

# SAFETY DATA SHEET

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



## OKS 464

Version	Revision Date:	Date of last issue: 27.03.2018	Print Date:
1.2	14.09.2020	Date of first issue: 13.06.2016	14.09.2020

### 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  
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 : mcm@oks-germany.com  
National contact :

#### 1.4 Emergency telephone number

Emergency telephone num-  
ber : 02/66101029 (Ospedale Niguarda - Milano)  
0382/24444 (Istituto Maugeri - Pavia)  
055/7947819 (Ospedale Careggi - Firenze)  
06/3054343 (Policlinico Gemelli - Roma)  
081/7472870 (Ospedale Cardarelli - Napoli)  
035/269469 - 800.883300 (Ospedali Riuniti - Bergamo)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**  
Not a hazardous substance or mixture.

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### 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.

## 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		$\geq 1 - < 2,5$
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		$\geq 1 - < 2,5$
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	Not classified		$\geq 1 - < 10$

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	01-2119486977-12-XXXX			
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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 respiration.
- 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.

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### 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

Specific hazards during fire-fighting : Fire may cause evolution of:  
Carbon oxides  
Metal oxides  
Nitrogen oxides (NO<sub>x</sub>)  
Oxides of phosphorus  
Sulphur 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.  
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.

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### 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)

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

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 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 <sup>3</sup>
Graphite	Workers	Inhalation	Long-term systemic effects	1,2 mg/m <sup>3</sup>
Amines, C11-14-branched alkyl, mon-	Workers	Inhalation	Long-term systemic effects	0,2 mg/m <sup>3</sup>

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ohexyl and dihexyl phosphates				
	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	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, 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
1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-dodecanethiol	Marine sediment	23,96 mg/kg
	Soil	47,76 mg/kg
	Fresh water	0,041 mg/l
	Marine water	0,0041 mg/l
	Intermittent use/release	0,41 mg/l
	Microbiological Activity in Sewage Treatment Systems	8000 mg/l
	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

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- Remarks : For prolonged or repeated contact use protective gloves. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.  
The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
- 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 specific 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

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

Relative vapour density : No data available

Relative density : 0,89 (20 °C)  
Reference substance: Water  
The value is calculated

Density : 0,89 g/cm<sup>3</sup>  
(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

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## 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



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

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achievable concentration.  
Information given is based on data obtained from similar substances.

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.

### Carbon black:

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

### 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

### Carbon black:

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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

### 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

### Carbon black:

Species : Rabbit  
Exposure time : 24 h  
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

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### 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.

##### **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:**

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

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### **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- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

### **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  
Result: negative

Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: negative

### **Carcinogenicity**

#### **Product:**

Remarks : No data available

#### **Components:**

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

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Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

### **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  
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 - Assessment :

Fertility : No toxicity to reproduction  
Teratogenicity : Animal testing did not show any effects on foetal development.

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### 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 development.

### 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, monoethyl and diethyl 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:**

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, monoethyl and diethyl 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:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

### Carbon black:

Exposure routes : Inhalation

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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, monoethyl and diethyl 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  
NOAEL : 250 mg/kg  
Application Route : Oral  
Method : OECD Test Guideline 421  
Remarks : Information given is based on data obtained from similar substances.

##### **Carbon black:**

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.



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### Components:

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

No aspiration toxicity classification

#### **Carbon black:**

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.

#### **Carbon black:**

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

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## 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

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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.

### **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

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### 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 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

## 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 : Test Type: Primary biodegradation  
Inoculum: activated sludge  
Result: Not readily biodegradable.  
Biodegradation: 0 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301C

### 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.

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### 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 : Species: Fish  
Bioconcentration factor (BCF): 3,16

Partition coefficient: n- : log Pow: 8 (20 °C)  
octanol/water

### 12.4 Mobility in soil

#### Product:

Mobility : Remarks: No data available

Distribution among environ- : Remarks: No data available  
mental compartments

### 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 Other adverse effects

#### Product:

Additional ecological infor- : No information on ecology is available.

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## 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

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

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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

### 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 mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : 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) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (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.

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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

### Other regulations:

Legislative Decree April 9, 2008, 81 (Implementation of Article 1 of the Law of 3 August 2007, n. 123, concerning the protection of health and safety in the workplace.) and subsequent amendments

Legislative Decree April 3, 2006, n. 152, (Environmental standards) and subsequent amendments

Legislative Decree February 6, 2009, 21 (Regulations for the execution of the provisions laid down in Regulation (EC) no. 648/2004 on detergents)

### 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

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

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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; 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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