according to GB/T 16483 and GB/T 17519



#### **OKS 2811**

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : OKS 2811

Chemical nature : Active substance with propellant

Aqueous solution

Solvent

#### 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

mcm@oks-germany.com

responsible for the SDS

Material Compliance Management

National contact :

Emergency telephone number : +86 532 8388 9090 (NRCC, only for hazardous chemicals)

+86 21 69225521

# Recommended use of the chemical and restrictions on use

Recommended use : Auxiliary

Restrictions on use : Restricted to professional users.

## 2. HAZARDS IDENTIFICATION

## **Emergency Overview**

Appearance: aerosolColour: colourlessOdour: characteristic

Pressurised container: May burst if heated.

GHS Classification

Aerosols : Category 3

**GHS** label elements

Hazard pictograms : None

according to GB/T 16483 and GB/T 17519



### **OKS 2811**

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

Signal word : Warning

Hazard statements : H229 Pressurised container: May burst if heated.

Precautionary statements : Prevention:

P210 Keep away from heat/ sparks/ open flames/ hot surfaces.

No smoking.

P251 Do not pierce or burn, even after use.

Storage:

P410 + P412 Protect from sunlight. Do not expose to

temperatures exceeding 50 °C/ 122 °F.

### Physical and chemical hazards

Pressurised container: May burst if heated.

#### **Health hazards**

Not classified based on available information.

#### **Environmental hazards**

Not classified based on available information.

# Other hazards which do not result in classification

None known.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Components

Chemical name	CAS-No.	Concentration (% w/w)
dinitrogen oxide	10024-97-2	>= 1 -< 10
β-Alanine, N-(2-aminoethyl)-N-(2-hydroxyethyl)-, N-coco acyl derivs., monosodium salts	93820-52-1	>= 0.1 -< 1
sodium N-lauroylsarcosinate	137-16-6	>= 0.1 -< 1

## 4. FIRST AID MEASURES

If inhaled : Obtain medical attention.

Remove person to fresh air. If signs/symptoms continue, get

medical attention.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.



according to GB/T 16483 and GB/T 17519



**OKS 2811** 

Version **Revision Date:** Date of last issue: 2021-07-14

2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14 1.8

If breathing is irregular or stopped, administer artificial

respiration.

Take off all contaminated clothing immediately. In case of skin contact

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.

Rinse immediately with plenty of water, also under the eyelids, In case of eye contact

for at least 10 minutes.

If eye irritation persists, consult a specialist.

If swallowed Move the victim to fresh air.

> Keep respiratory tract clear. Do NOT induce vomiting. Obtain medical attention. Rinse mouth with water.

Most important symptoms

and effects, both acute and

delayed

May cause an allergic skin reaction.

Inhalation may provoke the following symptoms:

Headache Nausea

Allergic appearance

Notes to physician The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

5. FIREFIGHTING MEASURES

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

carbon dioxide.

Unsuitable extinguishing

media

High volume water jet

Hazardous combustion

products

Carbon oxides

Nitrogen oxides (NOx)

Specific extinguishing

methods

Standard procedure for chemical fires.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains. Cool containers/tanks with water spray.

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.



according to GB/T 16483 and GB/T 17519



#### **OKS 2811**

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

#### **6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas. Ensure adequate ventilation.

Do not breathe vapours or spray mist.

Refer to protective measures listed in sections 7 and 8.

**Environmental precautions** 

Try to prevent the material from entering drains or water

courses.

Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and 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). Keep in suitable, closed containers for disposal.

Prevention of secondary hazards

Only qualified personnel equipped with suitable protective

equipment may intervene.

### 7. HANDLING AND STORAGE

### Handling

Advice on safe handling : Do

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.

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.

Do not get in eyes or mouth or on skin.

Do not get on skin or clothing.

Do not ingest.

These safety instructions also apply to empty packaging which

may still contain product residues.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or

burn, even after use.

Avoidance of contact : No materials to be especially mentioned.



according to GB/T 16483 and GB/T 17519



#### **OKS 2811**

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

**Storage** 

Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun

exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or

red-hot objects.

Store in accordance with the particular national regulations.

Protect from frost.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
dinitrogen oxide	10024-97-2	PC-TWA	5 mg/m3	CN OEL (2019-08-27)
		PC-STEL	10 mg/m3	CN OEL (2019-08-27)
		TWA	50 ppm	ACGIH (2007-01-01)

**Engineering measures** : Handle only in a place equipped with local exhaust (or other

appropriate exhaust).

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Short term only

Filter type : Filter type A-P

Eye/face 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.

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Protective index : Class 1

Remarks : For prolonged or repeated contact use protective gloves. The

break through time depends amongst other things on the



according to GB/T 16483 and GB/T 17519 CN



**OKS 2811** 

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

material, the thickness and the type of glove and therefore

has to be measured for each case.

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 : aerosol

Colour : colourless

Odour : characteristic

Odour Threshold : No data available

pH : 7.5 (20 °C)

Concentration: 100 %

Melting point/range : No data available

Boiling point/boiling range : 100 °C

(1,013 hPa)

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Self-ignition : not auto-flammable

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapour pressure : 6,000 hPa (20 °C)

Relative vapour density : No data available

according to GB/T 16483 and GB/T 17519



#### **OKS 2811**

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

Relative density : 1.05 (20 °C)

Reference substance: Water The value is calculated

Density : 1.05 g/cm3 (20 °C)

Bulk density : No data available

Solubility(ies)

Water solubility : soluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : 371 °C

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : < 20.5 mm2/s ( 40 °C)

Explosive properties : Not explosive

Oxidizing properties : No data available

Sublimation point : No data available

Metal corrosion rate : Not corrosive to metals

## 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 : Strong sunlight for prolonged periods.

Risk of receptacle bursting.

Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition : No decomposition if stored and applied as directed.

according to GB/T 16483 and GB/T 17519 CN



## **OKS 2811**

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

products

#### 11. TOXICOLOGICAL INFORMATION

## **Acute toxicity**

**Product:** 

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

Acute inhalation toxicity : Acute toxicity estimate: > 10 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Remarks: Harmful by inhalation.

Symptoms: Inhalation may provoke the following symptoms:,

Respiratory disorder

Acute dermal toxicity : Symptoms: Redness, Local irritation

## **Components:**

sodium N-lauroylsarcosinate:

Acute inhalation toxicity : LC50 (Rat): 0.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

### Skin corrosion/irritation

**Product:** 

Remarks : This information is not available.

### **Components:**

sodium N-lauroylsarcosinate:

Result : Severe skin irritation

according to GB/T 16483 and GB/T 17519 CN



**OKS 2811** 

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

Serious eye damage/eye irritation

**Product:** 

Remarks : Contact with eyes may cause irritation.

**Components:** 

β-Alanine, N-(2-aminoethyl)-N-(2-hydroxyethyl)-, N-coco acyl derivs., monosodium salts:

Result : Risk of serious damage to eyes.

sodium N-lauroyIsarcosinate:

Result : Risk of serious damage to eyes.

Respiratory or skin sensitisation

**Product:** 

Remarks : This information is not available.

**Components:** 

β-Alanine, N-(2-aminoethyl)-N-(2-hydroxyethyl)-, N-coco acyl derivs., monosodium salts:

Assessment : May cause sensitisation by skin contact.

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



according to GB/T 16483 and GB/T 17519 CN



**OKS 2811** 

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

Effects on foetal : Remarks: No data available

development

Repeated dose toxicity

**Product:** 

Remarks : This information is not available.

**Aspiration toxicity** 

**Product:** 

This information is not available.

**Further information** 

**Product:** 

Remarks : Risks of irreversible effects after a single exposure.

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

Persistence and degradability

**Product:** 

Biodegradability : Remarks: No data available

according to GB/T 16483 and GB/T 17519



**OKS 2811** 

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

Physico-chemical

removability

: Remarks: No data available

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).

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.

13. DISPOSAL CONSIDERATIONS

**Disposal methods** 

Waste from residues : 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.

Offer empty spray cans to an established disposal company. Pressurized container: Do not pierce or burn, even after use.

14. TRANSPORT INFORMATION

International Regulations

**UNRTDG** 

UN number : UN 1950

according to GB/T 16483 and GB/T 17519



#### **OKS 2811**

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

Proper shipping name : AEROSOLS

Class : 2.2

Packing group : Not assigned by regulation

Labels : 2.2

**IATA-DGR** 

UN/ID No. : UN 1950

Proper shipping name : Aerosols, non-flammable

Class : 2.2

Packing group : Not assigned by regulation Labels : Non-flammable, non-toxic Gas

Packing instruction (cargo : 203

aircraft)

Packing instruction : 203

(passenger aircraft)

**IMDG-Code** 

UN number : UN 1950
Proper shipping name : AEROSOLS

Class : 2.2

Packing group : Not assigned by regulation

Labels : 2.2 EmS Code : F-D, S-U Marine pollutant : no

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

Not applicable for product as supplied.

### **National Regulations**

### GB 6944/12268

UN number : UN 1950
Proper shipping name : AEROSOLS

Class : 2.2

Packing group : Not assigned by regulation

Labels : 2.2

## Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### 15. REGULATORY INFORMATION

## **National regulatory information**

Law on the Prevention and Control of Occupational Diseases

**Regulations on Safety Management of Hazardous Chemicals** 



according to GB/T 16483 and GB/T 17519



## **OKS 2811**

Version Date of last issue: 2021-07-14 Revision Date:

2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14 1.8

#### Catalogue of Hazardous Chemicals

List of ingredients	CAS-No.	Status	Reference number
dinitrogen oxide	10024-97-2	Listed	2561
ETHYL ALCOHOL	64-17-5	Listed	107
butanone	78-93-3	Listed	236

Identification of Major Hazard Installations for

Hazardous Chemicals (GB 18218)

Not applicable

Hazardous Chemicals for Priority Management under

**SAWS** 

Not applicable

Regulations on Labour Protection in Workplaces where Toxic Substances are Used

Catalogue of Highly Toxic Chemicals : Not applicable

Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

China Severely Restricted Toxic Chemicals for Import : Not applicable

and Export

International Regulations

Montreal Protocol Not applicable

Rotterdam Convention (Prior Informed Consent) Not applicable

Stockholm Convention (Persistent Organic Pollutants) Not applicable

The components of this product are reported in the following inventories:

**IECSC** : On the inventory, or in compliance with the inventory

## **16. OTHER INFORMATION**

: yyyy/mm/dd Date format

Full text of other abbreviations

**ACGIH** : USA. ACGIH Threshold Limit Values (TLV)

according to GB/T 16483 and GB/T 17519



#### **OKS 2811**

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

CN OEL : Occupational exposure limits for hazardous agents in the

workplace - Chemical hazardous agents.

ACGIH / TWA : 8-hour, time-weighted average

CN OEL / PC-TWA : Permissible concentration - time weighted average CN OEL / PC-STEL : Permissible concentration - short term exposure limit

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; 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; ERG - Emergency Response Guide; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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according to GB/T 16483 and GB/T 17519 CN



## **OKS 2811**

Version Revision Date: Date of last issue: 2021-07-14

1.8 2022-09-14 Date of first issue: 2014-06-02 Print Date: 2022-09-14

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.