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

1.1 Product identifier		
Product name	:	OKS 270
1.2 Relevant identified uses of	the s	substance or mixture and uses advised against
Use of the Sub- stance/Mixture	:	Lubricant
Recommended restrictions on use	:	Restricted to professional users.
1.3 Details of the supplier of the		-
Company	:	OKS Spezialschmierstoffe GmbH Ganghoferstr. 47 D-82216 Maisach-Gernlinden Tel.: +49 8142 3051 500 Fax.: +49 8142 3051 599
E-mail address of person responsible for the SDS National contact	:	mcm@oks-germany.com
1.4 Emergency telephone number Emergency telephone number	:	+49 8142 3051 517

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Short-term (acute) aquatic hazard, Category 1 H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Cat- H411: Tox egory 2

H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





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Signal word		:	Warning		
Hazard statements		:	H410	Very toxic to aquatic lit effects.	e with long lasting
Precautionary statements		:	Prevention: P273	Avoid release to the er	nvironment.
			Response: P391	Collect spillage.	

Additional Labelling

EUH208

Contains Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts. May produce an allergic reaction.

2.3 Other hazards

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

SECTION 3: Composition/information on ingredients

:

3.2 Mixtures

Chemical nature

Mineral oil. PTFE solid lubricant lithium soap

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration limits M-Factor Notes	Concentration (% w/w)
distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7 265-157-1 649-467-00-8	Asp. Tox.1; H304	Note L, Note H	>= 30 - < 50
Amines, N-tallow al- kyltrimethylenedi-, oleates	61791-53-5 263-186-4	Skin Irrit.2; H315 Eye Irrit.2; H319 STOT RE2; H373 Aquatic Acute1; H400 Aquatic Chronic1; H410	M-Factor: 10/1	>= 2,5 - < 10
zinc oxide	1314-13-2 215-222-5	Aquatic Acute1; H400 Aquatic Chronic1;	M-Factor: 1/1	>= 1 - < 2,5



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		030-013-00-7 01-2119463881-32- XXXX	H410		
di-C10-14	sulfonic acid, I-alkyl alcium salts	Not Assigned 939-603-7 01-2119978241-36- XXXX	Skin Sens.1B; H317	> 10 - 100 % Skin Sens.1B, H317	>= 0,1 - < 1
		place exposure limit :	1	I	1
hydrotrea	; (petroleum), ted heavy ; Baseoil — ed	64742-54-7 265-157-1 649-467-00-8 01-2119484627-25- XXXX		Note L	>= 20 - < 30
Ethene, 1 tetrafluoro ymer	,1,2,2- D-, homopol-	9002-84-0 618-337-2			>= 1 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled :	Remove person to fresh air. If signs/symptoms continue, get medical attention. Keep patient warm and at rest. If unconscious, place in recovery position and seek medical advice. Keep respiratory tract clear. If breathing is irregular or stopped, administer artificial respira- tion.
In case of skin contact :	Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. Get medical attention immediately if irritation develops and persists. Wash clothing before reuse. Thoroughly clean shoes before reuse.



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In cas	se of eye contact	:	Rinse immediately with plenty of wa for at least 10 minutes. If eye irritation persists, consult a sp	-
If swallowed		:	Move the victim to fresh air. If unconscious, place in recovery position and seek medica advice. Keep respiratory tract clear. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.	
4.2 Most i	important symptoms a	and e	effects, both acute and delayed	
Symp	otoms	:	No information available.	
Risks	3	:	None known.	
SECTION	N 5: Firefighting me	asur	es	
-	guishing media ble extinguishing media	a :	Use water spray, alcohol-resistant f bon dioxide.	oam, dry chemical or car-
Unsu media	itable extinguishing a	:	High volume water jet	
5.2 Specia	al hazards arising fro	m the	e substance or mixture	
Spec fightir	ific hazards during fire- ng	:	Fire may cause evolution of: Carbon oxides Halogenated compounds Metal oxides Nitrogen oxides (NOx) Oxides of phosphorus	
5.3 Advic	e for firefighters			
Spec	ial protective equipmen efighters	nt :	In the event of fire, wear self-contain Use personal protective equipment. tion products may be a hazard to be	Exposure to decomposi-
Furth	er information	:	Standard procedure for chemical fir Collect contaminated fire extinguish must not be discharged into drains.	



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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 conta	ainment 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	 Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Wash hands and face before breaks and immediately after handling the product. Do not get in eyes or mouth or on skin. Do not get on skin or clothing. Do not ingest. Do not repack. These safety instructions also apply to empty packaging which may still contain product residues. Keep container closed when not in use.
Hygiene measures	: Wash face, hands and any exposed skin thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage	:	Store in original container. Keep container closed when not in
areas and containers		use. Keep in a dry, cool and well-ventilated place. Containers
		which are opened must be carefully resealed and kept upright
		to prevent leakage. Store in accordance with the particular



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			national regulations. Keep in properly la	belled containers.
Storage class (TRGS 510)		:	11, Combustible Solids	
7.3 Specific end use(s) Specific use(s)		:	Specific instructions for handling, not re-	quired.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis	
distillates (petrole- um), hydrotreated heavy paraffinic	64742-54-7	AGW (Vapour and aerosols)	5 mg/m3	DE TRGS 900 (2018-06-07)	
Peak-limit: excur- sion factor (catego- ry)	4;(II)				
Further information	for the health compliance w	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., Sum of vapor and aerosols., When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
Distillates (petrole- um), hydrotreated heavy paraffinic; Baseoil — un- specified	64742-54-7	AGW (Vapour and aerosols)	5 mg/m3	DE TRGS 900 (2018-06-07)	
Peak-limit: excur- sion factor (catego- ry)	4;(II)				
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., Sum of vapor and aerosols., When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				
Ethene, 1,1,2,2- tetrafluoro-, homo- polymer	9002-84-0	AGW (Inhalable fraction)	10 mg/m3	DE TRGS 900 (2014-04-02)	
Peak-limit: excur- sion factor (catego- ry)	2;(II)				
Further information	General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values., Commission for dangerous substances, Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				
		AGW (Alveolate fraction)	1,25 mg/m3	DE TRGS 900	



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	(2014-04-02)
Peak-limit: excur- sion factor (catego- ry)	2;(II)
Further information	General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values., Commission for dangerous substances, Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).

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

Substance name	End Use	Exposure routes	Potential health ef-	Value		
			fects			
Distillates (petrole- um), hydrotreated heavy paraffinic; Baseoil — unspecified	Workers	Inhalation	Long-term local ef- fects	5,6 mg/m3		
Amines, N-tallow al- kyltrimethylenedi-, oleates	Workers	Skin contact	Long-term systemic effects	0,04 mg/kg		
	Workers	Inhalation	Long-term systemic effects	0,29 mg/m3		
zinc oxide	Workers	Inhalation	Long-term systemic effects	5 mg/m3		
	Workers	Inhalation	Long-term local ef- fects	0,5 mg/m3		
	Workers	Skin contact	Long-term systemic effects	83 mg/kg		
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	Workers	Inhalation	Long-term systemic effects	35,26 mg/m3		
	Workers	Inhalation	Long-term local ef- fects			
Remarks:	No hazard identified					
	Workers	Inhalation	Acute systemic ef- fects			
Remarks:	No hazard identified					
	Workers	Inhalation	Acute local effects			
Remarks:	No hazard ident	ified		•		
	Workers	Dermal	Long-term systemic effects	25 mg/kg		
	Workers	Dermal	Long-term local ef- fects			
Remarks:	No hazard identified					
	Workers	Dermal	Acute systemic ef- fects			
Remarks:	No hazard identified					
	Workers	Dermal	Acute local effects			
Remarks:	No hazard ident	ified				



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

Substance name	Environmental Compartment	Value
Distillates (petroleum), hy- drotreated heavy paraffinic; Baseoil — unspecified	Oral	9,33 mg/kg
Amines, N-tallow alkyltri- methylenedi-, oleates	Fresh water	0,00638 mg/l
	Marine water	0,000638 mg/l
	Intermittent use/release	0,00509 mg/l
	Microbiological Activity in Sewage Treat- ment Systems	98,6 mg/l
	Fresh water sediment	204 mg/kg
	Marine sediment	20,4 mg/kg
	Soil	9,93 mg/kg
zinc oxide	Fresh water	0,0206 mg/l
	Marine water	0,0061 mg/l
	Microbiological Activity in Sewage Treat- ment Systems	0,100 mg/l
	Fresh water sediment	117,8 mg/kg
	Marine sediment	56,5 mg/kg
	Soil	35,6 mg/kg
Benzenesulfonic acid, di-C10-14- alkyl derivs., calcium salts	Fresh water	0,1 mg/l
	Marine water	0,1 mg/l
	Fresh water sediment	45211 mg/kg
	Marine sediment	45211 mg/kg
	Microbiological Activity in Sewage Treat- ment Systems	1000 mg/l
	Air	
Remarks: No data a	vailable	
· · · · · · · · · · · · · · · · · · ·	Soil	36739 mg/kg

8.2 Exposure controls

none				
Personal protective equ	lipment			
Eye protection	: Tightly fitting safety goggles			
Hand protection				
Material	: Fluorinated rubber			
Protective index	: Class 1			
Remarks	: Wear protective gloves. The selected protective gloves hav to satisfy the specifications of Regulation (EU) 2016/425 an the standard EN 374 derived from it. The break through tim depends amongst other things on the material, the thickness			



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		and the type of glove and each case.	therefore has to be measured for
Respiratory protection		: Not required; except in ca	ase of aerosol formation.
Filter type		: Filter type A-P	
Protective measures		to the concentration and a the specific workplace. Choose body protection i	uipment must be selected according amount of the dangerous substance n relation to its type, to the concen- ngerous substances, and to the spe-

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	paste
Colour	:	beige
Odour	:	hydrocarbon-like
Odour Threshold	:	No data available
рН	:	Not applicable
Drop point	:	> 190 °C (1.013 hPa)
Boiling point/boiling range	:	No data available
Flash point	:	Not applicable
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Combustible Solids
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	< 0,01 hPa (20 °C)
Relative vapour density	:	No data available
Density	:	1,15 g/cm3



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	(20 °C)	
Bulk density	: No data available	
Solubility(ies) Water solubility	: insoluble	
Solubility in other solvents	: No data available	
Partition coefficient: n- octanol/water	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Viscosity Viscosity, dynamic	: No data available	
Viscosity, kinematic	: Not applicable	
Explosive properties	: Not explosive	
Oxidizing properties	: No data available	
9.2 Other information		
Sublimation point	: No data available	
Metal corrosion rate	: Not corrosive to metals	
Self-ignition	: not auto-flammable	

SECTION 10: Stability and reactivity

10.1 Reactivity No hazards to be specially mer	ntio	ned.
10.2 Chemical stability Stable under normal conditions	i.	
10.3 Possibility of hazardous read	tio	ns
Hazardous reactions	:	No dangerous reaction known under conditions of normal use.
10.4 Conditions to avoid		
Conditions to avoid	:	No conditions to be specially mentioned.
10.5 Incompatible materials		
Materials to avoid	:	No materials to be especially mentioned.



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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

Pr	oduc	ct:

Acute oral toxicity	: Remarks: This information is not ava	ailable.
Acute inhalation toxicity	: Remarks: This information is not ava	ailable.
Acute dermal toxicity	: Remarks: This information is not ava	ailable.

Components:

distillates (petroleum), hydrotreated heavy paraffinic:

Acute oral toxicity	:	LD50 Oral (Rat): > 5.000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 5.000 mg/kg

Amines, N-tallow alkyltrimethylenedi-, oleates:

Acute oral toxicity :	LD50 (Rat): > 5.000 mg/kg
zinc oxide:	
Acute oral toxicity :	LD50 (Rat): > 5.000 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity :	LC50 (Rat): > 5,7 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhala- tion toxicity
Acute dermal toxicity :	LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 402 GLP: yes Assessment: The substance or mixture has no acute dermal toxicity

Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts:



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Acute	oral toxicity	:	LD50 (Rat): > 5.000 mg/kg	
Acute	inhalation toxicity	:	LC50 (Rat): > 1,9 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mition toxicity	ixture has no acute inhala-
Acute	dermal toxicity	:	LD50 (Rat): > 2.000 mg/kg Assessment: The substance or m toxicity	ixture has no acute dermal
Distil	lates (netroleum) b	vdrotr	eated heavy paraffinic; Baseoil –	- unspecified:
	oral toxicity	:	LD50 (Rat): > 5.000 mg/kg Method: OECD Test Guideline 40 GLP: yes	
Acute	inhalation toxicity	:	LC50 (Rat): > 5,53 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 40 Assessment: The substance or m tion toxicity	
Acute	dermal toxicity	:	LD50 (Rabbit): > 5.000 mg/kg Method: OECD Test Guideline 40	2
Ether	ne, 1,1,2,2-tetrafluor	o-, hor	nopolymer:	
	oral toxicity	:	• •	1
Skin	corrosion/irritation			
Prod	uct:			
	arks: This information	is not	available.	
<u>Com</u>	oonents:			
Speci Asses	es, N-tallow alkyltrii es: Rabbit ssment: Irritating to sk t: Irritating to skin.	-	enedi-, oleates:	
_	oxide:			
Asses Metho	es: Rabbit ssment: No skin irritat od: OECD Test Guide t: No skin irritation		14	



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Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts:

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

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

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

Ethene, 1,1,2,2-tetrafluoro-, homopolymer:

Species: Rabbit Assessment: No skin irritation Result: No skin irritation

Serious eye damage/eye irritation

Product:

Remarks: This information is not available.

Components:

Amines, N-tallow alkyltrimethylenedi-, oleates:

Species: Rabbit Assessment: Irritating to eyes. Method: OECD Test Guideline 405 Result: Irritating to eyes.

zinc oxide:

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

Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts:

Assessment: No eye irritation Method: OECD Test Guideline 405 Result: No skin irritation

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

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



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Ethene, 1,1,2,2-tetrafluoro-, homopolymer:

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

Respiratory or skin sensitisation

Product:

Remarks: This information is not available.

Components:

Amines, N-tallow alkyltrimethylenedi-, oleates:

Assessment: Does not cause skin sensitisation. Result: Does not cause skin sensitisation.

zinc oxide:

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

Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts:

Assessment: Probability or evidence of low to moderate skin sensitisation rate in humans Result: Probability or evidence of low to moderate skin sensitisation rate in humans

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

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

Ethene, 1,1,2,2-tetrafluoro-, homopolymer:

Assessment: Did not cause sensitisation on laboratory animals. Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Product:

Genotoxicity in vitro	:	Remarks: No data available
Genotoxicity in vivo	:	Remarks: No data available



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Components:

Amines, N-tallow alkyltrimet	ylenedi-, oleates:			
Germ cell mutagenicity- As- sessment	: Tests on bacterial or mammalian cell cultures did not sho mutagenic effects.	sw		
zinc oxide:				
Germ cell mutagenicity- As- sessment	: Tests on bacterial or mammalian cell cultures did not she mutagenic effects.	wc		
Benzenesulfonic acid, di-C1	-14-alkyl derivs., calcium salts:			
Genotoxicity in vitro	: Test Type: Microbial mutagenesis assay (Ames test) Species: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative	'n		
Carcinogenicity				
<u>Product:</u> Remarks: No data available				
Components:				
distillates (petroleum), hydro	treated heavy paraffinic:			
Carcinogenicity - Assess- ment	: Not classifiable as a human carcinogen.			
Amines, N-tallow alkyltrimet	ylenedi-, oleates:			
Carcinogenicity - Assess- ment	No evidence of carcinogenicity in animal studies.			
zinc oxide:				
Carcinogenicity - Assess- ment	: Not classifiable as a human carcinogen.			
Distillates (petroleum), hydro	treated heavy paraffinic; Baseoil — unspecified:			
Carcinogenicity - Assess- ment				
Ethene, 1,1,2,2-tetrafluoro-, homopolymer:				
	: Not classifiable as a human carcinogen.			



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Repro	oductive toxicity			
Produ	uct:			
-	s on fertility	:	Remarks: No data available	
Effect ment	s on foetal develop-	:	Remarks: No data available	
<u>Comp</u>	oonents:			
Amin	es, N-tallow alkyltrin	nethy	enedi-, oleates:	
Repro sessn	oductive toxicity - As- nent	:	No toxicity to reproduction No toxicity to reproduction	
zinc o	oxide:			
Repro sessn	oductive toxicity - As- nent	:	No toxicity to reproduction No toxicity to reproduction	
Benz	enesulfonic acid, di-	C10-1	4-alkyl derivs., calcium salts:	
Repro sessn	oductive toxicity - As- nent	:	No toxicity to reproduction No toxicity to reproduction	
Distil	lates (petroleum), hy	drotr	eated heavy paraffinic; Baseoil —	unspecified:
Repro sessn	oductive toxicity - As- nent	:	No toxicity to reproduction	
STOT	- single exposure			
<u>Comp</u>	oonents:			
Amin	es, N-tallow alkyltrin	nethy	enedi-, oleates:	
Asses expos		e or m	ixture is not classified as specific tar	get organ toxicant, single
zinc o	oxide:			
Asses expos		e or m	ixture is not classified as specific tar	get organ toxicant, single

Ethene, 1,1,2,2-tetrafluoro-, homopolymer:

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

STOT - repeated exposure

Components:

Amines, N-tallow alkyltrimethylenedi-, oleates:

Exposure routes: Ingestion

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Assessment: May cause damage to organs through prolonged or repeated exposure.

zinc oxide:

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

Ethene, 1,1,2,2-tetrafluoro-, homopolymer:

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

Repeated dose toxicity

Product: Remarks: This information is not available.

Aspiration toxicity

<u>Product:</u> This information is not available.

Components:

distillates (petroleum), hydrotreated heavy paraffinic:

May be fatal if swallowed and enters airways.

May be harmful if swallowed and enters airways.

zinc oxide:

No aspiration toxicity classification

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

No aspiration toxicity classification

Ethene, 1,1,2,2-tetrafluoro-, homopolymer:

No aspiration toxicity classification

Further information

Product:

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

Components:

distillates (petroleum), hydrotreated heavy paraffinic:

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



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products.

SECTION 12: Ecological information

12.1 Toxicity

<u>Product:</u> Toxicity to fish	:	Remarks: Very toxic to aquatic organisms.
	•	
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available
Toxicity to algae	:	Remarks: No data available
Toxicity to microorganisms	:	Remarks: No data available
Components:		
Amines, N-tallow alkyltrimet	hy	lenedi-, oleates:
Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): > 0,1 - 1 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 0,1 - 1 mg/l Exposure time: 48 h
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 0,01 - 0,1 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Short-term (acute) aquatic hazard)	:	10
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	EC10: > 0,1 - 1 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: Reproduction Test Method: OECD Test Guideline 211
M-Factor (Long-term (chron- ic) aquatic hazard)	:	1
Ecotoxicology Assessment Short-term (acute) aquatic hazard	:	Very toxic to aquatic life.



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Long [.] hazaı	-term (chronic) aquatic rd	:	Very toxic to aquatic life with long las	ting effects.	
	oxide: ity to fish	:	LC50 (Danio rerio (zebra fish)): 1,55 Exposure time: 96 h Test Type: static test	mg/l	
Toxicity to daphnia and other aquatic invertebrates		• :	EC50 (Daphnia magna (Water flea)): 1 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202		
Toxicity to algae		:	EC50 (Pseudokirchneriella subcapita mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 GLP: yes	ta (green algae)): 0,136	
	ctor (Short-term (acute) tic hazard)	:	1		
Toxic	Toxicity to microorganisms		EC50 (activated sludge): > 1.000 mg/ Exposure time: 3 h Method: OECD Test Guideline 209 GLP: yes	1	
aquat	Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)		0,04 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea Test Type: semi-static test Method: OECD Test Guideline 211)	
	ctor (Long-term (chron- juatic hazard)	:	1		
Benz	enesulfonic acid, di-C	10-1	4-alkyl derivs., calcium salts:		
	ity to fish	:	LC50 (Oncorhynchus mykiss (rainbov Exposure time: 96 h Method: OECD Test Guideline 203	w trout)): > 100 mg/l	
	ity to daphnia and other tic invertebrates	• :	(Daphnia magna (Water flea)): > 100 Exposure time: 48 h Method: OECD Test Guideline 202) mg/l	
Toxic	Toxicity to algae		NOELR (Desmodesmus subspicatus Exposure time: 72 h Method: OECD Test Guideline 201	(green algae)): 100 mg	
			EL50 (Desmodesmus subspicatus (g	reen algae)): > 100 mg	



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			Exposure time: 72 h Method: OECD Test Guideline 201	
Τοχία	city to microorganisms	:	EC50 (activated sludge): > 10.000 r Exposure time: 3 h Method: OECD Test Guideline 209	ng/l
Disti	llates (petroleum), hyd	rotr	eated heavy paraffinic; Baseoil — ι	unspecified:
Τοχία	city to fish	:	LC50 (Pimephales promelas (fathea Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 GLP: yes	ad minnow)): > 100 mg/l
	city to daphnia and other tic invertebrates	· :	EC50 (Daphnia magna (Water flea)) Exposure time: 48 h Test Type: Immobilization Method: OECD Test Guideline 202 GLP: yes): > 10.000 mg/l
aqua	city to daphnia and other tic invertebrates (Chron- cicity)		NOEC: 10 mg/l Exposure time: 21 d Species: Daphnia magna (Water fle Test Type: semi-static test Method: OECD Test Guideline 211 GLP: yes	a)
12.2 Pers	istence and degradabi	lity		
Prod	luct:			
Biode	egradability	:	Remarks: No data available	
Phys ity	ico-chemical removabil-	:	Remarks: No data available	
Com	ponents:			
Amir	nes, N-tallow alkyltrime	ethy	enedi-, oleates:	
Biode	egradability	:	Result: rapidly biodegradable	
zinc	oxide:			
Biode	egradability	:	Remarks: The methods for determine not applicable to inorganic substance	
Benz	zenesulfonic acid, di-C	10-1	4-alkyl derivs., calcium salts:	
	egradability	:	Result: Not readily biodegradable. Biodegradation: 8 % Exposure time: 28 d Method: OECD Test Guideline 301)



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Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Biodegradability	:	Test Type: aerobic Inoculum: activated sludge Result: Not rapidly biodegradable Biodegradation: 3 % Exposure time: 28 d Method: OECD Test Guideline 301B
		Method: OECD Test Guideline 301B GLP: yes

12.3 Bioaccumulative potential

Product:

Bioaccumulation	:	Remarks: This mixture contains no substance considered to
		be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very
		persistent and very bioaccumulating (vPvB).

Components:

Amines, N-tallow alkyltrimethylenedi-, oleates:					
Bioaccumulation : Remarks: Bioaccumulation is unlikely.					
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts:					

Bioaccumulation	:	Bioconcentration factor (BCF): 70,8
Partition coefficient: n- octanol/water	:	log Pow: 26,22 (20 °C)

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil — unspecified:

Partition coefficient: n- : log Pow: > 2 octanol/water

12.4 Mobility in soil

<u>Product:</u> Mobility	:	Remarks: No data available
Distribution among environ- mental compartments	:	Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

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



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	-			
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<u>Com</u>	ponents:			
Amir	nes, N-tallow alkyltrir	nethy	lenedi-, oleates:	
Asse	ssment	:	Non-classified PBT substance. No stance.	on-classified vPvB sub-
zinc	oxide:			
Asse	ssment	:	Remarks: Not applicable	
D'- (1				
Disti	llates (petroleum), hy	yaroti	eated heavy paraffinic; Baseoil –	- unspecified:
Asse	ssment	:	Non-classified vPvB substance. N stance.	on-classified PBT sub-
Ethe	ne, 1,1,2,2-tetrafluor	o-, ho	mopolymer:	
Asse	ssment	:	Non-classified vPvB substance. N stance.	on-classified PBT sub-
12.6 Othe	er adverse effects			
Prod	uct:			
	ional ecological infor-	:	Very toxic to aquatic organisms, n effects in the aquatic environment	, ,

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Product	The product should not be allowed to enter drains, water courses or the soil. Do not dispose of with domestic refuse. Dispose of as hazardous waste in compliance with local and national regulations.
	Waste codes should be assigned by the user based on the application for which the product was used.
Contaminated packaging :	Packaging that is not properly emptied must be disposed of as the unused product. Dispose of waste product or used containers according to local regulations.
	The following Waste Codes are only suggestions:



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SECTION 14: Transport information

14.1 UN number		
ADR	:	UN 3077
IMDG	:	UN 3077
ΙΑΤΑ	:	UN 3077
14.2 UN proper shipping name		
ADR	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (fatty amine derivative)
IMDG	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (fatty amine derivative)
ΙΑΤΑ	:	Environmentally hazardous substance, solid, n.o.s. (fatty amine derivative)
14.3 Transport hazard class(es)		
ADR	:	9
IMDG	:	9
ΙΑΤΑ	:	9
14.4 Packing group		
ADR Packing group Classification Code Hazard Identification Number Labels		III M7 90 9
IMDG Packing group Labels EmS Code	: : :	III 9 F-A, S-F
IATA (Cargo) Packing instruction (cargo aircraft) Packing instruction (LQ) Packing group	:	956 Y956 III
Labels IATA (Passenger) Packing instruction (passen- ger aircraft) Packing instruction (LQ) Packing group Labels	: : : :	Class 9 - Miscellaneous dangerous substances and articles 956 Y956 III Class 9 - Miscellaneous dangerous substances and articles
AAE England and all have the		

14.5 Environmental hazards



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ADI Env	R ironmentally hazardous	: yes	
IMC Mar	G ine pollutant	: yes	
	A (Passenger) ironmentally hazardous	: yes	
	A (Cargo) ironmentally hazardous	: yes	
•	ecial precautions for u special precautions requ		
	nsport in bulk accordi narks	g to Annex II of Marpol and the IBC Code : Not applicable for product as supplied.	

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

e			
	REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	This product does not contain sub- stances of very high concern (Regu- lation (EC) No 1907/2006 (REACH), Article 57).
	REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable
	Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
	Regulation (EC) No 850/2004 on persistent organic pol- lutants	:	Not applicable
	Regulation (EC) No 649/2012 of the European Parlia- ment and the Council concerning the export and import of dangerous chemicals	:	Not applicable
	REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	:	Not applicable

E1

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity	Quantity Z
E1	ENVIRONMENTAL	100 t	200 t
	HAZARDS		



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	Vater contaminating class Germany)	: WGK 2 obviously hazardous to water Classification according to AwSV, Annex 1 (5.2)	
Т	ΓA Luft List (Germany)	: Total dust: others: 35,14 %	
		Inorganic substances in powdered form: Not applicable Inorganic substances in vapour or gaseous form: Not applicable Organic Substances: portion Class 1: 0,03 % others: 64,83 %	
		Carcinogenic substances: Not applicable Mutagenic: Not applicable Toxic to reproduction: Not applicable	
V	/olatile organic compounds	 Directive 2010/75/EU of 24 November 2010 on industria emissions (integrated pollution prevention and control) Remarks: Not applicable 	al

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Full text of H-Statements

H315 : H317 :	May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.
	May cause damage to organs through prolonged or repeated exposure if swallowed.
	Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

: The classification and labelling shown for this substance ap-



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Note L	-	plies to the hazardous property(ies) indi- statement(s) in combination with the haz category(ies) shown. The requirements facturers, importers or downstream user apply to all other hazard classes and ca classes where the route of exposure or fects leads to a differentiation of the clas ard class, the manufacturer, importer or required to consider the routes of expos the effects not already considered. The the requirements of Article 17 and of set shown that the substance contains less tract as measured by IP 346 "Determina matics in unused lubricating base oils ar petroleum fractions - Dimethyl sulphoxic index method", Institute of Petroleum, Le plies only to certain complex oil-derived	zard class(es) and of Article 4 for manu- rs of this substance tegories. For hazard the nature of the ef- ssification of the haz- downstream user is ure or the nature of final label shall follow ction 1.2 of Annex I. not apply if it can be than 3 % DMSO ex- ation of polycyclic aro- nd asphaltene free de extraction refractive ondon. This note ap-

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; AICS - Australian Inventory of Chemical Substances; 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 - (Quantitative) 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



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Classification of the mixture:		Classification procedure:
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 2	H411	Calculation method

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