

SAFETY DATA SHEET

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



OKS 8600

Version	Revision Date:	Date of last issue: 30.08.2022	Print Date:
1.4	24.11.2025	Date of first issue: 10.07.2016	25.11.2025

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

1.1 Product identifier

Product name : OKS 8600

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

Use of the Substance/Mixture : Lubricant

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 : +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.

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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 : ester oil

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)
Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9-C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione	947-263-6 01-2120761103-66-XXXX	Skin Irrit. 2; H315 Repr. 2; H361fd Aquatic Chronic 4; H413		>= 1 - < 2,5
Substances with a workplace exposure limit :				
Rape oil	8002-13-9 232-299-0	Not classified		>= 90 - <= 100
4,4'-methylene	10254-57-6	Not classified		>= 1 - < 10

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bis(dibutylidithiocarbamate)	233-593-1			
thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]	41484-35-9 255-392-8 01-2119960149-32-XXXX	Not classified		$\geq 1 - < 10$

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- If inhaled : Obtain medical attention.
Remove person to fresh air. If signs/symptoms continue, get medical attention.
Keep patient warm and at rest.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Take off all contaminated clothing immediately.
Get medical attention immediately if irritation develops and persists.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
Wash off immediately with plenty of water.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
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.
Obtain medical attention.
Rinse mouth with water.
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.

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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

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Carbon oxides
Nitrogen oxides (NO_x)
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 personal protective equipment.
Ensure adequate ventilation.
Do not breathe vapours or spray mist.
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.
Prevent further leakage or spillage if safe to do so.
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 : Contain spillage, and then collect with non-combustible

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absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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 breathe vapours or spray mist.
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.
Do not re-use empty containers.
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.

Storage class (TRGS 510) : 10, Combustible liquids

7.3 Specific end use(s)

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

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Rape oil	8002-13-9	AGW (Alveolate fraction)	5 mg/m ³	DE TRGS 900 (2022-06-23)
	Peak-limit: excursion factor (category): 4;(II)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		MAK (measured as the alveolate fraction)	5 mg/m ³	DE DFG MAK (2023-07-01)
	Peak-limit: excursion factor (category): 4; II			
	Further information: Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed			
4,4'-methylene bis(dibutylthiocarbamate)	10254-57-6	MAK (measured as the alveolate fraction)	5 mg/m ³	DE DFG MAK (2023-07-01)
	Further information: Either there are no data for an assessment of damage to the embryo or foetus, including developmental neurotoxicity, or the currently available data are not sufficient for classification in one of the groups A - C			
		MAK (inhalable fraction)	20 mg/m ³	DE DFG MAK (2023-07-01)
	Further information: Either there are no data for an assessment of damage to the embryo or foetus, including developmental neurotoxicity, or the currently available data are not sufficient for classification in one of the groups A - C			
		AGW (Inhalable fraction)	20 mg/m ³	DE TRGS 900 (2020-10-02)
		AGW (Alveolate fraction)	5 mg/m ³	DE TRGS 900 (2020-10-02)
thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]	41484-35-9	MAK (inhalable fraction)	2 mg/m ³	DE DFG MAK (2023-07-01)
	Peak-limit: excursion factor (category): 2; II			
	Further information: Either there are no data for an assessment of damage to the embryo or foetus, including developmental neurotoxicity, or the currently available data are not sufficient for classification in one of the groups A - C			
		AGW (Inhalable fraction)	2 mg/m ³	DE TRGS 900 (2018-06-07)
	Peak-limit: excursion factor (category): 2;(II)			

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

Substance name	End Use	Exposure routes	Potential health effects	Value
thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]	Workers	Inhalation	Long-term systemic effects	3 mg/m3
	Workers	Inhalation	Acute systemic effects	3 mg/m3
	Workers	Skin contact	Long-term systemic effects	13,8 mg/kg
Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9-C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione	Workers	Inhalation	Long-term systemic effects	3,72 mg/m3
	Workers	Skin contact	Long-term systemic effects	1,04 mg/m3

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

Substance name	Environmental Compartment	Value
thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]	Sewage treatment plant	1 mg/l
Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9-C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione	Fresh water	0,496 mg/l
	Marine water	0,05 mg/l
	Microbiological Activity in Sewage Treatment Systems	100 mg/l
	Fresh water sediment	3772830,55 mg/kg
	Marine sediment	377283,06 mg/kg
	Soil	3935351,65 mg/kg

8.2 Exposure controls

Engineering measures

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

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Personal protective equipment

Eye/face protection : Safety glasses with side-shields

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 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 A-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 : liquid

Colour : brown

Odour : characteristic

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Odour Threshold	:	No data available
Melting point/ range	:	No data available
Boiling point/boiling range	:	No data available
Flammability	:	Flammability (solid, gas): No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	290 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
pH	:	Not applicable substance/mixture is non-polar/aprotic
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Solubility(ies)		
Water solubility	:	immiscible
Solubility in other solvents	:	No data available
Partition coefficient: n-	:	No data available

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octanol/water

Vapour pressure : < 1 hPa (20 °C)

Relative density : 0,919 (20 °C)
Reference substance: Water
The value is calculated

Density : 0,92 g/cm³
(20 °C)

Bulk density : No data available

Relative vapour density : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : No data available

Evaporation rate : No data available

Refractive index : 1,4733 at 20 °C

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

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

Acute toxicity

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

Product:

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

Components:

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9–C15, C12 rich, alk-1-enyl) dihydro-2,5-furandione

:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 423
GLP: yes

4,4'-methylene bis(dibutyldithiocarbamate):

Acute oral toxicity : LD50 Oral (Rat): 16.000 mg/kg

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

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 6,3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

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

Skin corrosion/irritation

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

Product:

Remarks : This information is not available.

Components:

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9–C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

:

Species : human skin
Assessment : Irritating to skin.
Method : OECD Test Guideline 439
Result : Irritating to skin.
GLP : yes

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

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:

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9–C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

:

Assessment : No eye irritation
Result : No eye irritation

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Species : Rabbit

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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:

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9-C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

:

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

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

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

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:

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

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GLP: no

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 476
Result: negative
GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Chinese hamster
Application Route: oral (gavage)
Exposure time: 2 d
Method: OECD Test Guideline 474
Result: negative
GLP: no

Germ cell mutagenicity-
Assessment : Weight of evidence does not support classification as a germ
cell mutagen.

Carcinogenicity

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

Product:

Remarks : No data available

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:

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-,
triethylenetetramine fraction and 3-(C9–C15, C12 rich, alk-1-enyl) dihydro-2,5-furandione

:

Reproductive toxicity -
Assessment

: - Fertility -

Some evidence of adverse effects on development, based on
animal experiments., Some evidence of adverse effects on
sexual function and fertility, based on animal experiments.
- Teratogenicity -

Some evidence of adverse effects on development, based on
animal experiments., Some evidence of adverse effects on

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sexual function and fertility, based on animal experiments.

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Effects on foetal development : Test Type: Pre-natal
Species: Rat
Application Route: oral (gavage)
General Toxicity Maternal: NOAEL: 300 mg/kg body weight
Embryo-foetal toxicity: NOAEL: 1.000 mg/kg body weight
Symptoms: No embryotoxic effects
Method: OECD Test Guideline 414
Result: No effects on fertility and early embryonic development were detected.
GLP: yes

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

STOT - single exposure

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

Product:

Remarks : No data available

Components:

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

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

STOT - repeated exposure

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

Product:

Remarks : No data available

Repeated dose toxicity

Product:

Remarks : This information is not available.

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Components:

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Species	: Rat
NOAEL	: ≥ 138 mg/kg
Application Route	: oral (feed)
Exposure time	: 90 d
Number of exposures	: daily
Control Group	: yes
Method	: OECD Test Guideline 408
GLP	: yes

Aspiration toxicity

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

Product:

This information is not available.

Components:

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

No aspiration toxicity classification

11.2 Information on other hazards

Endocrine disrupting properties

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

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.
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Further information

Product:

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:

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:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 1.000 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1.000 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 496 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes

4,4'-methylene bis(dibutyldithiocarbamate):

Toxicity to fish : LC50 (Fish): > 500 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : EC50 (Scenedesmus capricornutum (fresh water algae)): 41,3 mg/l
Exposure time: 72 h

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thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

- Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 57 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
Remarks: Aquatic toxicity is unlikely due to low solubility.
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes
Remarks: No toxicity at the limit of solubility
- Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes
Remarks: No toxicity at the limit of solubility
- NOEC (Desmodesmus subspicatus (green algae)): 100 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes
Remarks: No toxicity at the limit of solubility
- Toxicity to microorganisms : EC20 (activated sludge): > 100 mg/l
Exposure time: 3 h
Test Type: static test
Method: OECD Test Guideline 209
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 10 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

Ecotoxicology Assessment

- Acute aquatic toxicity : This product has no known ecotoxicological effects.
- Chronic aquatic toxicity : This product has no known ecotoxicological effects.

12.2 Persistence and degradability

Product:

- Biodegradability : Remarks: No data available
- Physico-chemical : Remarks: No data available

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removability

Components:

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9-C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

:

Biodegradability : Test Type: anaerobic
Inoculum: activated sludge
Concentration: 3,77 mg/l
Result: Not readily biodegradable.
Biodegradation: 10 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
GLP: yes

4,4'-methylene bis(dibutyldithiocarbamate):

Biodegradability : Result: rapidly biodegradable

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Biodegradability : Test Type: Primary biodegradation
Inoculum: activated sludge
Result: Not rapidly biodegradable
Biodegradation: 7 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9-C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

:

Partition coefficient: n-octanol/water : log Pow: > 10

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Exposure time: 56 d
Bioconcentration factor (BCF): <= 12
Method: OECD Test Guideline 305C

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Partition coefficient: n-
octanol/water : log Pow: 10 (25 °C)

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:

thiodiethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]:

Assessment : Non-classified PBT substance. Non-classified vPvB substance

12.6 Endocrine disrupting properties

Product:

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

12.7 Other adverse effects

Product:

Additional ecological
information : No information on ecology is available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

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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 : unused product
13 02 06*, synthetic engine, gear and lubricating oils

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
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

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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.
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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

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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

Water hazard class (Germany) : WGK 1 slightly hazardous to water
Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : 5.2.5: Organic Substances:
Class 1: 95,5 %

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control)
Not applicable

15.2 Chemical safety assessment

This information is not available.

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SECTION 16: Other information

Full text of H-Statements

H315 : Causes skin irritation.
H361fd : Suspected of damaging fertility. Suspected of damaging the unborn child.
H413 : May cause long lasting harmful effects to aquatic life.

Full text of other abbreviations

Aquatic Chronic : Long-term (chronic) aquatic hazard
Repr. : Reproductive toxicity
Skin Irrit. : Skin irritation
DE DFG MAK : Germany. MAK BAT Annex IIa
DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.
DE DFG MAK / MAK : MAK value
DE TRGS 900 / AGW : 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; 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

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Further information

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

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