

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 - PT
(Commission Regulation (EU) 2020/878)



OKS 464

Version	Revision Date:	Date of last issue: 07.11.2022	Print Date:
1.4	09.02.2023	Date of first issue: 13.06.2016	09.02.2023

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 Sub-
stance/Mixture : Grease

Recommended restrictions : Restricted to professional users.
on use

1.3 Details of the supplier of the safety 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 person : mcm@oks-germany.com
responsible for the SDS Material Compliance Management

National contact :

1.4 Emergency telephone number

Emergency telephone num- : CIAV - Information Centre of Antipoison
ber (+351) 800 250 250 (free 24/7 service)

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.

Additional Labelling

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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, mono-hexyl and dihexyl phosphates	80939-62-4 279-632-6 01-2119976322-36-XXXX	Skin Irrit.2; H315 Eye Irrit.2; H319 Aquatic Chronic2; H411		$\geq 1 - < 2,5$
1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol	939-692-2 01-2119983498-16-XXXX	Aquatic Chronic3; H412		$\geq 1 - < 2,5$
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		$\geq 0,25 - < 1$

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Substances with a workplace exposure limit :				
Carbon black	1333-86-4 215-609-9 01-2119384822-32-XXXX	Not classified		$\geq 1 - < 10$
Graphite	7782-42-5 231-955-3 01-2119486977-12-XXXX	Not classified		$\geq 1 - < 10$
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		$\geq 1 - < 10$

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.

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If eye irritation persists, consult a specialist.

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

Risks : Causes skin irritation.

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 products : Carbon oxides
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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

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Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).

Do not breathe vapours, aerosols.

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : 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 : 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 national regulations. Keep in properly labelled containers.

7.3 Specific end use(s)

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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	VLE-MP (Inhalable fraction)	3 mg/m ³	PT OEL (2014-11-14)
	Further information: Substances of which the carcinogenic effect has been confirmed in laboratory tests on animals with confirmed relevance for humans.			
Graphite	7782-42-5	VLE-MP (Respirable fraction)	2 mg/m ³	PT OEL (2014-11-14)
lithium 12-hydroxystearate	7620-77-1	VLE-MP	10 mg/m ³	PT OEL (2007-03-26)
	Further information: Substances that are not classified as carcinogenic for humans.			

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/m ³
Graphite	Workers	Inhalation	Long-term systemic effects	1,2 mg/m ³
Amines, C11-14-branched alkyl, monoethyl and diethyl phosphates	Workers	Inhalation	Long-term systemic effects	0,2 mg/m ³
	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/m ³
	Workers	Dermal		6,25 mg/kg bw/day
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Workers	Inhalation	Long-term systemic effects	0,31 mg/m ³
	Workers	Skin contact	Long-term systemic effects	0,44 mg/kg bw/day

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

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Substance name	Environmental Compartment	Value
Carbon black	Fresh water	5 mg/l
	Marine water	5 mg/l
Amines, C11-14-branched alkyl, monoethyl and diethyl 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
1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol	Soil	47,76 mg/kg
	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
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Soil	308,98 mg/kg
	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 protection : Safety glasses with side-shields

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 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.

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- 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Physical state : paste
- Colour : black
- Odour : characteristic
- Odour Threshold : No data available
-
- Melting point/range : No data available
- 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

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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

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.

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10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on 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 : Symptoms: Redness, Local irritation

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

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

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

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Acute oral toxicity : LD50 (Rat): > 8.000 mg/kg
Method: OECD Test Guideline 401

Graphite:

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

Skin corrosion/irritation

Product:

Remarks : Irritating to skin.

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.

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

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

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

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Carbon black:

Species : Rabbit
Exposure time : 24 h
Assessment : No skin irritation
Method : OECD Test Guideline 404
Result : No skin irritation

Graphite:

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 : Irritating to eyes.

Components:

Amines, C11-14-branched alkyl, monoethyl and diethyl phosphates:

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

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

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

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

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

Graphite:

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.

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Species : Guinea pig
Assessment : Does not cause skin sensitisation.
Result : Does not cause skin sensitisation.

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.

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.

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Graphite:

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, monoethyl and diethyl 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.

Germ cell mutagenicity- Assessment : Animal testing did not show any mutagenic effects.

Graphite:

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

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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 - Assessment : Not classifiable as a human carcinogen., Carcinogenicity 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 development : Species: Rat
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

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

Reproductive toxicity - Assessment : - Fertility -
Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

Carbon black:

Reproductive toxicity - Assessment : - Fertility -
Animal testing did not show any effects on fertility.
- Teratogenicity -
Animal testing did not show any effects on foetal develop-

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Graphite:

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

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

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.

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:

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

Graphite:

Species : Rat
NOAEL : 813 mg/kg
Application Route : Oral
Method : OECD Test Guideline 422

Species : Rat
NOAEL : > 2 mg/l
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, monoethyl and diethyl phosphates:

No aspiration toxicity classification

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 : Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.

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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 : 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

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 1.000 mg/l
Exposure time: 96 h

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- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 41 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (microalgae)): > 100 mg/l
Exposure time: 72 h
- Toxicity to microorganisms : EC50 (Pseudomonas putida): > 8.000 mg/l
Exposure time: 16 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 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
- Toxicity to microorganisms : EC50 (Bacteria): > 800 mg/l
Exposure time: 3 h

Graphite:

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

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aquatic invertebrates 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

Components:

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

Biodegradability : Result: Not rapidly biodegradable
Biodegradation: 12 %
Method: OECD Test Guideline 301B

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Biodegradability : Result: Not rapidly biodegradable
Biodegradation: 0 %
Exposure time: 28 d

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

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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:

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

Components:

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

Partition coefficient: n- : log Pow: < 2,3 (23 °C)
octanol/water pH: 7

1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol:

Bioaccumulation : Bioconcentration factor (BCF): 3,16

Partition coefficient: n- : log Pow: 8
octanol/water

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

Partition coefficient: n- : log Pow: > 5
octanol/water

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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 : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (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.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

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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
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

ADR : Not regulated as a dangerous good

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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).

REACH - List of substances subject to authorisation (Annex XIV) (EU. REACH-Annex XIV) : Not applicable

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

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

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

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major-accident hazards involving dangerous substances.

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

PT OEL : Portugal. Security and Health at the Workplace - Occupational exposure limits of chemical agents
PT OEL / VLE-MP : Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - 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;

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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; TECl - 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

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