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



## OKS 536 石墨润滑涂料,水质,风干

Version Revision Date: Date of last issue: 2022-10-24

2.2 2024-06-12 Date of first issue: 2014-06-30 Print Date: 2024-06-25

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : OKS 536 石墨润滑涂料,水质,风干

Chemical nature : Aqueous solution

graphite

inorganic binding agent

Manufacturer or supplier's details

Company name of supplier : OKS Spezialschmierstoffe GmbH

Ganghoferstr. 47

82216 Maisach-Gernlinden

Deutschland

Tel.: +49 8142 3051 500 Fax: +49 8142 3051 599 info@oks-germany.com

E-mail address of person

responsible for the SDS

: mcm@oks-germany.com

National contact :

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 : Lubricant

Restrictions on use : Restricted to professional users.

#### 2. HAZARDS IDENTIFICATION

## **Emergency Overview**

Appearance: liquidColour: black

Odour : characteristic

May cause an allergic skin reaction.

**GHS Classification** 

Skin sensitisation : Category 1

**GHS** label elements



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



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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 soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical

advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before

reuse.

Disposal:

P501 Dispose of contents/containers according the local

government requirements.

## Physical and chemical hazards

Not classified based on available information.

## **Health hazards**

May cause an allergic skin reaction.

#### **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)
2-methyl-2H-isothiazol-3-one	2682-20-4	>= 0.0025 -< 0.025





according to GB/T 16483 and GB/T 17519



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

medical attention.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

If breathing is irregular or stopped, administer artificial

respiration.

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

Wash off immediately with soap and plenty of water.

Get medical attention immediately if irritation develops and

persists.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

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

for at least 10 minutes.

If eye irritation persists, consult a specialist.

If swallowed : Move the victim to fresh air.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear. Do NOT induce vomiting. Rinse mouth with water.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and

delayed

May cause an allergic skin reaction.

No symptoms known or expected.

Notes to physician : Treat symptomatically.

#### 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.

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

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



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for firefighters

Use personal protective equipment.

Exposure to decomposition products may be a hazard to

health.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Evacuate personnel to safe areas.
Use personal protective equipment.

Ensure adequate ventilation.

Do not breathe vapours or spray mist.

Refer to protective measures listed in sections 7 and 8.

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).

## 7. HANDLING AND STORAGE

#### Handling

Advice on safe handling : Do not breathe vapours or spray mist.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Wash hands and face before breaks and immediately after

handling the product.

Do not get in eyes or mouth or on skin.

Do not get on skin or clothing.

Do not ingest. Do not repack.

Do not re-use empty containers.

These safety instructions also apply to empty packaging which

may still contain product residues. Keep container closed when not in use.

Avoidance of contact : No materials to be especially mentioned.

**Storage** 



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



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Conditions for safe storage : Store in original container.

Keep container closed when not in use. Keep in a dry, cool and well-ventilated place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Store in accordance with the particular national regulations.

Keep in properly labelled containers.

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
graphite (synthetic)	7782-42-5	PC-TWA (Total dust)	4 mg/m3	CN OEL (2019-08-27)
		PC-TWA (Respirable dust)	2 mg/m3	CN OEL (2019-08-27)
		TWA (Respirable particulate matter)	2 mg/m3	ACGIH (2007-01-01)
2,2',2"-Nitrilotriethanol	102-71-6	TWA	5 mg/m3	ACGIH (2013-03-01)

Engineering measures : none

Personal protective equipment

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

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 : butyl-rubber
Break through time : > 10 min
Protective index : Class 1



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

break through time depends amongst other things on the material, the thickness and the type of glove and therefore

has to be measured for each case.

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 : liquid

Colour : black

Odour : characteristic

Odour Threshold : No data available

pH : 9.2 (20 °C)

Concentration: 100 %

Melting point/range : No data available

Boiling point/boiling range : 100 °C

Flash point : does not flash

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Will not burn

Self-ignition : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower : No data available

according to GB/T 16483 and GB/T 17519



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flammability limit

Vapour pressure : < 0.001 hPa (20 °C)

Relative vapour density : No data available

Relative density : 1.1 (20 °C)

Reference substance: Water The value is calculated

Density : 1.10 g/cm3 (20 °C)

Bulk density : No data available

Solubility(ies)

Water solubility : completely miscible

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 : 105.7 mm2/s (40 °C)

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.

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



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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:**

2-methyl-2H-isothiazol-3-one:

Acute oral toxicity : LD50 (Rat): 120 mg/kg

Method: OPPTS 870.1100

GLP: yes

Acute inhalation toxicity : LC50 (Rat): 0.11 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

Acute dermal toxicity : LD50 (Rat): 242 mg/kg

Method: OECD Test Guideline 402

## Skin corrosion/irritation

Product:

Remarks : This information is not available.

## **Components:**

2-methyl-2H-isothiazol-3-one:

Species : Rabbit

according to GB/T 16483 and GB/T 17519



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Assessment : Causes burns.

Method : OECD Test Guideline 404

Result : Causes burns.

GLP : yes

## Serious eye damage/eye irritation

**Product:** 

Remarks : This information is not available.

## **Components:**

2-methyl-2H-isothiazol-3-one:

Result : Risk of serious damage to eyes.
Assessment : Risk of serious damage to eyes.

## Respiratory or skin sensitisation

**Product:** 

Remarks : This information is not available.

## **Components:**

2-methyl-2H-isothiazol-3-one:

Test Type : Buehler Test Species : Guinea pig

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

Method : OECD Test Guideline 406

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

GLP : yes

#### Germ cell mutagenicity

**Product:** 

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

## **Components:**

## 2-methyl-2H-isothiazol-3-one:



according to GB/T 16483 and GB/T 17519



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Germ cell mutagenicity -

Assessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

Carcinogenicity

**Product:** 

Remarks : No data available

**Components:** 

2-methyl-2H-isothiazol-3-one:

Carcinogenicity - Assessment

No evidence of carcinogenicity in animal studies.

Reproductive toxicity

**Product:** 

Effects on fertility : Remarks: No data available

Effects on foetal development

Remarks: No data available

**Components:** 

2-methyl-2H-isothiazol-3-one:

Reproductive toxicity -

Assessment

- Fertility -

No toxicity to reproduction

- Teratogenicity -

No effects on or via lactation

STOT - single exposure

**Product:** 

Remarks : No data available

**Components:** 

2-methyl-2H-isothiazol-3-one:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

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## STOT - repeated exposure

**Product:** 

Remarks : No data available

## **Components:**

2-methyl-2H-isothiazol-3-one:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

## Repeated dose toxicity

**Product:** 

Remarks : This information is not available.

## **Aspiration toxicity**

## **Product:**

This information is not available.

## **Components:**

## 2-methyl-2H-isothiazol-3-one:

No aspiration toxicity classification

## **Further information**

**Product:** 

Remarks : Information given is based on data on the components and

the toxicology of similar products.

## **Components:**

2-methyl-2H-isothiazol-3-one:

Remarks : Ingestion causes burns of the upper digestive and respiratory

tracts.

according to GB/T 16483 and GB/T 17519



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## 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

Remarks: No data available Toxicity to microorganisms

**Components:** 

2-methyl-2H-isothiazol-3-one:

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.93 mg/l

Exposure time: 48 h

Test Type: flow-through test

Method: OECD Test Guideline 202

GLP: yes

M-Factor (Acute aquatic

toxicity)

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Toxicity to daphnia and other : NOEC (Daphnia magna (Water flea)): 0.044 mg/l

aquatic invertebrates (Chronic toxicity)

Exposure time: 21 d

Test Type: flow-through test

Method: OECD Test Guideline 211

M-Factor (Chronic aquatic

toxicity)

Persistence and degradability

**Product:** 

Biodegradability Remarks: No data available

Physico-chemical Remarks: No data available

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removability

**Components:** 

2-methyl-2H-isothiazol-3-one:

Biodegradability : Result: Not readily biodegradable.

**Bioaccumulative potential** 

**Product:** 

Bioaccumulation : Remarks: No data available

**Components:** 

2-methyl-2H-isothiazol-3-one:

Partition coefficient: n- : log Pow: -0.486 (25 °C)

octanol/water pH: 7

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 : 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

according to GB/T 16483 and GB/T 17519



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the unused product.

Dispose of waste product or used containers according to

local regulations.

#### 14. TRANSPORT INFORMATION

#### International Regulations

**UNRTDG** 

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable

**IATA-DGR** 

UN/ID No. : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
Packing instruction (cargo : Not applicable

aircraft)

Packing instruction : Not applicable

(passenger aircraft)

**IMDG-Code** 

**UN** number Not applicable Proper shipping name Not applicable Not applicable Class Not applicable Subsidiary risk Packing group Not applicable Not applicable Labels Not applicable **EmS Code** Marine pollutant Not applicable

## 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 : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable



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## Special precautions for user

Not applicable

## 15. REGULATORY INFORMATION

## **National regulatory information**

Law on the Prevention and Control of Occupational Diseases

## **Regulations on Safety Management of Hazardous Chemicals**

Catalogue of Hazardous Chemicals : Not applicable

Hazardous Chemicals for Priority Management under

SAWS

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 (2023) : Not applicable

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**

Date format : yyyy/mm/dd

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

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



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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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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.