

Version	Revision Date:	Date of last issue: 16.12.2022	Print Date:
2.0	14.06.2023	Date of first issue: 01.07.2016	14.06.2023

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

1.1 Product identifier		
Product name	:	OKS 4220
1.2 Relevant identified	I uses of the s	substance or mixture and uses advised against
Use of the Substance/Mixture		Lubricant
Recommended res	strictions :	Restricted to professional users.
1.3 Details of the supp	lier of the saf	ety data sheet
Company	:	OKS Spezialschmierstoffe GmbH
		Ganghoferstr. 47 D-82216 Maisach-Gernlinden
		Tel.: +49 8142 3051 500
		Fax.: +49 8142 3051 599
		info@oks-germany.com
E-mail address of p	nerson .	mcm@oks-germany.com
responsible for the		Material Compliance Management
·		
National contact	:	
1.4 Emergency teleph	one number	
=		

#### г. cy talanh

Emergency telephone	:	+49 8142 3051 517
number		

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)			
Eye irritation, Category 2	H319: Causes serious eye irritation.		
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.		





2.0 2.2 Label	14.06.2023	Date of first issue: 01.07.2016	14.06.2023	
Version	Revision Date:	Date of last issue: 16.12.2022	Print Date:	

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

Hazard pictograms	:		
Signal word	:	Warning	
Hazard statements	:	H319 H335	Causes serious eye irritation. May cause respiratory irritation.
Precautionary statements	:	Prevention: P264 P271 P280	Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/ face protection.
		<b>Response:</b> P304 + P340 + P3	air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel
		P337 + P313	unwell. If eye irritation persists: Get medical advice/ attention.
		<b>Storage:</b> P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

#### Hazardous components which must be listed on the label:

 $\label{eq:poly_constraint} Poly[oxy[trifluoro(trifluoromethyl)-1,2-ethanediyl]], \ \alpha-(1,1,2,2,2-pentafluoroethyl)-\omega-[tetrafluoro(trifluoromethyl)ethoxy]-$ 

#### 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.





Version	Revision Date:	Date of last issue: 16.12.2022	Print Date:
2.0	14.06.2023	Date of first issue: 01.07.2016	14.06.2023

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

#### 3.2 Mixtures

Chemical nature

: perfluorinated polyether oil PTFE

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)
Poly[oxy[trifluoro(triflu oromethyl)-1,2- ethanediyl]], α- (1,1,2,2,2- pentafluoroethyl)-ω- [tetrafluoro(trifluorome thyl)ethoxy]-	60164-51-4 611-940-1	Eye Irrit.2; H319 STOT SE3; H335		>= 50 - < 70
disodium sebacate	17265-14-4 241-300-3 01-2120762063-61- XXXX	Eye Irrit.2; H319		>= 1 - < 10
Substances with a work	place exposure limit :			
Ethylene, tetrafluoro-, polymer	9002-84-0 618-337-2	Not classified		>= 20 - < 30

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





<b>UKS 422</b>	20			
Version 2.0	Revision Date: 14.06.2023	Date of last issue: 16.12.2022 Date of first issue: 01.07.2016	Print Date: 14.06.2023	
		respiration.		
In case of skin contact		<ul> <li>Take off all contaminated clothing immediately.</li> <li>Wash off immediately with soap and plenty of water.</li> <li>Get medical attention immediately if irritation develops and persists.</li> <li>Wash clothing before reuse.</li> <li>Thoroughly clean shoes before reuse.</li> </ul>		
In case of eye contact		: Rinse immediately with plenty for at least 10 minutes. Seek medical advice.	of water, also under the eyelids,	
If swallowed		<ul> <li>Move the victim to fresh air.</li> <li>If unconscious, place in recovadvice.</li> <li>Keep respiratory tract clear.</li> <li>Do not induce vomiting withou</li> <li>Never give anything by mouth</li> </ul>		

#### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms	: No information available.
Risks	: None known.

# 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	High volume water jet

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

Hazardous combustion	: Carbon oxides
products	Nitrogen oxides (NOx)
	Halogenated compounds
	Metal oxides

#### 5.3 Advice for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.





• • • • • • • • • • • • • • • • • • • •			
Version 2.0	Revision Date: 14.06.2023	Date of last issue: 16.12.2022 Date of first issue: 01.07.2016	Print Date: 14.06.2023
for firefighters		Use personal protective equipmer decomposition products may be a	
Furth	er information	: Standard procedure for chemical	fires.

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

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

Personal precautions	<ul> <li>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). Avoid breathing dust. Refer to protective measures listed in sections 7 and 8.</li> </ul>

#### 6.2 Environmental precautions

Environmental precautions	:	Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.
---------------------------	---	---

#### 6.3 Methods and material for containment 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:Do not use in areas without adequate ventilation.<br/>In case of insufficient ventilation, wear suitable respiratory<br/>equipment.<br/>Avoid contact with skin and eyes.<br/>For personal protection see section 8.<br/>Smoking, eating and drinking should be prohibited in the<br/>application area.<br/>Wash hands and face before breaks and immediately after<br/>handling the product.<br/>Do not get in eyes or mouth or on skin.<br/>Do not get on skin or clothing.<br/>Do not ingest.<br/>Do not repack.





OKS 4220							
Version 2.0	Revision Date: 14.06.2023		e of last issue: 16.12.2022 e of first issue: 01.07.2016	Print Date: 14.06.2023			
			These safety instructions also apply to may still contain product residues. Keep container closed when not in us				
Hygiene measures		:	Wash face, hands and any exposed s handling.	kin thoroughly after			
7.2 Condit	ions for safe storage	ə, inc	luding any incompatibilities				
Requirements for storage areas and containers		:	Store in original container. Keep contause. Keep in a dry, cool and well-vent which are opened must be carefully reto prevent leakage. Store in accordan national regulations. Keep in properly	ilated place. Containers esealed and kept upright ce with the particular			
Storag	ge class (TRGS 510)	:	13, Non Combustible Solids				
7.3 Specific end use(s) Specific use(s)		:	Specific instructions for handling, 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			
Ethylene, tetrafluoro-, polymer	9002-84-0	AGWTime Weighted Average (Inhalable fraction)	10 mg/m3	DE TRGS 900 (2020-03-30)			
	Peak-limit: ex	cursion factor (categ	ory): 2;(II)				
	Further inform	Further information: When there is compliance with the OEL and biological					
	tolerance valu	tolerance values, there is no risk of harming the unborn child					
		AGWTime Weighted Average (Alveolate fraction)	1,25 mg/m3	DE TRGS 900 (2020-03-30)			
	Peak-limit: ex	Peak-limit: excursion factor (category): 2;(II)					
		Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child					
		BMAssessment scale (Alveolar dust fraction)	0,5 mg/m3	DE TRGS 527 (2020-02-19)			

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





Version	Revision Date: 14.06.2023	Date of last issue: 16.12.2022	Print Date:
2.0		Date of first issue: 01.07.2016	14.06.2023

Substance name	End Use	Exposure routes	Potential health effects	Value
disodium sebacate	Workers	Skin contact	Long-term systemic effects	10 mg/kg
	Workers	Inhalation	Long-term systemic effects	35,26 mg/m3

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

Substance name	Environmental Compartment	Value
disodium sebacate	Fresh water	0,018 mg/l
	Marine water	0,002 mg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	0,548 mg/kg
	Marine sediment	0,055 mg/kg
	Soil	0,099 mg/kg

#### 8.2 Exposure controls

Engineering measures Effective exhaust ventilation system					
Personal protective equipm	nent				
Eye/face protection	:	Safety glasses with side-shields			
Hand protection Material Break through time Protective index	:	Nitrile rubber > 10 min Class 1			
Remarks	:	For prolonged or repeated contact use protective gloves. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.			
Skin and body protection	:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.			
Respiratory protection	:	Not required; except in case of aerosol formation.			
Filter type	:	Filter type A-P			
Protective measures	:	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.			





Version	Revision Date:	Date of last issue: 16.12.2022	Print Date:
2.0	14.06.2023	Date of first issue: 01.07.2016	14.06.2023

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

## 9.1 Information on basic physical and chemical properties

Physical state	:	solid
Colour	:	white
Odour	:	odourless
Odour Threshold	:	No data available
	:	Decomposes without melting.
Boiling point/boiling range	:	No data available
Flammability (solid, gas)	:	Will not burn
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition temperature	:	> 280 °C
рН	:	Not applicable substance/mixture is non-soluble (in water)
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	Not applicable
Solubility(ies) Water solubility	:	insoluble
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Vapour pressure	:	< 0,001 hPa (20 °C)



## SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



## **OKS 4220**

Version 2.0	Revision Date: 14.06.2023	Date of last issue: 16.12.2022 Date of first issue: 01.07.2016	Print Date: 14.06.2023
Relat	tive density	: 1,92 (20 °C) Reference substance: Water The value is calculated	
Dens	ity	: 1,92 g/cm3 (20 °C)	
Bulk	density	: No data available	
Relat	tive vapour density	: No data available	
9.2 Other	information		
Explo	osives	: Not explosive	
Oxidi	zing properties	: No data available	
Self-i	gnition	: No data available	
Meta	l corrosion rate	: Not corrosive to metals	
Evap	oration rate	: No data available	
Subli	mation point	: No data available	

## **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

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.

## **10.6 Hazardous decomposition products**

>280 °C danger of forming toxic fluorine-containing pyrolysis products.





Version	Revision Date:	Date of last issue: 16.12.2022	Print Date:
2.0	14.06.2023	Date of first issue: 01.07.2016	14.06.2023

### **SECTION 11: Toxicological information**

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity		
Product:		
Acute oral toxicity	:	Remarks: This information is not available.
Acute inhalation toxicity	:	Remarks: Irritating to respiratory system.
		Symptoms: Inhalation may provoke the following symptoms:, Local irritation, Respiratory disorders
Acute dermal toxicity	:	Remarks: This information is not available.
Components:		
Poly[oxy[trifluoro(trifluoro [tetrafluoro(trifluoromethyl		hyl)-1,2-ethanediyl]], α-(1,1,2,2,2-pentafluoroethyl)-ω- ιoxy]-:
Acute oral toxicity	:	LD50 (Rat): > 25.000 mg/kg
Acute dermal toxicity	:	LD50 (Rabbit): > 17.000 mg/kg
disodium sebacate:		
Acute oral toxicity	:	LD50 (Rat): > 5.000 mg/kg Method: OECD Test Guideline 401 GLP: no
Acute dermal toxicity	:	LD50 (Rabbit): > 2.000 mg/kg Method: OECD Test Guideline 402 GLP: yes Assessment: The substance or mixture has no acute dermal toxicity
Ethylene, tetrafluoro-, poly	mer	-
Acute oral toxicity	:	LD50 (Rat): > 5.000 mg/kg Method: OECD Test Guideline 401
Skin corrosion/irritation		
<u>Product:</u> Remarks	:	This information is not available.





Version	Revision Date: 14.06.2023	Date of last issue: 16.12.2022	Print Date:
2.0		Date of first issue: 01.07.2016	14.06.2023

#### **Components:**

# Poly[oxy[trifluoro(trifluoromethyl)-1,2-ethanediyl]], $\alpha$ -(1,1,2,2,2-pentafluoroethyl)- $\omega$ -[tetrafluoro(trifluoromethyl)ethoxy]-:

Assessment	:	No skin irritation
Result	:	No skin irritation

#### disodium sebacate:

Species	: Rabbit	
Assessment	: No skin irritation	
Method	: OECD Test Guide	eline 404
Result	: No skin irritation	
GLP	: no	

#### Ethylene, tetrafluoro-, polymer:

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

#### Serious eye damage/eye irritation

#### Product:

Remarks : Irritating to eyes.

#### **Components:**

# Poly[oxy[trifluoro(trifluoromethyl)-1,2-ethanediyl]], $\alpha$ -(1,1,2,2,2-pentafluoroethyl)- $\omega$ -[tetrafluoro(trifluoromethyl)ethoxy]-:

Assessment	:	Irritating to eyes.
Result	:	Irritating to eyes.

#### disodium sebacate:

:	Rabbit
:	Irritating to eyes.
:	OECD Test Guideline 437
:	Irritating to eyes.
:	yes
	:

#### Ethylene, tetrafluoro-, polymer:

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





OKS 4	4220							
Versior 2.0	n Revision Date: 14.06.2023		e of last issue: 16.12.2022 e of first issue: 01.07.2016	Print Date: 14.06.2023				
Re	Respiratory or skin sensitisation							
Pr	oduct:							
Re	emarks	:	This information is not available.					
<u>Cc</u>	omponents:							
	oly[oxy[trifluoro(trifluor etrafluoro(trifluorometh		yl)-1,2-ethanediyl]], α-(1,1,2,2,2-p xy]-:	entafluoroethyl)-ω-				
Sp	pecies	:	Humans					
	sessment esult	:	Does not cause skin sensitisation. Does not cause skin sensitisation.					
	Suit	•	Dues not cause skin sensitisation.					
di	sodium sebacate:							
Sp	pecies	:	Guinea pig					
	sessment	:	Did not cause sensitisation on labo					
Re	esult	:	Did not cause sensitisation on labo	oratory animais.				
Et	hylene, tetrafluoro-, po	lymer:						
	sessment	:	Did not cause sensitisation on labo					
Re	esult	:	Did not cause sensitisation on labo	oratory animals.				
Ge	erm cell mutagenicity							
Pr	oduct:							
Ge	enotoxicity in vitro	:	Remarks: No data available					
Ge	enotoxicity in vivo	:	Remarks: No data available					
<u>Cc</u>	omponents:							
di	sodium sebacate:							
	erm cell mutagenicity-	:	Tests on bacterial or mammalian of	cell cultures did not show				
As	sessment		mutagenic effects.					
Ca	arcinogenicity							
<u>Pr</u>	oduct:							
Re	emarks	:	No data available					
<u>Cc</u>	omponents:							
Et	hylene, tetrafluoro-, po	lymer:						
	arcinogenicity -	:	Not classifiable as a human carcin	ogen.				
As	sessment							





NG 424	20			
rsion )	Revision Date: 14.06.2023		of last issue: 16.12.2022 of first issue: 01.07.2016	Print Date: 14.06.2023
Repro	oductive toxicity			
Prod	uct:			
Effect	ts on fertility	:	Remarks: No data available	
	ts on foetal opment	:	Remarks: No data available	
<u>Com</u>	oonents:			
disod	lium sebacate:			
	oductive toxicity -	:	- Fertility -	
Asses	ssment		No toxicity to reproduction - Teratogenicity -	
			No effects on or via lactation	
STOT	- single exposure			
Prod	uct:			
Rema	arks	:	No data available	
<u>Com</u>	oonents:			
	oxy[trifluoro(trifluo fluoro(trifluorometl		yl)-1,2-ethanediyl]], α-(1,1,2,2,2-μ xy]-:	pentafluoroethyl)-ω-
-	ssment	:	May cause respiratory irritation.	
Ethyl	ene, tetrafluoro-, po	olymer:		
Asses	ssment	:	The substance or mixture is not c organ toxicant, single exposure.	lassified as specific target
STOT	- repeated exposu	re		
Prod	uct:			
Rema	arks	:	No data available	
<u>Com</u>	oonents:			
	oxy[trifluoro(trifluo fluoro(trifluorometl		yl)-1,2-ethanediyl]], α-(1,1,2,2,2-μ xy]-:	oentafluoroethyl)-ω-
Asses	ssment	:	The substance or mixture is not c organ toxicant, repeated exposure	
Ethyl	ene, tetrafluoro-, po	olymer:		
Asses	ssment	:	The substance or mixture is not c	lassified as specific target
				a brand of





Version	Revision Date:	Date of last issue: 16.12.2022	Print Date:
2.0	14.06.2023	Date of first issue: 01.07.2016	14.06.2023

organ toxicant, repeated exposure.

#### Repeated dose toxicity

#### Product:

Remarks

: This information is not available.

#### Aspiration toxicity

#### Product:

This information is not available.

#### **Components:**

# $\label{eq:poly_constraint} Poly[oxy[trifluoro(trifluoromethyl)-1,2-ethanediyl]], \ \alpha-(1,1,2,2,2-pentafluoroethyl)- \omega-[tetrafluoro(trifluoromethyl)ethoxy]-:$

No aspiration toxicity classification

#### disodium sebacate:

No aspiration toxicity classification

#### Ethylene, tetrafluoro-, polymer:

No aspiration toxicity classification

#### **11.2 Information on other hazards**

#### 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.

#### **Further information**

#### Product:

Remarks

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





Version	Revision Date:	Date of last issue: 16.12.2022	Print Date:
2.0	14.06.2023	Date of first issue: 01.07.2016	14.06.2023

## **SECTION 12: Ecological information**

### 12.1 Toxicity

## Product:

:	Remarks: No data available
:	Remarks: No data available
:	Remarks: No data available
:	Remarks: No data available
	nyl)-1,2-ethanediyl]], α-(1,1,2,2,2-pentafluoroethyl)-ω- oxy]-:
:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 1.000 mg/l Exposure time: 96 h
:	EC50 (Daphnia magna (Water flea)): > 1.000 mg/l Exposure time: 48 h
:	LC50 (Danio rerio (zebra fish)): > 100 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes
:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test Type: semi-static test Method: OECD Test Guideline 202 GLP: yes
:	EL50 (Skeletonema costatum (marine diatom)): 38,7 mg/l Exposure time: 72 h Test Type: static test Method: ISO 10253 GLP: yes
	: eth :

### 12.2 Persistence and degradability

#### Product:



## **SAFETY DATA SHEET** according to Regulation (EC) No. 1907/2006 - DE (Commission Regulation (EU) 2020/878)



## **OKS 4220**

0110	4220			
Versio 2.0	on Revision Date: 14.06.2023		e of last issue: 16.12.2022 e of first issue: 01.07.2016	Print Date: 14.06.2023
E	Biodegradability	:	Remarks: No data available	
	Physico-chemical emovability	:	Remarks: No data available	
<u>c</u>	Components:			
d	lisodium sebacate:			
E	Biodegradability	:	Result: Biodegradable Biodegradation: 89 % Exposure time: 28 d	
12.3 E	Bioaccumulative potential			
F	Product:			
	Bioaccumulation	:	Remarks: This mixture contains no be persistent, bioaccumulating and This mixture contains no substance persistent and very bioaccumulating	toxic (PBT). considered to be very
<u>c</u>	Components:			
	oly[oxy[trifluoro(trifluoror tetrafluoro(trifluoromethyl		nyl)-1,2-ethanediyl]], α-(1,1,2,2,2-pe oxy]-:	entafluoroethyl)-ω-
E	Bioaccumulation	:	Remarks: This substance is not cor bioaccumulating and toxic (PBT). This substance is not considered to very bioaccumulating (vPvB).	
d	lisodium sebacate:			
	Partition coefficient: n- octanol/water	:	log Pow: -4,9 (20 °C) pH: 7,8	
12.4 N	Nobility in soil			
F	Product:			
	Aobility	:	Remarks: No data available	
	Distribution among Invironmental compartments	:	Remarks: No data available	
12.5 F	Results of PBT and vPvB a	sse	ssment	
<u>F</u>	Product:			
^	accomment		This substance/mixture contains no	a a man a manta a a mai da ra d

TTOULOL.	
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





<b>OKS 42</b>	OKS 4220					
Version 2.0	Version Revision Date: Date		e of last issue: 16.12.2022 e of first issue: 01.07.2016	Print Date: 14.06.2023		
			0.1% or higher.			
Com	ponents:					
	oxy[trifluoro(trifluor fluoro(trifluorometh		nyl)-1,2-ethanediyl]], α-(1,1,2,2,2-p οχν]-:	entafluoroethyl)-ω-		
-	ssment	:	Non-classified PBT substance. No	on-classified vPvB substance		
Ethyl	lene, tetrafluoro-, po	lymer	:			
Assessment :		Non-classified vPvB substance. N	on-classified PBT substance			
12.6 Endo	ocrine disrupting pro	opertie	25			
Prod	uct:					
Asse	ssment	:	The substance/mixture does not c considered to have endocrine disr to REACH Article 57(f) or Commis (EU) 2017/2100 or Commission R levels of 0.1% or higher.	upting properties according sion Delegated regulation		
12.7 Othe	r adverse effects					
	<u>uct:</u> ional ecological nation	:	No information on ecology is avail	able.		

## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods					
Product		Waste codes should be assigned by the user based on the application for which the product was used.			
		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.			
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:			
Waste Code	:	unused product			





OKS 4220							
Version 2.0	Revision Date: 14.06.2023	Date of last issue: 16.12.2022 Date of first issue: 01.07.2016	Print Date: 14.06.2023				
		13 02 06*, synthetic engine, gear a	and lubricating oils				
		uncleaned packagings 15 01 10*, packaging containing re by hazardous substances	esidues of or contaminated				

## **SECTION 14: Transport information**

## 14.1 UN number or ID number

ADN	:	Not regulated as a dangerous good
ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
ΙΑΤΑ	:	Not regulated as a dangerous good
14.2 UN proper shipping name		
ADN	:	Not regulated as a dangerous good
ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
ΙΑΤΑ	:	Not regulated as a dangerous good
14.3 Transport hazard class(es)		
ADN	:	Not regulated as a dangerous good
ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
ΙΑΤΑ	:	Not regulated as a dangerous good
14.4 Packing group		
ADN	:	Not regulated as a dangerous good
ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
IATA (Cargo)	:	Not regulated as a dangerous good
IATA (Passenger)	:	Not regulated as a dangerous good
14.5 Environmental hazards		





OKS 4220				
Version 2.0	Revision Date: 14.06.2023	Date of last issue: 16.12 Date of first issue: 01.07		Print Date: 14.06.2023
		<b></b>		
ADN		: Not regulated as a	0 0	
ADR		: Not regulated as a dangerous good		
RID		: Not regulated as a dangerous good		
IMDO	3	: Not regulated as a dangerous good		
Not a	cial precautions for applicable			
		Ik according to IMO instru		
Rem	arks	: Not applicable for p	product as supplie	ed.
the n		the manufacture, placing on tain dangerous substances, iex XVII)		icable
Cond	REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). (EU SVHC)		substand (Regulat	duct does not contain ces of very high concern ion (EC) No 06 (REACH), Article 57).
deple	ulation (EC) No 1005/ ete the ozone layer 1005/2009)	2009 on substances that	: Not appl	icable
pollu	ulation (EU) 2019/102 tants (recast) POP)	1 on persistent organic	: Not appl	icable
Reau	ulation (EC) No 649/2	012 of the European	: Not appl	icable

Regulation (EC) No 649/2012 of the European : Not applicable Parliament and the Council concerning the export and import of dangerous chemicals (EU PIC)

Regulation (EU) 2019/1148 on the marketing and use of : Not applicable explosives precursors

Seveso III: Directive 2012/18/EU of the European Not applicable Parliament and of the Council on the control of





Version 2.0	Revision Date: 14.06.2023	Date of last issue: 16.12.2022 Date of first issue: 01.07.2016	Print Date: 14.06.2023
	or-accident hazards invo tances.	lving dangerous	
	er hazard class many)	: WGK 1 slightly hazardous to water Classification according to AwSV, Anr	nex 1 (5.2)
TAL	uft List (Germany)	<ul> <li>5.2.1: Total dust: Not applicable</li> <li>5.2.2: Inorganic substances in powder Not applicable</li> <li>5.2.4: Inorganic substances in gaseou Not applicable</li> <li>5.2.5: Organic Substances: Not applicable</li> <li>5.2.7.1.1: Carcinogenic substance: Not applicable</li> <li>5.2.7.1.1: Quartz fine dust PM4: Not applicable</li> <li>5.2.7.1.1: Formaldehyde: Not applicable</li> <li>5.2.7.1.1: fibres: Not applicable</li> <li>5.2.7.1.2: Germ cell mutagens: Not applicable</li> <li>5.2.7.1.3: Substances toxic to reprodu Not applicable</li> <li>5.2.7.2: Poorly degradable, easily enriorganic substances: Not applicable</li> </ul>	is form:
Volat	tile organic compounds	: Directive 2010/75/EU of 24 November emissions (integrated pollution preven	

Not applicable

## 15.2 Chemical safety assessment

This information is not available.

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

Full text of H-Statements	
H319	: Causes serious eye irritation.
H335	: May cause respiratory irritation.

Full text of other abbreviations





Version	Revision Date:	Date of last issue: 16.12.2022	Print Date:
2.0	14.06.2023	Date of first issue: 01.07.2016	14.06.2023
DE TI DE TI	RGS 527 RGS 900 RGS 527 / BM RGS 900 / AGW	<ul> <li>Germany. TRGS 527 - Activities w</li> <li>Germany. TRGS 900 - Occupation</li> <li>Assessment scale</li> <li>Time Weighted Average</li> </ul>	

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways: ADR - 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 - (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; TECI - Thailand Existing Chemicals 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 mixture:		Classification procedure:
Eye Irrit. 2	H319	Calculation method
STOT SE 3	H335	Calculation method

This safety data sheet applies only to products as originally packed and labelled. The information contained therein may not be reproduced or modified without our express written permission. Any forwarding of this document is only permitted to the extent required by law. Any further, in particular public, dissemination of the safety data sheet (e.g. as a document for download from the Internet) is not permitted without our express written consent. We provide our customers with amended safety data sheets as prescribed by law. The customer is responsible for passing on





Version	Revision Date:	Date of last issue: 16.12.2022	Print Date:
2.0	14.06.2023	Date of first issue: 01.07.2016	14.06.2023

safety data sheets and any amendments contained therein to its own customers, employees and other users of the product. We provide no guarantee that safety data sheets received by users from third parties are up-to-date. All information and instructions in this safety data sheet have been compiled to the best of our knowledge and are based on the information available to us on the day of publication. The information provided is intended to describe the product in relation to the required safety measures; it is neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and does not justify any contractual legal relationship. The existence of a safety data sheet for a particular jurisdiction does not necessarily mean that import or use within that jurisdiction is legally permitted. If you have any questions, please contact your responsible sales contact or authorized trading partner.

