	otreated:	
E	Biodeg	radability	:	Result: Not rapidly biodegradable	
12.3 I	Bioaco	cumulative potential			
<u>F</u>	Produc	<u>ot:</u>			
E	Bioacc	umulation	:	Remarks: This mixture contains no sub be persistent, bioaccumulating and tox This mixture contains no substance co persistent and very bioaccumulating (v	ic (PBT). nsidered to be very
<u>(</u>	Compo	onents:			
		on product of dipher (1:1.58:0.32:0.097):	nylmo	ethanediisocyanate, octylamine, oleyl	amine and cyclohexyl-
		n coefficient: n- l/water	:	log Pow: > 6 (20 °C) Method: OECD Test Guideline 117	
F	Pheno	l, isopropylated, ph	osph	ate (3:1):	
F	Partitio	n coefficient: n- l/water	:	log Pow: 4,92 - 5,17 (25 °C)	
C	Conde	nsation products of	fatty	v acids, tall oil with 2-amino-2-ethylpro	opanediol:
		umulation	:	Bioconcentration factor (BCF): < 100	
		n coefficient: n- I/water	:	log Pow: 9,01	
t	ripher	yl phosphate:			
	-	umulation	:	Species: Oryzias latipes (Orange-red k Exposure time: 18 d Concentration: 0,01 mg/l Bioconcentration factor (BCF): 144	tillifish)
		n coefficient: n- l/water	:	log Pow: 4,6 (20 °C)	



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#### 12.4 Mobility in soil

Product:		
Mobility	:	Remarks: No data available
Distribution among environ- mental compartments	:	Remarks: No data available

:

## 12.5 Results of PBT and vPvB assessment

Ρ	r	ο	d	u	С	t	:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

### **Components:**

#### Phenol, isopropylated, phosphate (3:1):

Assessment

Non-classified PBT substance. Non-classified vPvB substance.

### 12.6 Endocrine disrupting properties

#### Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

Product:

Additional ecological infor-	:	Toxic to aquatic life with long lasting effects.
mation		

### **SECTION 13: Disposal considerations**

13.1 Waste treatment methods	
Product	<ul> <li>The product should not be allowed to enter drains, water courses or the soil.</li> <li>Do not dispose of with domestic refuse.</li> <li>Dispose of as hazardous waste in compliance with local and national regulations.</li> </ul>
	Waste codes should be assigned by the user based on the application for which the product was used.



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Contaminated packaging		<ul> <li>Packaging that is not properly emptied must be disposed of the unused product.</li> <li>Dispose of waste product or used containers according to local regulations.</li> </ul>				
		The following Waste Codes are only s	uggestions:			
Waste Code		: used product, unused product 12 01 12*, spent waxes and fats				
		uncleaned packagings 15 01 10, packaging containing residu by hazardous substances	es of or contaminated			

## **SECTION 14: Transport information**

## 14.1 UN number or ID number

4	ADR	:	UN 3077
F	RID	:	UN 3077
I	MDG	:	UN 3077
L	ΑΤΑ	:	UN 3077
14.2 l	UN proper shipping name		
ļ	ADR	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Triaryl Phosphate Isopropylated, triphenyl phosphate)
F	RID	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Triaryl Phosphate Isopropylated, triphenyl phosphate)
I	MDG	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Triaryl Phosphate Isopropylated, triphenyl phosphate)
L	ΑΤΑ	:	Environmentally hazardous substance, solid, n.o.s. (Triaryl Phosphate Isopropylated, triphenyl phosphate)
14.3	Transport hazard class(es)		
ļ	ADR	:	9
F	RID	:	9
I	MDG	:	9
L	ΑΤΑ	:	9
14.4 I	Packing group		
,	ADR		



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Class	ng group ification Code rd Identification Number s		III M7 90 9	
Class	ng group ification Code rd Identification Number s		III M7 90 9	
<b>IMDG</b> Packi Label EmS	ng group s	:	III 9 F-A, S-F	
Packi aircra Packi	ng instruction (LQ) ng group	: : : :	956 Y956 III Miscellaneous	
Packi ger ai Packi	(Passenger) ng instruction (passen- rcraft) ng instruction (LQ) ng group s	: : :	956 Y956 III Miscellaneous	
14.5 Envii	onmental hazards			
<b>ADR</b> Envire	onmentally hazardous	:	yes	
<b>RID</b> Envire	onmentally hazardous	:	yes	
<b>IMDG</b> Marin	e pollutant	:	yes	
	(Passenger)	:	yes	
	(Cargo)	:	yes	

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### 14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.



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## **SECTION 15: Regulatory information**

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Appex XVII)

preparations and articles (Annex XVII)					
REACH - Candidate List of Su Concern for Authorisation (Arti (EU SVHC)	:	This product does not contain sub- stances of very high concern (Regu- lation (EC) No 1907/2006 (REACH), Article 57).			
REACH - List of substances su (Annex XIV) (EU. REACH - Annex XIV)	ubject to authorisation	:	Not applicable		
Regulation (EC) No 1005/2009 plete the ozone layer (EC 1005/2009)	:	Not applicable			
Regulation (EU) 2019/1021 on tants (recast) (EU POP)	:	Not applicable			
Regulation (EC) No 649/2012 ment and the Council concerni of dangerous chemicals (EU PIC)	:	Not applicable			
Seveso III: Directive 2012/18/EU of the European : E2 ENVIRONMENTAL HAZARDS Parliament and of the Council on the control of major-accident hazards involving dangerous sub- stances.					
MAL-Code-Number	: 4-3 (1993)				
Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industria emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 2,18 %					

## 15.2 Chemical safety assessment

This information is not available.



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### **SECTION 16: Other information**

Full text of H-Statements

H317	:	May cause an allergic skin reaction.		
H361	:	Suspected of damaging fertility or the unborn child.		
H373	:	May cause damage to organs through prolonged or repeated exposure if swallowed.		
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.		
H413	:	May cause long lasting harmful effects to aquatic life.		
Full text of other abbreviations				

Note L	:	The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO ex- tract as measured by IP 346 "Determination of polycyclic aro- matics in unused lubricating base oils and asphaltene free petroleum fractions - Dimethyl sulphoxide extraction refractive index method", Institute of Petroleum, London. This note ap- plies only to certain complex oil-derived substances in Part 3.
DK OEL	:	Denmark. Occupational Exposure Limits
DK OEL / GV	:	Long term exposure limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008: CMR - Carcinogen, Mutagen or Reproductive Toxicant: DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP -Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; 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; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quanti-



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tative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### **Further information**

Classification of the mixtur	e:	Classification procedure:
Aquatic Chronic 2	H411	Calculation method

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