

**OKS 490**

Version 3.1	Revision Date: 07.11.2022	Date of last issue: 01.09.2020 Date of first issue: 24.04.2014	Print Date: 07.11.2022
----------------	------------------------------	---	---------------------------

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

Product name : OKS 490

**Manufacturer or supplier's details**

Company name of supplier : 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 responsible for the SDS : mcm@oks-germany.com  
Material Compliance Management

Emergency telephone number : +7 495 628 1687  
+49 8142 3051 517

**Recommended use of the chemical and restrictions on use**

Recommended use : Grease


Restrictions on use : Restricted to professional users.

**2. HAZARDS IDENTIFICATION**

**GHS Classification (According to GOST 32423, GOST 32424 and GOST 32425)**

Skin sensitisation : Category 1

**GHS-Labeling (According to GOST 31340)**

Hazard pictograms : 

Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

Precautionary statements : **Prevention:**  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves.  
**Response:**  
P302 + P352 IF ON SKIN: Wash with plenty of water.  
P333 + P313 If skin irritation or rash occurs: Get medical

## OKS 490

Version 3.1	Revision Date: 07.11.2022	Date of last issue: 01.09.2020 Date of first issue: 24.04.2014	Print Date: 07.11.2022
----------------	------------------------------	---	---------------------------

advice/ attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.

### Other hazards which do not result in classification

None known.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical nature : Mineral oil.  
aluminium soap  
graphite

### Components

Chemical name	Concentration (% w/w)	Occupational Exposure Limits		CAS-No.	EC-No.
		MAC value mg/m <sup>3</sup> / TSEL value	Hazard Class		
Fatty acids, C16-18 (even numbered), aluminium salts	>= 1 - < 10	TSEL: 2 mg/m <sup>3</sup> Data Source: RU TSEL			939-582-4
Fatty acids, C16-18 and C18-unsatd., Me esters, sulfurized	>= 2,5 - < 10	No data available		68390-93-2	269-913-1
dibutyl [[bis[(2- ethylhexyl)oxy]phosphin othioyl]thio]succinate	>= 0,25 - < 1	No data available		68413-48-9	270-220-1

## 4. 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.

## OKS 490

Version 3.1	Revision Date: 07.11.2022	Date of last issue: 01.09.2020 Date of first issue: 24.04.2014	Print Date: 07.11.2022
----------------	------------------------------	---	---------------------------

- 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.
- Most important symptoms and effects, both acute and delayed : May cause an allergic skin reaction.  
Allergic appearance
- Notes to physician : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

## 5. FIREFIGHTING MEASURES

### Flammable properties

- Flash point : Not applicable  
Ignition temperature : No data available
- Upper explosion limit / Upper flammability limit : No data available
- Lower explosion limit / Lower flammability limit : No data available
- Flammability (solid, gas) : Combustible Solids
- 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
- Hazardous combustion products : Carbon oxides  
Sulphur oxides  
Oxides of phosphorus  
Metal oxides
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

**OKS 490**

Version 3.1	Revision Date: 07.11.2022	Date of last issue: 01.09.2020 Date of first issue: 24.04.2014	Print Date: 07.11.2022
----------------	------------------------------	---	---------------------------

Exposure to decomposition products may be a hazard to health.

---

**6. ACCIDENTAL RELEASE MEASURES**

- |   |   |
|---|---|
| Personal precautions,<br>protective equipment and<br>emergency procedures | : Evacuate personnel to safe areas.<br>Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).<br>Do not breathe vapours, aerosols.<br>Refer to protective measures listed in sections 7 and 8. |
| Environmental precautions   | : Try to prevent the material from entering drains or water courses.<br>Local authorities should be advised if significant spillages cannot be contained.   |
| Methods and materials for<br>containment and cleaning up                  | : Clean up promptly by sweeping or vacuum.<br>Keep in suitable, closed containers for disposal.   |

---

**7. HANDLING AND STORAGE**

- |                             |  |
|-----------------------------|--|
| Advice on safe handling     | : Avoid contact with skin and eyes.<br>For personal protection see section 8.<br>Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.<br>Smoking, eating and drinking should be prohibited in the application area.<br>Wash hands and face before breaks and immediately after handling the product.<br>Do not get in eyes or mouth or on skin.<br>Do not get on skin or clothing.<br>Do not ingest.<br>Do not repack.<br>These safety instructions also apply to empty packaging which may still contain product residues.<br>Keep container closed when not in use. |
| Conditions for safe storage | : Store in original container.<br>Keep container closed when not in use.<br>Keep in a dry, cool and well-ventilated place.<br>Containers which are opened must be carefully resealed and kept upright to prevent leakage.<br>Store in accordance with the particular national regulations.<br>Keep in properly labelled containers.  |

**OKS 490**

Version 3.1	Revision Date: 07.11.2022	Date of last issue: 01.09.2020 Date of first issue: 24.04.2014	Print Date: 07.11.2022
----------------	------------------------------	---	---------------------------

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Data Source
Fatty acids, C16-18 (even numbered), aluminium salts	Not Assigned	TSEL (aerosol)	2 mg/m <sup>3</sup>	RU TSEL (2021-02-03)

**Engineering measures** : none

**Personal protective equipment**

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

Filter type : Filter type P

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.

Eye protection : Safety glasses with side-shields

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.

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

Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : paste

Colour : black

Odour : characteristic

**OKS 490**

Version 3.1	Revision Date: 07.11.2022	Date of last issue: 01.09.2020 Date of first issue: 24.04.2014	Print Date: 07.11.2022
----------------	------------------------------	---	---------------------------

Odour Threshold : No data available

pH : Not applicable

Melting point/range : No data available

Boiling point/boiling range : > 300 °C

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : Combustible Solids

Self-ignition : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : < 0,001 hPa (20 °C)

Relative vapour density : No data available

Relative density : 0,98 (20 °C)  
Reference substance: Water  
The value is calculated

Density : 0,98 g/cm<sup>3</sup> (20 °C)

Bulk density : No data available

Solubility(ies)  
Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

**OKS 490**

Version 3.1	Revision Date: 07.11.2022	Date of last issue: 01.09.2020 Date of first issue: 24.04.2014	Print Date: 07.11.2022
----------------	------------------------------	---	---------------------------

Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive
Oxidizing properties	:	No data available
Sublimation point	:	No data available

**10. STABILITY AND REACTIVITY**

Reactivity	:	No hazards to be specially mentioned.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	No conditions to be specially mentioned.
Incompatible materials	:	No materials to be especially mentioned.
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

**Product:**

Acute oral toxicity	:	Remarks: This information is not available.
Acute inhalation toxicity	:	Remarks: This information is not available.
Acute dermal toxicity	:	Symptoms: Redness, Local irritation

**Components:**

**Fatty acids, C16-18 (even numbered), aluminium salts:**

Acute oral toxicity	:	LD50 (Rat): > 2.000 mg/kg Assessment: The substance or mixture has no acute oral toxicity
---------------------	---	--

**OKS 490**

Version	Revision Date:	Date of last issue: 01.09.2020	Print Date:
3.1	07.11.2022	Date of first issue: 24.04.2014	07.11.2022

**dibutyl [[bis[(2-ethylhexyl)oxy]phosphinothioyl]thio]succinate:**

Acute oral toxicity : LD50 (Rat): 11.300 mg/kg  
Method: OECD Test Guideline 401

**Skin corrosion/irritation**

**Product:**

Remarks : This information is not available.

**Components:**

**Fatty acids, C16-18 (even numbered), aluminium salts:**

Species : Human  
Assessment : No skin irritation  
Result : No skin irritation

**dibutyl [[bis[(2-ethylhexyl)oxy]phosphinothioyl]thio]succinate:**

Species : Rabbit  
Assessment : No skin irritation  
Result : No skin irritation

**Serious eye damage/eye irritation**

**Product:**

Remarks : This information is not available.

**Components:**

**Fatty acids, C16-18 (even numbered), aluminium salts:**

Result : No eye irritation  
Assessment : No eye irritation

**dibutyl [[bis[(2-ethylhexyl)oxy]phosphinothioyl]thio]succinate:**

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

**Respiratory or skin sensitisation**

**Product:**

Remarks : This information is not available.



**OKS 490**

Version	Revision Date:	Date of last issue: 01.09.2020	Print Date:
3.1	07.11.2022	Date of first issue: 24.04.2014	07.11.2022

**Components:**

**Fatty acids, C16-18 (even numbered), aluminium salts:**

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

**dibutyl [[bis[(2-ethylhexyl)oxy]phosphinothioyl]thio]succinate:**

Assessment	:	The product is a skin sensitiser, sub-category 1B.
Result	:	The product is a skin sensitiser, sub-category 1B.

**Germ cell mutagenicity**

**Product:**

Genotoxicity in vitro	:	Remarks: No data available
-----------------------	---	----------------------------

Genotoxicity in vivo	:	Remarks: No data available
----------------------	---	----------------------------

**Carcinogenicity**

**Product:**

Remarks	:	No data available
---------	---	-------------------

**Reproductive toxicity**

**Product:**

Effects on fertility	:	Remarks: No data available
----------------------	---	----------------------------

Effects on foetal development	:	Remarks: No data available
-------------------------------	---	----------------------------

**Repeated dose toxicity**

**Product:**

Remarks	:	This information is not available.
---------	---	------------------------------------

**Aspiration toxicity**

**Product:**

This information is not available.

**OKS 490**

Version 3.1	Revision Date: 07.11.2022	Date of last issue: 01.09.2020 Date of first issue: 24.04.2014	Print Date: 07.11.2022
----------------	------------------------------	---	---------------------------

**Further information**

**Product:**

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

---

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**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:**

**Fatty acids, C16-18 and C18-unsatd., Me esters, sulfurized:**

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 13 mg/l  
aquatic invertebrates Exposure time: 48 h

Toxicity to algae/aquatic : EC50 (algae): > 100 mg/l  
plants Exposure time: 72 h

**dibutyl [[bis[(2-ethylhexyl)oxy]phosphinothioyl]thio]succinate:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 0,002 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Method: OECD Test Guideline 203  
GLP: yes  
Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 100 mg/l

**OKS 490**

Version 3.1	Revision Date: 07.11.2022	Date of last issue: 01.09.2020 Date of first issue: 24.04.2014	Print Date: 07.11.2022
----------------	------------------------------	---	---------------------------

aquatic invertebrates                      Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202

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

**Persistence and degradability**

**Product:**

Biodegradability                      : Remarks: No data available

Physico-chemical removability                      : Remarks: No data available

**Components:**

**Fatty acids, C16-18 and C18-unsatd., Me esters, sulfurized:**

Biodegradability                      : Result: Not readily biodegradable.  
Biodegradation: 35 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

**dibutyl [[bis[(2-ethylhexyl)oxy]phosphinothioyl]thio]succinate:**

Biodegradability                      : aerobic  
Inoculum: activated sludge  
Result: Not rapidly biodegradable  
Biodegradation: 12,1 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

**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:**

**dibutyl [[bis[(2-ethylhexyl)oxy]phosphinothioyl]thio]succinate:**

**OKS 490**

Version 3.1	Revision Date: 07.11.2022	Date of last issue: 01.09.2020 Date of first issue: 24.04.2014	Print Date: 07.11.2022
----------------	------------------------------	---	---------------------------

Partition coefficient: n-octanol/water : log Pow: > 6,5  
Method: OECD Test Guideline 117  
GLP: yes

**Mobility in soil**

**Product:**

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

**Other adverse effects**

**Product:**

Additional ecological information : No information on ecology is available.

**Hygienic standards:**

**(Allowable concentration in air, water, including fishery waters, soil)**

Components	Air	Water	Soil	Data Source
Fatty acids, C16-18 (even numbered), aluminium salts	TSEL value: 0,001 mg/m <sup>3</sup> (Aluminium)	No data available	No data available	List 2

For explanation of abbreviations see section 16.

**13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

Waste from residues : 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.

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

**OKS 490**

Version 3.1	Revision Date: 07.11.2022	Date of last issue: 01.09.2020 Date of first issue: 24.04.2014	Print Date: 07.11.2022
----------------	------------------------------	---	---------------------------

12 01 12\*, spent waxes and fats

uncleaned packagings  
15 01 10\*, packaging containing residues of or contaminated  
by hazardous substances

---

**14. TRANSPORT INFORMATION**

**ADR**

Not regulated as a dangerous good

**UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Special precautions for user**

Not applicable

---

**15. REGULATORY INFORMATION**

**National regulatory information**

Federal Law of 21.07.1997 No. 116-FZ (amended on 11.06.2021) "On industrial safety of hazardous production facilities".

Federal Law of 24.06.1998 No. 89-FZ (amended on 02.07.2021) "On production and consumption waste".

Federal Law of 30.03.1999 No. 52-FZ (amended on 02.07.2021) "On the Sanitary and Epidemiological Well-Being of the Population" (amended and supplemented, entered into force on 31.10.2021).

Federal Law of 04.05.1999 No. 96-FZ "On the protection of atmospheric air" (as amended on December 8, 2020).

Federal Law of 27.12.2002 No. 184-FZ (amended on 02.07.2021) "On Technical Regulation" (amended and supplemented, entered into force on 01.09.2021).

Federal Law of 10.01.2002 No. 7-FZ (amended on 02.07.2021) "On environmental protection".

Federal Law of 22.07.2008 No. 123-FZ "Technical Regulations on Fire Safety Requirements"  
TECHNICAL REGULATIONS OF THE CUSTOMS UNION TR CU 030/2012 On requirements for lubricants, oils and special fluids (amended on 03.03.2017).

**International Regulations**

Montreal Protocol : Not applicable

Rotterdam Convention (Prior Informed Consent) : Not applicable

**OKS 490**

Version	Revision Date:	Date of last issue: 01.09.2020	Print Date:
3.1	07.11.2022	Date of first issue: 24.04.2014	07.11.2022

Stockholm Convention (Persistent Organic Pollutants) : Not applicable

---

**16. OTHER INFORMATION**

**List of data sources used in the preparation of the Safety Data Sheet**

GOST 30333-2007. Interstate standard. Safety data sheet for chemical products. Primary requirements.

GOST 12.1.004-91 System of labor safety standards (SSBT). Fire safety. General requirements.

GOST 12.1.007-76 Occupational safety standards system. Noxious substances. Classification and general safety requirements

GOST 12.1.044-89 SSBT. Fire and explosion hazard of substances and materials. Nomenclature of indicators and methods for their determination.

GOST 12.4.021 System of labor safety standards (SSBT). Ventilation systems. General requirements.

GOST 12.4.137-2001 Special footwear with leather uppers for protection against oil, oil products, acids, alkalis, non-toxic and explosive dust. Technical conditions.

GOST 12.4.252-2013 System of labor safety standards (SSBT). Means of individual protection of hands. Gloves. General technical requirements. Test methods.

GOST 14192-96. Interstate standard. Cargo marking. Minsk, 1998.

GOST 19433-88 Dangerous goods. Classification and labeling.

GOST 31340-2013. Interstate standard. Precautionary labeling of chemical products. General requirements.

GOST 32419-2013 Classification of the hazard of chemical products. General requirements.

GOST 32421-2013 Classification of chemical products, the hazard of which is due to physical and chemical properties. Test methods for explosive chemical products.

GOST 32423-2013 Hazard classification of mixed chemical products by their effects on the body.

GOST 32424-2013 Classification of the hazard of chemical products by their impact on the environment. Basic provisions.

GOST 32425-2013 Hazard classification of mixed chemical products in terms of environmental impact.

GOST R 53264-2019 Fire fighting equipment. Special protective clothing for firefighters. General technical requirements. Test methods.

GOST R 53265-2019 Fire fighting equipment. Personal protective equipment for the feet of the firefighter. General technical requirements. Test methods.

GOST R 53268-2009 Fire fighting equipment. Fire rescue belts. General technical requirements. Test methods.

GOST R 53269-2019 Fire fighting equipment. Firefighters helmets. General technical requirements. Test methods.

SanPiN 1.2.2353-08 "Carcinogenic factors and basic requirements for the prevention of carcinogenic hazard".

SanPiN 1.2.3685-21 "Hygienic standards and requirements for ensuring the safety and (or) harmlessness to humans of environmental factors" dated 28.01.2021.

SanPiN 2.1.3684-21 "Sanitary and epidemiological requirements for the maintenance of the territories of urban and rural settlements, for water bodies, drinking water and drinking water supply, atmospheric air, soils, living quarters, the operation of industrial, public premises, the organization and implementation of sanitary and anti-epidemic (preventive) measures".

SanPiN 2.2.0.555-96. 2.2. Labor hygiene. Hygienic requirements for working conditions for women. Sanitary rules and regulations.

# SAFETY DATA SHEET

- RU



## OKS 490

Version	Revision Date:	Date of last issue: 01.09.2020	Print Date:
3.1	07.11.2022	Date of first issue: 24.04.2014	07.11.2022

Carriage of dangerous goods, International maritime dangerous goods (IMDG) code.  
Water quality standards for fishery water bodies, including standards for maximum permissible concentrations of harmful substances in the waters of fishery water bodies (approved by order of the Ministry of Agriculture of Russia dated December 13, 2016 No. 552).  
Regulations for the carriage of dangerous goods (Appendix 1 and 2) to the Agreement on International Goods Transport by Rail (SMGS), 2009.  
Agreement on International Goods Transport by Rail (SMGS).  
UN Recommendations on the Transport of Dangerous Goods. Typical rules. Twenty-second revised edition. United Nations, New York and Geneva, 2021.  
Montreal Protocol (Ozone Depleting Substances)  
Stockholm Convention (Persistent Organic Pollutants)

### Full text of other abbreviations

Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Flam. Liq.	:	Flammable liquids
Skin Sens.	:	Skin sensitisation
RU TSEL	:	SanPiN 1.2.3685-21 Table 2.2 Tentative Safe Exposure Levels (TSELS) of Pollutants in the Air of the Working Area
RU TSEL / TSEL	:	TSEL value
List 2	:	SanPiN 1.2.3685-21 Table 1.2, Table 1.12 & Table 1.13 Tentative Safe Exposure Levels (TSEL) in the air of urban and rural settlements

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; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; TCSI - Taiwan Chemical Substance Inventory; TECl - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances



**OKS 490**

Version	Revision Date:	Date of last issue: 01.09.2020	Print Date:
3.1	07.11.2022	Date of first issue: 24.04.2014	07.11.2022

Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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 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.