

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

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

1.1 Product identifier

Product name : OKS 2100

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

Use of the Sub-stance/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
D-82216 Maisach-Gernlinden
Tel.: +49 8142 3051 500
Fax.: +49 8142 3051 599

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

1.4 Emergency telephone number

Emergency telephone number : +49 8142 3051 517
Warszawa: +48 22 619 66 54

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3	H226: Flammable liquid and vapour.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Aspiration hazard, Category 1	H304: May be fatal if swallowed and enters airways.
Chronic aquatic toxicity, Category 2	H411: Toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

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







OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:				
Signal word	:	Danger			
Hazard statements	:	H226 H304	Flammable liquid and vapour. May be fatal if swallowed and enters airways.		
		H336 H411	May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.		
Supplemental Hazard Statements	:	EUH066	Repeated exposure may cause skin dryness or cracking.		
Precautionary statements	:	Prevention: P210 P273	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.		
		Response: P301 + P310 P331 P370 + P378 P391	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Collect spillage.		
		Storage: P403 + P235	Store in a well-ventilated place. Keep cool.		

Hazardous components which must be listed on the label:

Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha

Additional Labelling

EUH208 Contains calcium bis(dinonylnaphthalenesulphonate); Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts. May produce an allergic reaction.

2.3 Other hazards

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

SAFETY DATA SHEET

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



OKS 2100

Version 1.1 Revision Date: 09.10.2018 Date of last issue: 22.06.2016 Print Date: 09.10.2018
Date of first issue: 22.06.2016

Chemical nature : Solvent
Wax

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration limits M-Factor Notes	Concentration (% w/w)
Naphtha (petroleum), hydrotreated heavy; Low boiling point hy- drogen treated naph- tha	64742-48-9 265-150-3 649-327-00-6	Flam. Liq.3; H226 STOT SE3; H336 Asp. Tox.1; H304 Aquatic Chronic2; H411	Note P	$\geq 70 - < 90$
calcium bis(dinonylnaphthalen esulphonate)	57855-77-3 260-991-2	Skin Irrit.2; H315 Eye Irrit.2; H319 Skin Sens.1; H317		$\geq 0,1 - < 1$
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	70024-69-0 274-263-7 01-2119492616-28- XXXX	Skin Sens.1B; H317	$\geq 10\%$ Skin Sens.1B,	$\geq 0,1 - < 1$
Substances with a workplace exposure limit :				
Paraffin waxes and Hydrocarbon waxes	8002-74-2 232-315-6			$\geq 1 - < 10$

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : Call a physician or poison control centre immediately.
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 respira-

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

- tion.
- 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 skin thoroughly with soap and water or use recognized skin cleanser.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
Seek medical advice.
- If swallowed : Move the victim to fresh air.
If accidentally swallowed obtain immediate medical attention.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
Do NOT induce vomiting.
Rinse mouth with water.
Never give anything by mouth to an unconscious person.
Aspiration hazard if swallowed - can enter lungs and cause damage.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Inhalation may provoke the following symptoms:
Unconsciousness
Dizziness
Drowsiness
Headache
Nausea
Tiredness
Skin contact may provoke the following symptoms:
Erythema
Allergic appearance
- Aspiration may cause pulmonary oedema and pneumonitis.

- Risks : Central nervous system depression
Can be absorbed through skin.
Risk of product entering the lungs on vomiting after ingestion.
Health injuries may be delayed.
May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.
Treat symptomatically.

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

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

Specific hazards during fire-fighting : Fire may cause evolution of:
Carbon oxides

Do not let product enter drains.
Container may explode if heated.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. In the case of respirable dust and/or fumes, use self-contained breathing apparatus. 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 personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Do not breathe vapours or spray mist.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
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.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Non-sparking tools should be used.

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 : Use only in an area containing explosion proof equipment.
Do not use in areas without adequate ventilation.
Do not breathe vapours or spray mist.
In case of insufficient ventilation, wear suitable respiratory equipment.
Avoid contact with skin and eyes.
For personal protection see section 8.
Keep away from fire, sparks and heated surfaces.
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.
Smoking, eating and drinking should be prohibited in the application area.
Wash hands and face before breaks and immediately after handling the product.
Ensure all equipment is electrically grounded before beginning transfer operations.
Do not get in eyes or mouth or on skin.
Do not get on skin or clothing.
Do not ingest.
Do not use sparking tools.
Do not enter areas where used or stored until adequately ventilated.
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.

Advice on protection against fire and explosion : Keep away from heat and sources of ignition.

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

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

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 cool place away from oxidizing agents. Keep in a dry, cool and well-ventilated place. Do not store together with oxidizing and self-igniting products. 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) : Consult the technical guidelines for the use of this substance/mixture.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Naphtha (petroleum), hydro-treated heavy; Low boiling point hydrogen treated naphtha	64742-48-9	NDS	300 mg/m ³	PL OEL (2014-06-23)
		NDSch	900 mg/m ³	PL OEL (2014-06-23)
Paraffin waxes and Hydrocarbon waxes	8002-74-2	NDS (inhalable fraction)	2 mg/m ³	PL OEL (2014-06-23)
Further information	Inhalable fraction - the fraction of aerosol penetrating through the nose and mouth, which after deposit in the respiratory tract poses a threat to health.			

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

Substance name	End Use	Exposure routes	Potential health effects	Value
calcium bis(dinonylnaphthalenesulphonate)	Workers	Inhalation	Long-term systemic effects	2,23 mg/m ³
	Workers	Skin contact	Long-term systemic effects	0,32 mg/kg

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

Substance name	Environmental Compartment	Value
calcium bis(dinonylnaphthalenesulphonate)	Fresh water	0,27 mg/l

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

	Marine water	0,027 mg/l
	Intermittent use/release	2,7 mg/l
	Microbiological Activity in Sewage Treatment Systems	10 mg/l
	Fresh water sediment	4,69 mg/kg
	Marine sediment	0,469 mg/kg
	Soil	0,936 mg/kg

8.2 Exposure controls

Engineering measures

Use only in an area equipped with explosion proof exhaust ventilation.
Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection

Material : Nitrile rubber
Protective index : Class 1

Remarks : Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. 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.

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : yellow

SAFETY DATA SHEET

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



OKS 2100

Version 1.1	Revision Date: 09.10.2018	Date of last issue: 22.06.2016 Date of first issue: 22.06.2016	Print Date: 09.10.2018
----------------	------------------------------	---	---------------------------

Odour : solvent-like

Odour Threshold : No data available

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : 145 °C

Flash point : 39 °C

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : <= 1.100 hPa (20 °C)

Relative vapour density : No data available

Density : 0,78 g/cm³
(20 °C)

Bulk density : No data available

Solubility(ies)
Water solubility : immiscible

Solubility in other solvents : No data available

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

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity
Viscosity, dynamic : No data available

Viscosity, kinematic : 4,3 mm²/s (40 °C)

Explosive properties : Not explosive

Oxidizing properties : No data available

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

9.2 Other information

Sublimation point : No data available

Self-ignition : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.
Strong sunlight for prolonged periods.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Remarks: Effects due to ingestion may include:
Symptoms: Central nervous system depression

Acute inhalation toxicity : Remarks: Respiration of solvent vapour may cause dizziness.
Symptoms: Inhalation may provoke the following symptoms: Dizziness, Drowsiness, Vomiting, Fatigue, Vertigo, Central nervous system depression

Acute dermal toxicity : Remarks: Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering.

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

Symptoms: Redness, Local irritation, Skin disorders

Components:

Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha:

Acute inhalation toxicity : Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

calcium bis(dinonylnaphthalenesulphonate):

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

Acute dermal toxicity : LD50 (Rabbit): > 20.000 mg/kg

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

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

Acute inhalation toxicity : LC50 (Rat): > 1,9 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : (Rabbit): > 5.000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Skin corrosion/irritation

Product:

Remarks: This information is not available.

Components:

Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha:

Result: Repeated exposure may cause skin dryness or cracking.

calcium bis(dinonylnaphthalenesulphonate):

Species: Rabbit
Assessment: Irritating to skin.
Result: Irritating to skin.

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

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

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

Result: No skin irritation

Serious eye damage/eye irritation

Product:

Remarks: Contact with eyes may cause irritation.

Components:

calcium bis(dinonylnaphthalenesulphonate):

Species: Rabbit

Assessment: Irritating to eyes.

Result: Irritating to eyes.

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

Species: Rabbit

Assessment: No eye irritation

Method: OECD Test Guideline 405

Result: No eye irritation

Respiratory or skin sensitisation

Product:

Remarks: This information is not available.

Components:

calcium bis(dinonylnaphthalenesulphonate):

Species: Guinea pig

Assessment: May cause sensitisation by skin contact.

Result: May cause sensitisation by skin contact.

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

Test Type: Buehler Test

Species: Guinea pig

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

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

Components:

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

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

Carcinogenicity

Product:

Remarks: No data available

Components:

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

Components:

calcium bis(dinonylnaphthalenesulphonate):

Reproductive toxicity - Assessment : No toxicity to reproduction

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

Effects on fertility : Test Type: reproductive and developmental toxicity study
Species: Rat
Application Route: Oral
General Toxicity - Parent: NOAEL: > 500 mg/kg body weight
General Toxicity F1: NOAEL: > 500 mg/kg body weight
Method: OECD Test Guideline 415

Reproductive toxicity - Assessment : No toxicity to reproduction

SAFETY DATA SHEET

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



OKS 2100

Version 1.1	Revision Date: 09.10.2018	Date of last issue: 22.06.2016 Date of first issue: 22.06.2016	Print Date: 09.10.2018
----------------	------------------------------	---	---------------------------

essment No toxicity to reproduction

STOT - single exposure

Components:

Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha:

Exposure routes: Inhalation

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

calcium bis(dinonylnaphthalenesulphonate):

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

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

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

STOT - repeated exposure

Components:

calcium bis(dinonylnaphthalenesulphonate):

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

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

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

Repeated dose toxicity

Product:

Remarks: This information is not available.

Components:

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

Species: Rat

NOAEL: 500 mg/kg

NOAEL: 500 mg/kg

Application Route: Oral

Exposure time: 28

Method: OECD Test Guideline 407

Species: Rat

NOAEL: 0,05 mg/l

Application Route: Inhalation

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

Test atmosphere: dust/mist
Exposure time: 28
Method: OECD Test Guideline 412

Species: Rat
NOAEL: > 1000 mg/kg
NOAEL: > 1.000 mg/kg
Application Route: Dermal
Exposure time: 28
Method: OECD Test Guideline 410

Aspiration toxicity

Product:

May be fatal if swallowed and enters airways.

Components:

Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha:

May be fatal if swallowed and enters airways.

calcium bis(dinonylnaphthalenesulphonate):

No aspiration toxicity classification

Further information

Product:

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

Components:

Paraffin waxes and Hydrocarbon waxes:

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: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

Toxicity to algae : Remarks: No data available

Toxicity to microorganisms :
Remarks: No data available

Components:

Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha:

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

calcium bis(dinonylnaphthalenesulphonate):

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): > 0,28 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 0,27 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
Remarks: No toxicity at the limit of solubility

Ecotoxicology Assessment

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

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 10.000 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
Remarks: No toxicity at the limit of solubility

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
Remarks: No toxicity at the limit of solubility

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 1.500 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Remarks: No toxicity at the limit of solubility

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

Toxicity to microorganisms : LC50 (activated sludge): > 10.000 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

Ecotoxicology Assessment

Chronic aquatic toxicity : This product has no known ecotoxicological effects., No toxicity at the limit of solubility

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Physico-chemical removability : Remarks: No data available

Components:

calcium bis(dinonylnaphthalenesulphonate):

Biodegradability : Result: Not readily biodegradable.

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge
Result: Not rapidly biodegradable
Biodegradation: 8 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
GLP: yes

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:

calcium bis(dinonylnaphthalenesulphonate):

Partition coefficient: n-octanol/water : log Pow: 10,96

Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts:

Bioaccumulation : Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

Partition coefficient: n-octanol/water : log Pow: 16,09 (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:

calcium bis(dinonylnaphthalenesulphonate):

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

12.6 Other adverse effects

Product:

Additional ecological information : Toxic 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.

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

The following Waste Codes are only suggestions:

SECTION 14: Transport information

14.1 UN number

ADR : UN 1993
IMDG : UN 1993
IATA : UN 1993

14.2 UN proper shipping name

ADR : FLAMMABLE LIQUID, N.O.S.
()
IMDG : FLAMMABLE LIQUID, N.O.S.
(Naphtha, petroleum, hydrotreated heavy)
IATA : Flammable liquid, n.o.s.
(Naphtha, petroleum, hydrotreated heavy)

14.3 Transport hazard class(es)

ADR : 3
IMDG : 3
IATA : 3

14.4 Packing group

ADR
Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3
Tunnel restriction code : (D/E)

IMDG
Packing group : III
Labels : 3
EmS Code : F-E, S-E

IATA (Cargo)
Packing instruction (cargo aircraft) : 366
Packing instruction (LQ) : Y344
Packing group : III
Labels : Flammable Liquids

IATA (Passenger)
Packing instruction (passenger aircraft) : 355
Packing instruction (LQ) : Y344

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

Packing group : III
Labels : Flammable Liquids

14.5 Environmental hazards

ADR
Environmentally hazardous : yes

IMDG
Marine pollutant : yes

IATA (Passenger)
Environmentally hazardous : no

IATA (Cargo)
Environmentally hazardous : no

14.6 Special precautions for user

No special precautions required.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

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

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : See Annex XVII to Regulation (EC) no 1907/2006 for Conditions of restriction

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E2	ENVIRONMENTAL	Quantity 1 200 t	Quantity 2 500 t
----	---------------	---------------------	---------------------

SAFETY DATA SHEET

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



OKS 2100

Version 1.1	Revision Date: 09.10.2018	Date of last issue: 22.06.2016 Date of first issue: 22.06.2016	Print Date: 09.10.2018
----------------	------------------------------	---	---------------------------

HAZARDS

P5c	FLAMMABLE LIQUIDS	5.000 t	50.000 t
34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams), (d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)	2.500 t	25.000 t

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 84,7 %
Remarks: VOC content excluding water

Other regulations:

Act of 25 February 2011 on the Chemical Substances and Their Mixtures (consolidated text Dz. U. 2015, item 1203).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Official Journal of the European Union L 353 from 31.12.2008) with further adaptation to technical progress (ATP 1-7).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Official Journal of the European Union L 396 from 30.12.2006, as amended).

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Ordinance of the Minister of Health of 10 August 2012 concerning the criteria and procedure of classification of chemical substances and their mixtures (consolidated text Dz. U. of 2015., pos. 208).

Ordinance of the Minister of Economy, Labour and Social Policy of 21st December 2005 concerning the basic requirements for personal protective equipment (Dz. U. Nr. 259, item 2173).

Ordinance of the Minister of Labour and Social Policy of 6th June 2014 concerning the highest allowable concentrations and levels of the agents harmful for health in the workplace (OJ 2014 No. 0 pos 817).

Ordinance of the Minister of Health of 2nd February 2011 concerning tests and measurement

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

of agents harmful for health in the workplace (Dz. U. Nr. 33, item 166).
Ordinance of the Minister of Health of 30th December 2004 on the health and safety of workers related to chemical agents at work (Dz. U. from 2005, Nr. 11, item 86, as amended).
Act of 14 December 2012. on Waste (Journal of Laws of 2013. pos. 21, as amended).
Act of 13 June 2013. On packaging and packaging waste Journal. U. of 2013. Item. 888, as amended).
Ordinance of the Minister of Environment of 9th December 2014 on Waste Catalog (Dz. U. 2014 item 1923).
Ordinance of the Minister of Environment on the requirements for carrying out the process of thermal treatment of waste and how to deal with waste produced in the process. (Dz. U. of 2016., Pos. 108)
Act of 19 August 2011 on transport of dangerous goods (Dz. U. Nr. 227, item 1367, as amended).
Government Statement of 26 July 2005 on enforcing of changes Annexes A and B of European Agreement concerning international transport of dangerous goods by road (ADR) (Dz. U. Nr. 178, item 1481, as amended).
Ordinance of the Minister of Health of 20th April 2012 concerning labeling of containers of dangerous substances and dangerous mixtures and some mixtures ((consolidated text) Dz. U. z 2015 nr. 0 poz. 450).
Ordinance of the Minister of Health of 11th June 2012 concerning categories of dangerous substances and dangerous mixtures for which containers must be fitted with child-resistant fastenings and a tactile warning of danger (Dz. U. from 2012, item 688 as amended).

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Full text of H-Statements

H226 : Flammable liquid and vapour.
H304 : May be fatal if swallowed and enters airways.
H315 : Causes skin irritation.
H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.
H336 : May cause drowsiness or dizziness.
H411 : Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Note P : The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260- P262-P301 + P310-P331 shall apply. This note applies only to certain complex oil-derived substances in Part 3.

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:

Flam. Liq. 3	H226
STOT SE 3	H336
Asp. Tox. 1	H304
Aquatic Chronic 2	H411

Classification procedure:

Based on product data or assessment
Calculation method
Based on product data or assessment
Calculation method

This safety datasheet applies only to products originally packaged and labelled by OKS Spezial-schmierstoffe. The information contained therein is protected by copyright and must not be reproduced or amended without the express written approval of OKS Spezialschmierstoffe. This document may be passed on only to the extent required by law. Any dissemination of our safety datasheets (e.g. as a document for download from the Internet) beyond this legally required extent is not permitted without express written consent. OKS Spezialschmierstoffe provides its customers with amended safety datasheets as prescribed by law. The customer is responsible for passing on safety datasheets and any amendments contained therein to its own customers, employees and other users of the product. OKS Spezialschmierstoffe provides no guarantee that safety datasheets received by users from third parties are up-to-date. All information and instructions in this

SAFETY DATA SHEET

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



OKS 2100

Version	Revision Date:	Date of last issue: 22.06.2016	Print Date:
1.1	09.10.2018	Date of first issue: 22.06.2016	09.10.2018

safety datasheets were compiled to the best of our knowledge and are based on the information available to us. The data provided are intended to describe the product in relation to the required safety measures; they are neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and do not justify any contractual legal relationships.