

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

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

### 1.1 Product identifier

Product name : OKS 1149

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

Use of the Sub-  
stance/Mixture : Lubricant

Recommended restrictions : Restricted to professional users.  
on use

### 1.3 Details of the supplier of the safety data sheet

Company : OKS Spezialschmierstoffe GmbH  
Ganghoferstr. 47  
D-82216 Maisach-Gernlinden  
Tel.: +49 8142 3051 500  
Fax.: +49 8142 3051 599  
info@oks-germany.com

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

National contact :

### 1.4 Emergency telephone number

Emergency telephone num- : +33 1 45 42 59 59  
ber

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Long-term (chronic) aquatic hazard, Cat- H412: Harmful to aquatic life with long lasting ef-  
egory 3 fects.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard statements : H412 Harmful to aquatic life with long lasting ef-  
fects.

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

Precautionary statements : **Prevention:**  
P273 Avoid release to the environment.

### 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 : silicone oil  
Thickening agent

#### Components

Chemical name	CAS-No. EC-No.  Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)
dilithium azelate	38900-29-7 254-184-4  01-2120119814-57-XXXX 01-2120119814-57-XXXX 01-2120119814-57-XXXX 01-2120119814-57-XXXX	Acute Tox.4; H302		>= 1 - < 10
dibutyl 1,4,5,6,7,7-hexachlorobicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate	1770-80-5 217-192-9	Skin Irrit.2; H315 Eye Irrit.2; H319 STOT SE3; H335 Aquatic Acute1; H400 Aquatic Chronic1;		>= 1 - < 2,5

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

		H410		
--	--	------	--	--

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.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

Unsuitable extinguishing media : High volume water jet

### 5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Carbon oxides  
Halogenated compounds  
Metal oxides

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Exposure to decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

---

## 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).  
Avoid breathing dust.  
Refer to protective measures listed in sections 7 and 8.

### 6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.  
If the product contaminates rivers and lakes or drains inform respective authorities.

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Clean up promptly by sweeping or vacuum.  
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For personal protection see section 8.

---

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.  
For personal protection see section 8.

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

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

Contains no substances with occupational exposure limit values.

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

Substance name	End Use	Exposure routes	Potential health effects	Value
dilithium azelate	Workers	Dermal	Long-term systemic effects	13,5 mg/kg bw/day
	Workers	Dermal	Long-term local effects	0,172 mg/cm <sup>2</sup>

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

Substance name	Environmental Compartment	Value
dilithium azelate	Fresh water	0,023 mg/l
	Marine water	0,002 mg/l

### 8.2 Exposure controls

#### Engineering measures

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment.

# SAFETY DATA SHEET

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



## OKS 1149

Version 1.3	Revision Date: 22.08.2022	Date of last issue: 13.09.2018 Date of first issue: 31.05.2016	Print Date: 22.08.2022
----------------	------------------------------	---	---------------------------

### Personal protective equipment

- Eye protection : Safety glasses with side-shields
- Hand protection  
Material : Nitrile rubber  
Break through time : > 10 min  
Protective index : Class 1
- Remarks : Wear protective gloves. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.  
The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
- 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.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Physical state : solid
- Colour : white
- Odour : slight
- 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

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

Lower explosion limit / Lower flammability limit : No data available

Flash point : > 320 °C

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 : < 0,001 hPa (20 °C)

Relative density : 1

Density : 1,02 g/cm<sup>3</sup>  
(20 °C)

Bulk density : No data available

Relative vapour density : No data available

### 9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : No data available

Evaporation rate : No data available

Sublimation point : No data available

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

### 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

>150 °C small quantities of formaldehyde may be formed.

### SECTION 11: Toxicological information

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

##### Acute toxicity

##### Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg  
Method: Calculation method

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

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

##### Components:

##### **dilithium azelate:**

Acute oral toxicity : LD50 (Rat): > 300 mg/kg  
Method: OECD Test Guideline 420  
GLP: yes

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

##### **dibutyl 1,4,5,6,7,7-hexachlorobicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate:**

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



# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

### Skin corrosion/irritation

#### Product:

Remarks : This information is not available.

#### Components:

##### **dilithium azelate:**

Assessment : No skin irritation  
Result : No skin irritation

##### **dibutyl 1,4,5,6,7,7-hexachlorobicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate:**

Result : Irritating to skin.

### Serious eye damage/eye irritation

#### Product:

Remarks : This information is not available.

#### Components:

##### **dilithium azelate:**

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

##### **dibutyl 1,4,5,6,7,7-hexachlorobicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate:**

Result : Irritating to eyes.  
Remarks : Non persistent irritation

### Respiratory or skin sensitisation

#### Product:

Remarks : This information is not available.

#### Components:

##### **dilithium azelate:**

Assessment : Does not cause skin sensitisation.  
Result : Does not cause skin sensitisation.

### Germ cell mutagenicity

#### Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

### Carcinogenicity

#### Product:

Remarks : No data available

### Reproductive toxicity

#### Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

### STOT - single exposure

#### Components:

##### **dilithium azelate:**

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

##### **dibutyl 1,4,5,6,7,7-hexachlorobicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate:**

Exposure routes : Inhalation

Assessment : May cause respiratory irritation.

### STOT - repeated exposure

#### Components:

##### **dilithium azelate:**

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.

### Aspiration toxicity

#### Product:

This information is not available.

#### Components:

##### **dilithium azelate:**

No aspiration toxicity classification

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

### 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.

## SECTION 12: Ecological information

### 12.1 Toxicity

**Product:**

Toxicity to fish : Remarks: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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:**

**dilithium azelate:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h

**dibutyl 1,4,5,6,7,7-hexachlorobicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate:**

#### Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

### 12.2 Persistence and degradability

#### Product:

Biodegradability : Remarks: No data available

Physico-chemical removability : Remarks: No data available

### 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:

##### **dilithium azelate:**

Bioaccumulation : Bioconcentration factor (BCF): 3,0

Partition coefficient: n-octanol/water : log Pow: -3,56

### 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.

### 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.

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

### 12.7 Other adverse effects

#### Product:

Additional ecological information : Harmful to aquatic life with long lasting effects.

## 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  
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

# SAFETY DATA SHEET

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



## OKS 1149

Version 1.3	Revision Date: 22.08.2022	Date of last issue: 13.09.2018 Date of first issue: 31.05.2016	Print Date: 22.08.2022
----------------	------------------------------	---	---------------------------

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.

---

## 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).

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

- REACH - List of substances subject to authorisation (Annex XIV) (EU. REACH-Annex XIV) : Not applicable
- Regulation (EC) No 1005/2009 on substances that deplete the ozone layer (EC 1005/2009) : Not applicable
- Regulation (EU) 2019/1021 on persistent organic pollutants (recast) (EU POP) : Not applicable
- Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals (EU PIC) : Not applicable
- Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable
- Occupational Illnesses (R-461-3, France) : Not applicable
- Reinforced medical supervision (R4624-18) : The product has no CMR properties
- Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Not applicable

### 15.2 Chemical safety assessment

This information is not available.

---

## SECTION 16: Other information

### Full text of H-Statements

- H302 : Harmful if swallowed.  
H315 : Causes skin irritation.  
H319 : Causes serious eye irritation.  
H335 : May cause respiratory irritation.  
H400 : Very toxic to aquatic life.  
H410 : Very toxic to aquatic life with long lasting effects.

### Full text of other abbreviations

# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

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

### Further information

#### Classification of the mixture:

Aquatic Chronic 3                      H412

#### Classification procedure:

Calculation method

This safety data sheet applies only to products as originally packed and labelled. The information contained therein may not be reproduced or modified without our express written permission. Any forwarding of this document is only permitted to the extent required by law. Any further, in particular public, dissemination of the safety data sheet (e.g. as a document for download from the Internet) is not permitted without our express written consent. We provide our customers with amended safety data sheets as prescribed by law. The customer is responsible for passing on safety data sheets and any amendments contained therein to its own customers, employees and other users of the product. We provide no guarantee that safety data sheets received by users from third parties are up-to-date. All information and instructions in this safety data sheet have been compiled to the best of our knowledge and are based on the information available to us on the day of publication. The information provided is intended to describe the product in relation to the required safety measures; it is neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and does not justify any contractual legal relationship. The existence of a safety data sheet for a particular jurisdiction does not necessarily mean



# SAFETY DATA SHEET

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



## OKS 1149

Version	Revision Date:	Date of last issue: 13.09.2018	Print Date:
1.3	22.08.2022	Date of first issue: 31.05.2016	22.08.2022

---

that import or use within that jurisdiction is legally permitted. If you have any questions, please contact your responsible sales contact or authorized trading partner.