

SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |

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 Substance/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
82216 Maisach-Gernlinden
Deutschland
Tel.: +49 8142 3051 500
Fax: +49 8142 3051 599
info@oks-germany.com

E-mail address of person responsible for the SDS : mcm@oks-germany.com

National contact :

1.4 Emergency telephone number

Emergency telephone number : +33 1 45 42 59 59 ORFILA
+33 1 72 11 00 03 NCEC
+49 8142 3051 517

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Specific target organ toxicity - repeated exposure, Category 2, lymph node

H373: May cause damage to organs through prolonged or repeated exposure.

SAFETY DATA SHEET

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



OKS 464

Version 2.0 Revision Date: 14.04.2025 Date of last issue: 22.10.2024 Print Date: 14.04.2025
Date of first issue: 13.06.2016

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

| | | | |
|--------------------------|---|---|---|
| Hazard pictograms | : |  | |
| Signal word | : | Warning | |
| Hazard statements | : | H373 | May cause damage to organs (lymph node) through prolonged or repeated exposure. |
| Precautionary statements | : | Response: P314 | Get medical advice/ attention if you feel unwell. |

Hazardous components which must be listed on the label:

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

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. | Classification | specific concentration limit | Concentration (% w/w) |
|---------------|-------------------|----------------|------------------------------------|--------------------------|
|---------------|-------------------|----------------|------------------------------------|--------------------------|

SAFETY DATA SHEET

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



OKS 464

Version 2.0 Revision Date: 14.04.2025 Date of last issue: 22.10.2024 Print Date: 14.04.2025
Date of first issue: 13.06.2016

| | Index-No. Registration number | | M-Factor Notes Acute toxicity estimate | |
|--|--|--|---|-------------------|
| Amines, C11-14- branched alkyl, monohexyl and dihexyl phosphates | 80939-62-4 279-632-6 01-2119976322-36- XXXX | Skin Irrit.2; H315 Eye Irrit.2; H319 STOT RE1; H372 Aquatic Chronic2; H411 | | $\geq 1 - < 2,5$ |
| 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 | | $\geq 0,25 - < 1$ |
| Substances with a workplace exposure limit : | | | | |
| Carbon black | 1333-86-4 215-609-9 01-2119384822-32- XXXX | Not classified | | $\geq 1 - < 10$ |
| Graphite (synthetic) | 7782-42-5 231-955-3 01-2119486977-12- 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.

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

- 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.
Get medical attention immediately.
- If swallowed : Move the victim to fresh air.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
Do not induce vomiting without medical advice.
Obtain medical attention.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No symptoms known or expected.
- Risks : May cause damage to organs through prolonged or repeated exposure.

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.

SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |

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.
Ensure adequate ventilation.
Do not breathe vapours, aerosols.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and transfer to properly labelled containers.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not use in areas without adequate ventilation.
In case of insufficient ventilation, wear suitable respiratory equipment.
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

SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |

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

Occupational Exposure Limits

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|--|-----------|-------------------------------|-----------------------|---------------------|
| Carbon black | 1333-86-4 | VME | 3,5 mg/m ³ | FR VLE (2007-12-01) |
| Further information: Permissible limit values (circular) | | | | |
| Graphite (synthetic) | 7782-42-5 | VME (Alveolar fraction) | 2 mg/m ³ | FR VLE (2007-12-01) |
| Further information: Permissible limit values (circular) | | | | |

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 (synthetic) | Workers | Inhalation | Long-term systemic effects | 1,2 mg/m ³ |
| Amines, C11-14-branched alkyl, monohexyl and dihexyl 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- | Workers | Inhalation | | 4,408 mg/m ³ |

SAFETY DATA SHEET

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



OKS 464

Version
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Revision Date:
14.04.2025

Date of last issue: 22.10.2024
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| | | | | |
|---|---------|--------------|----------------------------|----------------------|
| dodecanethiol | | | | |
| | Workers | Dermal | | 6,25 mg/kg bw/day |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | Workers | Skin contact | Long-term systemic effects | 0,44 mg/kg bw/day |
| | Workers | Inhalation | Long-term systemic effects | 0,31 mg/m3 |

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

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

8.2 Exposure controls

Engineering measures

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

Personal protective equipment

Eye/face protection : Safety glasses

Hand protection

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

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.

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Respiratory protection : Not required; except in case of aerosol formation.

Filter type : Filter type P

Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Environmental exposure controls

Air :
No special environmental precautions required.

Soil :
The product should not be allowed to enter drains, water courses or the soil.

Water :
The product should not be allowed to enter drains, water courses or the soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : paste
Colour : black

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

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
substance/mixture is non-soluble (in water)

Viscosity

 Viscosity, dynamic : No data available

 Viscosity, kinematic : Not applicable

Solubility(ies)

 Water solubility : insoluble

 Solubility in other solvents : No data available

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)

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

Bulk density : No data available
Relative vapour density : No data available
Particle characteristics
Particle size : Not applicable
Particle Size Distribution : Not applicable

9.2 Other information

Explosives : Not explosive
Oxidizing properties : No data available
Self-ignition : No data available
Evaporation rate : No data available
Sublimation point : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |

SECTION 11: Toxicological information

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

Acute toxicity

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

Product:

- Acute oral toxicity : Remarks: This information is not available.
- Acute inhalation toxicity : Remarks: This information is not available.
- Acute dermal toxicity : Remarks: This information is not available.

Components:

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

- Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401
- Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

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

- Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401
- Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Carbon black:

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

Graphite (synthetic):

- Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 423
Assessment: The substance or mixture has no acute oral toxicity
- Acute inhalation toxicity : LC50 (Rat): > 2.000 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |

Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute
inhalation toxicity

Skin corrosion/irritation

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

Product:

Remarks : This information is not available.

Components:

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

Species : Rabbit
Assessment : Irritating to skin.
Method : OECD Test Guideline 404
Result : Irritating to skin.

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

Species : Rabbit
Assessment : No skin irritation
Method : OECD Test Guideline 404
Result : No skin irritation

Carbon black:

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

Graphite (synthetic):

Species : Rabbit
Assessment : No skin irritation
Method : OECD Test Guideline 404
Result : No skin irritation

Serious eye damage/eye irritation

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

Product:

Remarks : This information is not available.

Components:

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

SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |

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

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

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

Carbon black:

Species : Rabbit
Exposure time : 24 h
Assessment : No eye irritation
Method : OECD Test Guideline 405
Result : No eye irritation

Graphite (synthetic):

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

Respiratory or skin sensitisation

Skin sensitisation

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

Respiratory sensitisation

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

Product:

Remarks : This information is not available.

Components:

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

Species : Guinea pig
Assessment : Did not cause sensitisation on laboratory animals.
Result : Did not cause sensitisation on laboratory animals.

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

Species : Guinea pig
Assessment : Did not cause sensitisation on laboratory animals.
Method : OECD Test Guideline 406
Result : Did not cause sensitisation on laboratory animals.

SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |

Carbon black:

Test Type : Buehler Test
Species : Guinea pig
Assessment : Does not cause skin sensitisation.
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

Graphite (synthetic):

Species : Mouse
Method : OECD Test Guideline 429
Result : negative

Germ cell mutagenicity

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

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Components:

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 (synthetic):

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

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

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

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

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

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

Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

Components:

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

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

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
development.

Graphite (synthetic):

Effects on fertility

: Species: Rat

Application Route: Oral

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

Method: OECD Test Guideline 422

STOT - single exposure

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

Product:

Remarks : No data available

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.

Carbon black:

Assessment

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

STOT - repeated exposure

May cause damage to organs (lymph node) through prolonged or repeated exposure.

Product:

Remarks : No data available

Components:

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

Target Organs

: lymph node

Assessment

: The substance or mixture is classified as specific target organ
toxicant, repeated exposure, category 1.

Carbon black:

SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |

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, monoethyl and diethyl phosphates:

Species : Rat
LOAEL : 10 mg/kg
Application Route : Oral
Method : OECD Test Guideline 422

Carbon black:

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

Graphite (synthetic):

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

Species : Rat
NOAEL : > 2 mg/l
Application Route : inhalation (dust/mist/fume)
Method : OECD Test Guideline 412

Aspiration toxicity

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

Product:

This information is not available.

Components:

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

No aspiration toxicity classification

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

Carbon black:

No aspiration toxicity classification

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Further information

Product:

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

Components:

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

SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |

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 : EC50 (Daphnia magna (Water flea)): 1,2 mg/l
aquatic invertebrates
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic : EC50 (Selenastrum capricornutum (green algae)): > 10 mg/l
plants
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l
Exposure time: 3 h

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

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 51 mg/l
aquatic invertebrates
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Toxicity to algae/aquatic : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
plants
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 : EC50 (Daphnia magna (Water flea)): > 5.600 mg/l
aquatic invertebrates
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic : EC50 (Scenedesmus capricornutum (fresh water algae)):
plants
10.000 mg/l
Exposure time: 72 h
Test Type: static test

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (Bacteria): > 800 mg/l
Exposure time: 3 h

Graphite (synthetic):

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Physico-chemical removability : Remarks: No data available

Components:

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

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

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

Biodegradability : Test Type: aerobic
Inoculum: activated sludge
Result: Not rapidly biodegradable
Biodegradation: 1 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes

Carbon black:

Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

Graphite (synthetic):

Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

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

Partition coefficient: n-octanol/water : log Pow: 1,74 - 11,61

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

Partition coefficient: n-octanol/water : log Pow: 5,2 - 10,82

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

Carbon black:

Assessment : Substance is not persistent, bioaccumulative, and toxic (PBT).. Substance is not very persistent and very bioaccumulative (vPvB).

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological information : No information on ecology is available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
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

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.4 Packing group

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good
IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good

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.

SAFETY DATA SHEET

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



OKS 464

| | | | |
|----------------|------------------------------|---|---------------------------|
| Version 2.0 | Revision Date: 14.04.2025 | Date of last issue: 22.10.2024 Date of first issue: 13.06.2016 | Print Date: 14.04.2025 |
|----------------|------------------------------|---|---------------------------|

SECTION 15: Regulatory information

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

- REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable
- REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). (EU SVHC) : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
- Regulation (EU) No 2024/590 on substances that deplete the ozone layer (EC 2024/590) : Not applicable
- Regulation (EU) 2019/1021 on persistent organic pollutants (recast) (EU POP) : Not applicable
- Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals (EU PIC) : Not applicable
- REACH - List of substances subject to authorisation (Annex XIV) (EU. REACH-Annex XIV) : Not applicable
- Regulation (EU) 2019/1148 on the marketing and use of explosives precursors : 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
- Installations classified for the protection of the environment (Environment Code R511-9) : Not applicable

SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |

- Occupational Illnesses (R-461-3, France) : 36, 25, 34, 49, 49 bis, 15, 15 bis
- Reinforced medical supervision (R4624-23) : The product has no CMR properties category 1, 1A or 1B
- Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control)
Not applicable

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where 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.
H372 : Causes damage to organs through prolonged or repeated exposure.
H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

- FR VLE : France. Occupational Exposure Limits
FR VLE / VME : 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; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response;

SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |

EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:

STOT RE 2

H373

Classification procedure:

Calculation method

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

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SAFETY DATA SHEET

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



OKS 464

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: 22.10.2024 | Print Date: |
| 2.0 | 14.04.2025 | Date of first issue: 13.06.2016 | 14.04.2025 |
