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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

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

1.1 Product identifier

Product name : OKS 464

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

Use of the : Grease

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

: +34 91 562 04 20

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 - ES



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

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 : Synthetic hydrocarbon oil

lithium soap solid lubricant

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)
Amines, C11-14- branched alkyl, monohexyl and dihexyl phosphates	80939-62-4 279-632-6 01-2119976322-36- XXXX	Skin Irrit.2; H315 Eye Irrit.2; H319 Aquatic Chronic2; H411		>= 1 - < 2,5
Benzenamine, N- phenyl-, reaction products with 2,4,4- trimethylpentene	68411-46-1 270-128-1 01-2119491299-23- XXXX	Repr.2; H361f Aquatic Chronic3; H412		>= 0,25 - < 1
Substances with a workplace exposure limit :				
Carbon black	1333-86-4	Not classified		>= 1 - < 10

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



OKS 464

VersionRevision Date:Date of last issue: 09.02.2023Print Date:1.522.10.2024Date of first issue: 13.06.201622.10.2024

	215-609-9 01-2119384822-32- XXXX		
Graphite (synthetic)	7782-42-5 231-955-3 01-2119486977-12- XXXX	Not classified	>= 1 - < 10
lithium 12- hydroxystearate	7620-77-1 231-536-5 01-2119970893-23- XXXX 01-2119970893-23- XXXX 01-2119970893-23- XXXX 01-2119970893-23- XXXX	Not classified	>= 1 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : Obtain medical attention.

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

medical attention.

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

respiration.

In case of skin contact : Take off all contaminated clothing immediately.

Get medical attention immediately if irritation develops and

persists.

Wash clothing before reuse.

Thoroughly clean shoes before reuse. Wash off immediately with plenty of 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.



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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

If swallowed : Move the victim to fresh air.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

Do not induce vomiting without medical advice.

Obtain medical attention.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No symptoms known or expected.

Risks : None known.

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

High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion

Carbon oxides

products

Nitrogen oxides (NOx) Oxides of phosphorus

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 decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.



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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

Ensure adequate ventilation.

Do not breathe vapours, aerosols.

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 : Pick up and transfer to properly labelled containers.

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 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 to prevent leakage. Store in accordance with the particular



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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

national regulations. Keep in properly labelled containers.

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
Carbon black	1333-86-4	VLA-ED	3,5 mg/m3	ES VLA (2006-01-01)
Graphite (synthetic)	7782-42-5	VLA-ED (respirable dust fraction)	2 mg/m3	ES VLA (2017-02-01)
lithium 12- hydroxystearate	7620-77-1	VLA-ED	10 mg/m3	ES VLA (2012-01-01)

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Carbon black	Workers	Inhalation	Long-term local effects	0,5 mg/m3
Graphite (synthetic)	Workers	Inhalation	Long-term systemic effects	1,2 mg/m3
Amines, C11-14- branched alkyl, monohexyl and dihexyl phosphates	Workers	Inhalation	Long-term systemic effects	0,2 mg/m3
	Workers	Skin contact	Long-term systemic effects	0,03 mg/kg
	Workers	Skin contact	Acute systemic effects	0,03 mg/kg
1,3,4-Thiadiazolidine- 2,5-dithione, reaction products with hydrogen peroxide and tert- dodecanethiol	Workers	Inhalation		4,408 mg/m3
	Workers	Dermal		6,25 mg/kg bw/day
Benzenamine, N- phenyl-, reaction products with 2,4,4- trimethylpentene	Workers	Skin contact	Long-term systemic effects	0,44 mg/kg bw/day



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



OKS 464

VersionRevision Date:Date of last issue: 09.02.2023Print Date:1.522.10.2024Date of first issue: 13.06.201622.10.2024

Workers Inhalation Long-term systemic 0,31 mg/m3 effects

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

Substance name	Environmental Compartment	Value
Carbon black	Fresh water	5 mg/l
	Marine water	5 mg/l
Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates	Fresh water	0,055 mg/l
	Intermittent use/release	0,01 mg/l
	Marine water	0,005 mg/l
	Sewage treatment plant	1 mg/l
	Fresh water sediment	239,64 mg/kg
	Marine sediment	23,96 mg/kg
	Soil	47,76 mg/kg
1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol	Fresh water	0,041 mg/l
	Marine water	0,0041 mg/l
	Fresh water sediment	380,62 mg/kg
	Marine sediment	38,06 mg/kg
	Sewage treatment plant	8000 mg/l
	Soil	308,98 mg/kg
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Fresh water	0,034 mg/l
	Marine water	0,003 mg/l
	Microbiological Activity in Sewage Treatment Systems	10 mg/l
	Fresh water sediment	0,446 mg/kg
	Marine sediment	0,045 mg/kg
	Soil	1,76 mg/kg

8.2 Exposure controls

Engineering measures

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

Personal protective equipment

Eye/face protection : Safety glasses

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Protective index : Class 1

Remarks : Wear protective gloves. The break through time depends

amongst other things on the material, the thickness and the

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

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 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 :

The product should not be allowed to enter drains, water

courses or the soil.

black

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : paste

Colour

Odour : characteristic

Odour Threshold : No data available

Melting point/range : No data available

a brand of

FREUDENBERG

8 / 27

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Boiling point/boiling range : No data available

Flammability (solid, gas) : Combustible Solids

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 : No data available

pH : Not applicable

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 : ca. < 0,013 hPa (20 °C)

Relative density : 0,89 (20 °C)

Reference substance: Water The value is calculated

Density : 0,89 g/cm3

(20 °C)

Bulk density : No data available

Relative vapour density : No data available

Particle characteristics

Particle size : Not applicable

Particle Size Distribution : Not applicable

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : No data available

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

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on 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: This information is not available.

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

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

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

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

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

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Carbon black:

Acute oral toxicity : LD50 (Rat): > 8.000 mg/kg

Method: OECD Test Guideline 401

Graphite (synthetic):

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 423

Assessment: The substance or mixture has no acute oral

toxicity

Acute inhalation toxicity : LC50 (Rat): > 2.000 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute

inhalation toxicity

lithium 12-hydroxystearate:

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

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 3.000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Skin corrosion/irritation

Product:

Remarks : This information is not available.

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Species : Rabbit

Assessment : Irritating to skin.

Method : OECD Test Guideline 404

Result : Irritating to skin.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

Carbon black:

Species : Rabbit Exposure time : 24 h

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

Graphite (synthetic):

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

lithium 12-hydroxystearate:

Assessment : No skin irritation

Method : OECD Test Guideline 439

Result : No skin irritation

Serious eye damage/eye irritation

Product:

Remarks : This information is not available.

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Species : Rabbit

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Assessment : Irritating to eyes.

Method : OECD Test Guideline 405

Result : Irritating to eyes.

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

Carbon black:

Species : Rabbit Exposure time : 24 h

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

Graphite (synthetic):

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

lithium 12-hydroxystearate:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Species : Guinea pig

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

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Guinea pig

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 406

Result : Did not cause sensitisation on laboratory animals.

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Carbon black:

Test Type : Buehler Test Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

Graphite (synthetic):

Species : Mouse

Method : OECD Test Guideline 429

Result : negative

lithium 12-hydroxystearate:

Exposure routes : Dermal Species : Mouse

Method : OECD Test Guideline 429

Result : negative

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Test system: Rodent cell line

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Carbon black:

Genotoxicity in vitro : Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Genotoxicity in vivo : Species: Rat

Application Route: Inhalation

Result: Positive results were obtained in some in vivo tests.

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Germ cell mutagenicity-

Assessment

Animal testing did not show any mutagenic effects.

Graphite (synthetic):

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)

Method: OECD Test Guideline 471

Result: negative

Test Type: gene mutation test Method: OECD Test Guideline 476

Result: negative

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

Carcinogenicity

Product:

Remarks : No data available

Components:

Carbon black:

Carcinogenicity - : Not classifiable as a human carcinogen., Carcinogenicity

Assessment classification not possible from current data.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal

development

Remarks: No data available

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Effects on foetal : Species: Rat

development Application Route: Oral

Method: OECD Test Guideline 422

Result: No effects on fertility and early embryonic

development were detected.

Reproductive toxicity -

Assessment

: - Fertility -

No toxicity to reproduction

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Reproductive toxicity -

: - Fertility -

Assessment

Some evidence of adverse effects on sexual function and

fertility, based on animal experiments.

Carbon black:

Reproductive toxicity -

: - Fertility -

Assessment

Animal testing did not show any effects on fertility.

- Teratogenicity -

Animal testing did not show any effects on foetal

development.

Graphite (synthetic):

Effects on fertility : Species: Rat

Application Route: Oral

General Toxicity F1: NOAEL: 813 mg/kg body weight

Method: OECD Test Guideline 422

STOT - single exposure

Product:

Remarks : No data available

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

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

organ toxicant, single exposure.

Carbon black:

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

organ toxicant, single exposure.

STOT - repeated exposure

Product:

Remarks : No data available

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

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

organ toxicant, repeated exposure.

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



OKS 464

VersionRevision Date:Date of last issue: 09.02.2023Print Date:1.522.10.2024Date of first issue: 13.06.201622.10.2024

Carbon black:

Exposure routes : Inhalation Target Organs : Lungs

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.

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Species : Rat LOAEL : 10 mg/kg Application Route : Oral

Method : OECD Test Guideline 422

Carbon black:

Species : Rat
NOAEL : 0,001 mg/l
Application Route : Inhalation
Test atmosphere : dust/mist
Exposure time : 90 d
Target Organs : Lungs

Graphite (synthetic):

Species : Rat NOAEL : 813 mg/kg

Application Route : Oral

Method : OECD Test Guideline 422

Application Route : inhalation (dust/mist/fume)
Method : OECD Test Guideline 412

Aspiration toxicity

Product:

This information is not available.

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

No aspiration toxicity classification

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Carbon black:

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.

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Remarks : Ingestion causes irritation of upper respiratory system and

gastrointestinal disturbance.

Carbon black:

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 :

a brand of

FREUDENBERG

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Remarks: No data available

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5,5 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 1,2 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Selenastrum capricornutum (green algae)): > 10 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l

Exposure time: 3 h

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

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

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 51 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

Carbon black:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 1.000 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 5.600 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Scenedesmus capricornutum (fresh water algae)):

10.000 ma/l

Exposure time: 72 h Test Type: static test



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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (Bacteria): > 800 mg/l

Exposure time: 3 h

Graphite (synthetic):

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

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

(Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

lithium 12-hydroxystearate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 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

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): > 160

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 160

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Physico-chemical

removability

Remarks: No data available



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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Biodegradability : Result: Not rapidly biodegradable

Biodegradation: 12 %

Method: OECD Test Guideline 301B

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Biodegradability : Test Type: aerobic

Inoculum: activated sludge Result: Not rapidly biodegradable

Biodegradation: 1 % Exposure time: 28 d

Method: OECD Test Guideline 301B

GLP: yes

Carbon black:

Biodegradability : Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

Graphite (synthetic):

Biodegradability : Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

lithium 12-hydroxystearate:

Biodegradability : Test Type: Primary biodegradation

Inoculum: activated sludge Result: rapidly biodegradable Biodegradation: 74,7 % Exposure time: 28 d

Method: OECD Test Guideline 301C

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates:

Partition coefficient: n-

octanol/water

: log Pow: 1,74 - 11,61

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Partition coefficient: n-

octanol/water

: log Pow: 5,2 - 10,82



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



OKS 464

VersionRevision Date:Date of last issue: 09.02.2023Print Date:1.522.10.2024Date of first issue: 13.06.201622.10.2024

lithium 12-hydroxystearate:

Partition coefficient: n-

octanol/water

log Pow: 2,6

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.

Components:

Carbon black:

Assessment : Substance is not persistent, bioaccumulative, and toxic

(PBT).. Substance is not very persistent and very

bioaccumulative (vPvB).

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.



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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

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:

Waste Code : used product, unused product

12 01 12**, spent waxes and fats

uncleaned packagings

15 01 10*, packaging containing residues of or contaminated

by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

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

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)

ADR : Not regulated as a dangerous good

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

RID : Not regulated as a dangerous goodIMDG : Not regulated as a dangerous goodIATA : Not regulated as a dangerous good

14.4 Packing group

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

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

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 (EC) No 1005/2009 on substances that

deplete the ozone layer

(EC 1005/2009)

: Not applicable

Regulation (EU) 2019/1021 on persistent organic

pollutants (recast)

(EU POP)

: Not applicable



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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

Regulation (EU) No 649/2012 of the European : Not applicable

Parliament and the Council concerning the export and

import of dangerous chemicals

(EU PIC)

REACH - List of substances subject to authorisation : Not applicable

(Annex XIV)

(EU. REACH-Annex XIV)

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 major-accident hazards involving dangerous

substances.

Not applicable

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

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

H315 : Causes skin irritation.

H319 : Causes serious eye irritation. H361f : Suspected of damaging fertility.

H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

ES VLA : Spain. Environmental Limits for exposure to Chemical agents

- Table 1: Occupational Exposure Values

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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

ES VLA / VLA-ED : Environmental Daily Limit Value

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 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



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



OKS 464

Version Revision Date: Date of last issue: 09.02.2023 Print Date: 1.5 22.10.2024 Date of first issue: 13.06.2016 22.10.2024

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.