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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- : Grease

stance/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

D-82216 Maisach-Gernlinden Tel.: +49 8142 3051 500 Fax.: +49 8142 3051 599

E-mail address of person

responsible for the SDS

National contact

mcm@oks-germany.com

1.4 Emergency telephone number

Emergency telephone num-

ber

: +49 8142 3051 517

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

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.



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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	Concentration limits M-Factor Notes	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		>= 1 - < 2,5	
1,3,4-Thiadiazolidine- 2,5-dithione, reaction products with hydro- gen peroxide and tert- dodecanethiol	939-692-2 01-2119983498-16- XXXX	Aquatic Chronic3; H412		>= 1 - < 2,5	
Substances with a work	Substances with a workplace exposure limit :				
Graphite	7782-42-5 231-955-3 01-2119486977-12- 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 : Remove person to fresh air. If signs/symptoms continue, get

medical attention.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

If breathing is irregular or stopped, administer artificial respira-

ion.



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

Wash off immediately with soap and plenty of water. Get medical attention immediately if irritation develops and

persists.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

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.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

Do not induce vomiting without medical advice.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or car-

bon dioxide.

Unsuitable extinguishing

media

High volume water jet

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Fire may cause evolution of:

Carbon oxides Metal oxides

ivietai Oxides

Nitrogen oxides (NOx) Oxides of phosphorus

Sulphur oxides



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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 decomposi-

tion 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).

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 ap-

plication 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.



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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.

Storage class (TRGS 510) : 11, Combustible Solids

7.3 Specific end use(s)

Specific use(s) : Specific instructions for handling, not required.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Graphite	7782-42-5	AGW (Inhalable fraction)	10 mg/m3	DE TRGS 900 (2014-04-02)
Peak-limit: excursion factor (category)	2;(II)			
		AGW (Alveolate fraction)	1,25 mg/m3	DE TRGS 900 (2014-04-02)
Peak-limit: excursion factor (category)	2;(II)			

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 ef- fects	0,5 mg/m3
Graphite	Workers	Inhalation	Long-term systemic effects	1,2 mg/m3
Amines, C11-14- branched alkyl, mon- ohexyl and dihexyl phosphates	Workers	Inhalation	Long-term systemic effects	0,2 mg/m3
	Workers	Skin contact	Long-term systemic	0,03 mg/kg



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			effects	
	Workers	Skin contact	Acute systemic effects	0,03 mg/kg
1,3,4-Thiadiazolidine- 2,5-dithione, reaction products with hydro- gen peroxide and tert- dodecanethiol	Workers	Inhalation	Long-term systemic effects	4,408 mg/m3
	Workers	Skin contact	Long-term systemic effects	6,25 mg/kg bw/day

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,	Fresh water	0,055 mg/l
monohexyl and dihexyl phos-		
phates		
	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-	Fresh water	0,041 mg/l
dithione, reaction products with		
hydrogen peroxide and tert-		
dodecanethiol		
	Marine water	0,0041 mg/l
	Intermittent use/release	0,41 mg/l
	Microbiological Activity in Sewage Treat-	8000 mg/l
	ment Systems	
	Fresh water sediment	380,62 mg/kg
	Marine sediment	38,06 mg/kg
	Soil	308,98 mg/kg
	Oral	6,67 mg/kg

8.2 Exposure controls

Engineering measures

none

Personal protective equipment

Eye protection : Tightly fitting safety goggles

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

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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.

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.

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the spe-

cific work-place.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : paste

Colour : black

Odour : characteristic

Odour Threshold : No data available

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : Not applicable

Evaporation rate : 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

Vapour pressure : ca. < 0,013 hPa (20 °C)

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Relative vapour density : No data available

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

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : No data available

9.2 Other information

Sublimation point : No data available

Self-ignition : 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

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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 toxicological effects

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.

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

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 2,75 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum

achievable concentration.

Information given is based on data obtained from similar sub-

stances.



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

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Information given is based on data obtained from

similar substances.

Graphite:

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

Method: OECD Test Guideline 423

Assessment: The substance or mixture has no acute oral tox-

icity

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 inhala-

tion toxicity

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.

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

Species : Rabbit

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



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Serious eye damage/eye irritation

Product:

Remarks : This information is not available.

Components:

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

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

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:

Test Type : Buehler Test Species : Guinea pig

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 406

Result : Did not cause sensitisation on laboratory animals.

Graphite:

Species : Mouse



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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

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

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster fibroblasts

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Remarks: Information given is based on data obtained from

similar substances.

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

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

Result: negative

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

Carcinogenicity

Product:

Remarks : No data available

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Components:

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

Carcinogenicity - Assess-

ment

: Not classifiable as a human carcinogen.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

Components:

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

Effects on foetal develop-

ment

Species: Rat

Application Route: Oral

Method: OECD Test Guideline 422

Result: No effects on fertility and early embryonic develop-

ment were detected.

Reproductive toxicity - As-

sessment

Fertility : No toxicity to reproduction

Teratogenicity

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

Effects on fertility : Species: Rat

Application Route: Oral

General Toxicity - Parent: NOAEL: 1.000 mg/kg body weight General Toxicity F1: NOAEL: 1.000 mg/kg body weight

Method: OECD Test Guideline 421

Remarks: Information given is based on data obtained from

similar substances.

Reproductive toxicity - As-

sessment

.

Fertility : No toxicity to reproduction

Teratogenicity : Animal testing did not show any effects on foetal develop-

ment.

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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.

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

dodecanethiol:

The substance or mixture is not classified as specific target Assessment

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.

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

dodecanethiol:

The substance or mixture is not classified as specific target Assessment

organ toxicant, repeated exposure.

Repeated dose toxicity

Product:

: This information is not available. Remarks

Components:

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

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

Method **OECD Test Guideline 422**

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

dodecanethiol:

Species Rat



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NOAEL : 250 mg/kg

Application Route : Oral

Method : OECD Test Guideline 421

Remarks : Information given is based on data obtained from similar sub-

stances.

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, monohexyl and dihexyl phosphates:

No aspiration toxicity classification

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.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other : Remarks: No data available



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aquatic invertebrates

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

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 41 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

Test Type: Growth inhibition

Method: OECD Test Guideline 201

Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Graphite:

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

Exposure time: 96 h

Method: OECD Test Guideline 203

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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

Exposure time: 72 h

Method: OECD Test Guideline 201

12.2 Persistence and degradability

Product:

Biodegradability Remarks: No data available

Physico-chemical removabil- : 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 tertdodecanethiol:

Biodegradability Test Type: Primary biodegradation

> Inoculum: activated sludge Result: Not readily biodegradable.

Biodegradation: 0 % Exposure time: 28 d

Method: OECD Test Guideline 301C

Graphite:

Biodegradability Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

12.3 Bioaccumulative potential

Product:

Remarks: This mixture contains no substance considered to Bioaccumulation

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:

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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 : Species: Fish

Bioconcentration factor (BCF): 3,16

Partition coefficient: n-

octanol/water

: log Pow: 8 (20 °C)

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among environ-

mental compartments

Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher...

12.6 Other adverse effects

Product:

Additional ecological infor-

mation

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.

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

a brand of
FREUDENBERG

according to Regulation (EC) No. 1907/2006 - DE



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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

ADR : 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

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

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

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

IMDG : Not regulated as a dangerous good

IATA (Passenger) : Not regulated as a dangerous good

IATA (Cargo) : Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable



according to Regulation (EC) No. 1907/2006 - DE



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14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

ture

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

: This product does not contain sub-

stances of very high concern (Regulation (EC) No 1907/2006 (REACH).

Article 57).

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

: Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

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

of dangerous chemicals

Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

preparations and articles (Annex XVII)

: Not applicable

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

Water contaminating class

(Germany)

WGK 1 slightly hazardous to water

Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : Total dust:

others: 13,4 %

Inorganic substances in powdered form:

Not applicable

Inorganic substances in vapour or gaseous form:

Not applicable
Organic Substances:
portion Class 1: < 0,01 %

others: 86,6 %

Carcinogenic substances:

Not applicable Mutagenic: Not applicable

Toxic to reproduction:

a brand of
FREUDENBERG

according to Regulation (EC) No. 1907/2006 - DE



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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.

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

Full text of other abbreviations

DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.

DE TRGS 900 / AGW : Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule: ENCS - Existing and New Chemical Substances (Japan): ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evalua-

according to Regulation (EC) No. 1907/2006 - DE



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tion, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

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