according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

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

1.1 Product identifier

Product name : OKS 4220

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

Use of the : Lubricant

Substance/Mixture

Recommended restrictions

on use

: Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : OKS Spezialschmierstoffe GmbH

Ganghoferstr. 47

82216 Maisach-Gernlinden

Deutschland

Tel.: +49 8142 3051 500 Fax: +49 8142 3051 599 info@oks-germany.com

E-mail address of person

responsible for the SDS

mcm@oks-germany.com

National contact

1.4 Emergency telephone number

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)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

Additional Labelling

EUH210 Safety data sheet available on request.

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 : 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)
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.



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

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 breathing is irregular or stopped, administer artificial

respiration.

In case of skin contact : Remove contaminated clothing. If irritation develops, get

medical attention.

Wash off with soap and water.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 10 minutes.

If eye irritation persists, consult a specialist.

If swallowed : Move the victim to fresh air.

Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

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:

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment. Exposure to

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.

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).

Avoid breathing dust.

Refer to protective measures listed in sections 7 and 8.

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 : 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.

Hygiene measures : Wash face, hands and any exposed skin thoroughly after

handling.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in original container. Keep container closed when not in use. Keep in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

to prevent leakage. Store in accordance with the particular national regulations. Keep in properly labelled containers.

Storage 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	Control parameters	Basis
		of exposure)		
Ethylene,	9002-84-0	MAK (measured	0,3 mg/m3	DE DFG MAK
tetrafluoro-,		as the alveolate	_	(2023-07-01)
polymer		fraction)		
	Peak-limit: excursion factor (category): 8; II			
	Further information: Substances that cause cancer in humans or animals or			
	that are considered to be carcinogenic for humans and for which a MAK value			
	can be derived., Damage to the embryo or foetus is unlikely when the MAK			
	value or the BAT value is observed			
		MAK (inhalable	4 mg/m3	DE DFG MAK
		fraction)		(2023-07-01)
	Peak-limit: excursion factor (category): 8; II			
	Further information: Substances that cause cancer in humans or animals or			
	that are considered to be carcinogenic for humans and for which a MAK value			
	can be derived., Damage to the embryo or foetus is unlikely when the MAK			
	value or the BAT value is observed			
		BM (Alveolar	0,5 mg/m3	DE TRGS
		dust fraction)		527
				(2020-02-19)

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

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



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

VersionRevision Date:Date of last issue: 31.10.2024Print Date:2.306.06.2025Date of first issue: 01.07.201606.06.2025

Fresh water sediment	0,548 mg/kg
Marine sediment	0,055 mg/kg
Soil	0,099 mg/kg

8.2 Exposure controls

Engineering measures

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment.

Personal protective equipment

Eye/face protection : Safety glasses with side-shields

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Protective index : 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.

Environmental exposure controls

Air :

No special environmental precautions required.

Soil :

The product should not be allowed to enter drains, water

courses or the soil.

Water :

a brand of

FREUDENBERG

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

VersionRevision Date:Date of last issue: 31.10.2024Print Date:2.306.06.2025Date of first issue: 01.07.201606.06.2025

The product should not be allowed to enter drains, water

courses or the soil.

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

pH : 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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

VersionRevision Date:Date of last issue: 31.10.2024Print Date:2.306.06.2025Date of first issue: 01.07.201606.06.2025

Partition coefficient: n-

octanol/water

: No data available

Vapour pressure : < 0,001 hPa (20 °C)

Relative density : 1,92 (20 °C)

Reference substance: Water The value is calculated

Density : 1,92 g/cm3

(20 °C)

Bulk density : No data available

Relative vapour density : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : No data available

Metal corrosion rate : Not corrosive to metals

Evaporation rate : No data available

Sublimation 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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

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

Acute toxicity

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

Product:

Acute oral toxicity : Remarks: This information is not available.

Acute inhalation toxicity : Remarks: This information is not available.

Acute dermal toxicity : Remarks: This information is not available.

Components:

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-, polymer:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

Skin corrosion/irritation

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

Product:

Remarks : This information is not available.

Components:

disodium sebacate:

Species : Rabbit



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

Assessment : No skin irritation

Method : OECD Test Guideline 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

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

Product:

Remarks : This information is not available.

Components:

disodium sebacate:

Species : Rabbit

Assessment : Irritating to eyes.

Method : OECD Test Guideline 437

Result : Irritating to eyes.

GLP : yes

Ethylene, tetrafluoro-, polymer:

Species : Rabbit

Assessment : No eye irritation Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

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

Respiratory sensitisation

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

Product:

Remarks : This information is not available.

Components:

disodium sebacate:

Species : Guinea pig

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



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

Ethylene, tetrafluoro-, polymer:

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

Germ cell mutagenicity

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

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Components:

disodium sebacate:

Germ cell mutagenicity- : Tests on bacterial or mammalian cell cultures did not show

Assessment mutagenic effects.

Carcinogenicity

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

Product:

Remarks : No data available

Components:

Ethylene, tetrafluoro-, polymer:

Carcinogenicity - : Not classifiable as a human carcinogen.

Assessment

Reproductive toxicity

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

Product:

Effects on fertility : Remarks: No data available

Effects on foetal : Remarks: No data available

development

Components:

disodium sebacate:

Reproductive toxicity - : - Fertility -

Assessment No toxicity to reproduction

- Teratogenicity -

No effects on or via lactation



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

VersionRevision Date:Date of last issue: 31.10.2024Print Date:2.306.06.2025Date of first issue: 01.07.201606.06.2025

STOT - single exposure

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

Product:

Remarks : No data available

Components:

Ethylene, tetrafluoro-, polymer:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

STOT - repeated exposure

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

Product:

Remarks : No data available

Components:

Ethylene, tetrafluoro-, polymer:

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

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

Product:

This information is not available.

Components:

disodium sebacate:

No aspiration toxicity classification

Ethylene, tetrafluoro-, polymer:

No aspiration toxicity classification

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

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.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: No data available

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:

disodium sebacate:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h
Test Type: semi-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: semi-static test

Method: OECD Test Guideline 202

GLP: yes

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

Toxicity to algae/aquatic

plants

EL50 (Skeletonema costatum (marine diatom)): 38,7 mg/l

Exposure time: 72 h Test Type: static test Method: ISO 10253

GLP: yes

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Physico-chemical

removability

Remarks: No data available

Components:

disodium sebacate:

Biodegradability : Result: Biodegradable

Biodegradation: 89 % Exposure time: 28 d

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

disodium sebacate:

Partition coefficient: n- : log Pow: -4,9 (20 °C)

octanol/water pH: 7,8

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among :

environmental 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.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

Components:

Ethylene, tetrafluoro-, polymer:

Assessment : Non-classified vPvB substance, Non-classified PBT 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

information

: No information on ecology is available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

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:

Waste Code : unused product

13 02 06*, synthetic engine, gear and lubricating oils

uncleaned packagings

15 01 10*, packaging containing residues of or contaminated

by hazardous substances



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

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
IATA : 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
IATA : 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
IATA : 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

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Date of last issue: 31.10.2024 Version **Revision Date:** Print Date: 06.06.2025 06.06.2025 2.3 Date of first issue: 01.07.2016

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Remarks Not applicable for product as supplied.

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,

mixtures and articles (Annex XVII)

Not applicable

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

(EU SVHC)

This product does not contain substances of very high concern

(Regulation (EC) No

1907/2006 (REACH), Article 57).

Regulation (EU) No 2024/590 on substances that

deplete the ozone layer

(EC 2024/590)

Not applicable

Regulation (EU) 2019/1021 on persistent organic

pollutants (recast)

(EU POP)

Not applicable

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and

import of dangerous chemicals

(EU PIC)

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

(EU. REACH-Annex XIV)

: Not applicable

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

explosives precursors

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of

Not applicable



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

major-accident hazards involving dangerous

substances.

Water hazard class

(Germany)

WGK 1 slightly hazardous to water

Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : 5.2.1: Total dust:

others: 31,5 %

5.2.2: Inorganic substances in powdered form:

Not applicable

5.2.4: Inorganic substances in gaseous form:

Not applicable

5.2.5: Organic Substances:

Not applicable

5.2.7.1.1: Carcinogenic substance:

Not applicable

5.2.7.1.1: Quartz fine dust PM4:

Not applicable

5.2.7.1.1: Formaldehyde:

Not applicable 5.2.7.1.1: fibres: Not applicable

5.2.7.1.2: Germ cell mutagens:

Not applicable

5.2.7.1.3: Substances toxic to reproduction:

Not applicable

5.2.7.2: Poorly degradable, easily enrichable and highly toxic

organic substances: Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial and

livestock rearing emissions (integrated pollution prevention

and control)
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.

Full text of other abbreviations

DE DFG MAK : Germany. MAK BAT Annex IIa

a brand of

FREUDENBERG

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

Version Revision Date: Date of last issue: 31.10.2024 Print Date: 2.3 06.06.2025 Date of first issue: 01.07.2016 06.06.2025

DE TRGS 527 : Germany. TRGS 527 - Activities with nanomaterials

DE DFG MAK / MAK : MAK value
DE TRGS 527 / BM : Assessment scale

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

|| Relevant changes compared to the last edition are highlighted at the left margin. This version replaces all previous editions.

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 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



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878 - DE



OKS 4220

VersionRevision Date:Date of last issue: 31.10.2024Print Date:2.306.06.2025Date of first issue: 01.07.201606.06.2025

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.