# **Safety Data Sheet**

according to Regulation (EC) No. 1907/2006 (REACH)



# SILCASIL 320

Version number: 6.0 Revision: 13.01.2022
Replaces version of: 13.10.2020 (5) First version: 28.10.2008

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

#### 1.1 Product identifier

Trade name SILCASIL 320

**Registration number (REACH)**Not relevant (mixture)

**CAS number** not relevant (mixture)

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

Relevant identified uses Sealant

# 1.3 Details of the supplier of the safety data sheet

SILCA Service- und Vertriebsgesellschaft für

Dämmstoffe mbHTelefax: +49 (0) 2104 9727-25Elberfelder Straße 200ae-mail: reach@silca-online.deD-40822 MettmannWebsite: www.silca-online.de

Germany

e-mail (competent person) sdb@csb-online.de

Please do not use this e-mail address to ask for the latest safety data sheet. For this purpose contact SILCA Service- und Vertriebsgesellschaft für Dämmstoffe mbH.

Telephone: +49 (0) 2104 9727-0

#### 1.4 Emergency telephone number

Poison centre		
Country	Name	Telephone
Germany	Giftinformationszentrum - Nord Göttingen	+49 551 19240

As above or nearest toxicological information centre.

#### **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 (CLP)

Classification							
Section	Hazard class	Category	Hazard class and category	Hazard state- ment			
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319			

#### Classification

Section	Hazard class	Category	Hazard class and category	Hazard state- ment
3.45	skin sensitisation	1	Skin Sens. 1	H317
3.9	specific target organ toxicity - repeated expos- ure	2	STOT RE 2	H373

For full text of abbreviations: see SECTION 16

#### The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure.

#### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word warning

**Pictograms** 

**GHS07, GHS08** 



#### **Hazard statements**

H317 May cause an allergic skin reaction.H319 Causes serious eye irritation.

**H373** May cause damage to organs (blood) through prolonged or repeated exposure

(if swallowed).

## **Precautionary statements**

**P260** Do not breathe dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.P280 Wear protective gloves/protective clothing/eye protection/face protection.

**P302+P352** IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

**P314** Get medical advice/attention if you feel unwell.

**Hazardous ingredients for labelling** butan-2-one O,O',O"-(methylsilylidyne)trioxime

butan-2-one-O,O',O"-(vinylsilylidyne)trioxime

#### 2.3 Other hazards

Special danger of slipping by leaking/spilling product.

#### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not relevant (mixture).

#### 3.2 Mixtures

#### **Description of the mixture**

Hazardous ingredients							
Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Specific Conc. Limits	M-Factors	
butan-2-one O,O',O''- (methylsilyli- dyne)trioxime	CAS No 22984-54-9 EC No 245-366-4	10 - < 25	Eye Irrit. 2 / H319 Skin Sens. 1B / H317 STOT RE 2 / H373	<b>(!) (♣)</b>	-	-	
2-propanone, O,O',O''-(ethyl- silylidyne)tri- oxime	CAS No 58190-57-1 EC No 611-631-1	1-<5	STOT RE 2 / H373	<b>\$</b>	-	-	
butan-2-one- O,O',O"- (vinylsilylidyne)t rioxime	CAS No 2224-33-1 EC No 218-747-8	1-<5	Eye Dam. 1 / H318 Skin Sens. 1B / H317 STOT RE 2 / H373	(1) (2)	-	-	

# **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

#### **General notes**

Take off immediately all contaminated clothing.

In all cases of doubt, or when symptoms persist, seek medical advice.

## **Following inhalation**

Provide fresh air.

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

# Following skin contact

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

#### Following eye contact

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

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#### Following ingestion

Rinse mouth. Do not induce vomiting.

Get medical advice/attention if you feel unwell.

#### Notes for the doctor

None.

#### 4.2 Most important symptoms and effects, both acute and delayed

These information are not available.

## 4.3 Indication of any immediate medical attention and special treatment needed

None.

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

#### Suitable extinguishing media

water spray, alcohol resistant foam, fire extinguishing powder, carbon dioxide (CO2)

#### Unsuitable extinguishing media

water jet

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

Hazardous decomposition products: Section 10.

#### **Hazardous combustion products**

nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2)

## 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Co-ordinate firefighting measures to the fire surroundings.

Do not allow firefighting water to enter drains or water courses.

Collect contaminated firefighting water separately.

Fight fire with normal precautions from a reasonable distance.

# Special protective equipment for firefighters

use suitable breathing apparatus

#### **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Remove persons to safety.

Ventilate affected area.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

#### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

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# 6.2 Environmental precautions

Keep away from drains, surface and ground water.

Retain contaminated washing water and dispose of it.

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

#### Advice on how to clean up a spill

Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.).

## **Appropriate containment techniques**

Use of adsorbent materials.

#### Other information relating to spills and releases

Place in appropriate containers for disposal.

Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5.

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Disposal considerations: see section 13.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes.

Do not breathe vapour/spray.

### Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.

Keep away from sources of ignition - No smoking.

#### Specific notes/details

None.

#### Measures to protect the environment

Avoid release to the environment.

#### Advice on general occupational hygiene

Do not eat, drink and smoke in work areas.

Wash hands after use.

Preventive skin protection (barrier creams/ointments) is recommended.

Remove contaminated clothing and protective equipment before entering eating areas.

#### 7.2 Conditions for safe storage, including any incompatibilities

#### Flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### **Incompatible substances or mixtures**

Incompatible materials: see section 10.

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# Protect against external exposure, such as

heat

#### **Consideration of other advice**

Keep away from food, drink and animal feeding stuffs.

# **Ventilation requirements**

Provision of sufficient ventilation.

## Specific designs for storage rooms or vessels

Keep container tightly closed and in a well-ventilated place.

Keep cool.

**Storage temperature** 

recommended storage temperature: 5 - 35 °C

# **Packaging compatibilities**

Keep only in original container.

# 7.3 Specific end use(s)

No information available.

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

# Relevant DNELs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
butan-2-one O,O',O''-(methyl- silylidyne)trioxime	22984-54-9	DNEL	1,02 mg/ m³	human, inhalat- ory	worker (industry)	chronic - system- ic effects
butan-2-one O,O',O''-(methyl- silylidyne)trioxime	22984-54-9	DNEL	0,145 mg/ kg bw/day	human, dermal	worker (industry)	chronic - system- ic effects
2-propanone, O,O',O''-(ethylsilyli- dyne)trioxime	58190-57-1	DNEL	0,419 mg/ m³	human, inhalat- ory	worker (industry)	chronic - system- ic effects
2-propanone, O,O',O''-(ethylsilyli- dyne)trioxime	58190-57-1	DNEL	0,059 mg/ kg bw/day	human, dermal	worker (industry)	chronic - system- ic effects
butan-2-one- O,O',O''-(vinylsilyli- dyne)trioxime	2224-33-1	DNEL	1,06 mg/ m³	human, inhalat- ory	worker (industry)	chronic - system- ic effects
butan-2-one- O,O',O''-(vinylsilyli- dyne)trioxime	2224-33-1	DNEL	0,15 mg/ kg bw/day	human, dermal	worker (industry)	chronic - system- ic effects

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# Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Environmental com- partment			
butan-2-one O,O',O''-(methyl- silylidyne)trioxime	22984-54-9	PNEC	0,018 <sup>mg</sup> / <sub>l</sub>	freshwater			
butan-2-one O,O',O''-(methyl- silylidyne)trioxime	22984-54-9	PNEC	0,002 <sup>mg</sup> / <sub>l</sub>	marine water			
butan-2-one O,O',O''-(methyl- silylidyne)trioxime	22984-54-9	PNEC	3,9 <sup>mg</sup> / <sub>l</sub>	sewage treatment plant (STP)			
butan-2-one O,O',O''-(methyl- silylidyne)trioxime	22984-54-9	PNEC	557,5 <sup>mg</sup> / <sub>kg</sub>	freshwater sediment			
butan-2-one O,O',O''-(methyl- silylidyne)trioxime	22984-54-9	PNEC	55,75 <sup>mg</sup> / <sub>kg</sub>	marine sediment			
butan-2-one O,O',O''-(methyl- silylidyne)trioxime	22984-54-9	PNEC	65,63 <sup>mg</sup> / <sub>kg</sub>	soil			
2-propanone, O,O',O''-(ethyl- silylidyne)trioxime	58190-57-1	PNEC	0,24 <sup>mg</sup> / <sub>l</sub>	freshwater			
2-propanone, O,O',O''-(ethyl- silylidyne)trioxime	58190-57-1	PNEC	0,024 <sup>mg</sup> / <sub>l</sub>	marine water			
2-propanone, O,O',O''-(ethyl- silylidyne)trioxime	58190-57-1	PNEC	2,398 <sup>mg</sup> / <sub>l</sub>	sewage treatment plant (STP)			
2-propanone, O,O',O''-(ethyl- silylidyne)trioxime	58190-57-1	PNEC	2.047 <sup>mg</sup> / <sub>kg</sub>	freshwater sediment			
2-propanone, O,O',O''-(ethyl- silylidyne)trioxime	58190-57-1	PNEC	204,7 <sup>mg</sup> / <sub>kg</sub>	marine sediment			
2-propanone, O,O',O''-(ethyl- silylidyne)trioxime	58190-57-1	PNEC	241 <sup>mg</sup> / <sub>kg</sub>	soil			
butan-2-one-O,O',O''-(vinylsilyli- dyne)trioxime	2224-33-1	PNEC	0,019 <sup>mg</sup> / <sub>l</sub>	freshwater			
butan-2-one-O,O',O''-(vinylsilyli- dyne)trioxime	2224-33-1	PNEC	0,002 <sup>mg</sup> / <sub>l</sub>	marine water			
butan-2-one-O,O',O''-(vinylsilyli- dyne)trioxime	2224-33-1	PNEC	4,06 <sup>mg</sup> / <sub>l</sub>	sewage treatment plant (STP)			
butan-2-one-O,O',O''-(vinylsilyli- dyne)trioxime	2224-33-1	PNEC	1.137 <sup>mg</sup> / <sub>kg</sub>	freshwater sediment			
butan-2-one-O,O',O''-(vinylsilyli- dyne)trioxime	2224-33-1	PNEC	113,7 <sup>mg</sup> / <sub>kg</sub>	marine sediment			
butan-2-one-O,O',O''-(vinylsilyli- dyne)trioxime	2224-33-1	PNEC	133,8 <sup>mg</sup> / <sub>kg</sub>	soil			
butan-2-one O,O',O''-(methylsilylidyne)trioxime: PNEC Secondary Poisoning 3,22 mg/kg food							

butan-2-one-O,O',O"-(vinylsilylidyne)trioxime: PNEC Secondary Poisoning 3,333 mg/kg food

#### 8.2 **Exposure controls**

#### **Appropriate engineering controls**

General ventilation.

#### Individual protection measures (personal protective equipment)

#### **Eye/face protection**

Wear eye/face protection.

#### **Hand protection**

## **Protective gloves**

Material	Material thickness	Breakthrough times of the glove material
PVC: polyvinyl chloride	≥ 0,35 mm	>480 minutes (permeation: level 6)

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### **Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

Type: A-P2 (combined filters against particles and organic gases and vapours, colour code: Brown/ White).

#### **Environmental exposure controls**

Use appropriate container to avoid environmental contamination.

Keep away from drains, surface and ground water.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

**Physical state** liquid (pasty)

Colour grey

Odour characteristic

Melting point/freezing point not determined

Boiling point or initial boiling point and boiling not determined

range

**Flammability** this material is combustible, but will not ignite

readily

Lower and upper explosion limit not determined

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Flash point >198 °C

Auto-ignition temperature 290 °C

**Decomposition temperature** not relevant

pH (value) not determined

**Kinematic viscosity** not determined

**Dynamic viscosity** not determined

Solubility(ies)

Water solubility not miscible in any proportion

Partition coefficient n-octanol/water (log value) not determined

**Vapour pressure** not determined

Density and/or relative density

Density  $1,15 \, {}^{g}/_{cm^3}$  at 20  ${}^{\circ}$ C

Relative vapour density information on this property is not available

Particle characteristics not relevant

(liquid)

9.2 Other information

Information with regard to physical hazard

classes

hazard classes acc. to GHS (physical hazards):

not relevant

**Other safety characteristics** there is no additional information

## **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

This material is not reactive under normal ambient conditions.

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

# 10.3 Possibility of hazardous reactions

No known hazardous reactions.

# 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### 10.5 Incompatible materials

acids, bases, oxidisers

# 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

Hazardous combustion products: see section 5.

#### **SECTION 11: Toxicological information**

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

#### **Classification procedure**

If not otherwise specified the classification is based on:

Ingredients of the mixture (additivity formula).

#### Classification according to GHS (1272/2008/EC, CLP)

#### **Acute toxicity**

Test data are not available for the complete mixture.

#### Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
butan-2-one O,O',O''-(methylsilyli- dyne)trioxime	22984-54-9	oral	LD50	2.463 <sup>mg</sup> / <sub>kg</sub>	rat
butan-2-one O,O',O"-(methylsilyli- dyne)trioxime	22984-54-9	dermal	LD0	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat
2-propanone, O,O',O''-(ethylsilyli- dyne)trioxime	58190-57-1	oral	LD50	>2.500 <sup>mg</sup> / <sub>kg</sub>	rat, female
2-propanone, O,O',O''-(ethylsilyli- dyne)trioxime	58190-57-1	dermal	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat
butan-2-one-0,0',0"-(vinylsilyli- dyne)trioxime	2224-33-1	oral	LD0	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat, male
butan-2-one-0,0',0''-(vinylsilyli- dyne)trioxime	2224-33-1	dermal	LD0	>2.009 <sup>mg</sup> / <sub>kg</sub>	rat

#### Skin corrosion/irritation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

# Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

#### **Respiratory sensitisation**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

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#### Germ cell mutagenicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Carcinogenicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

# **Reproductive toxicity**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Specific target organ toxicity - single exposure

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Specific target organ toxicity - repeated exposure

May cause damage to organs (blood) through prolonged or repeated exposure (if swallowed).

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

#### 11.2 Information on other hazards

There is no additional information.

#### **Endocrine disrupting properties**

None of the ingredients are listed.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

#### **Aquatic toxicity (acute)**

Test data are not available for the complete mixture.

#### Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
butan-2-one O,O',O"- (methylsilylidyne)tri- oxime	22984-54-9	EC50	201 <sup>mg</sup> / <sub>l</sub>	daphnia magna	48 h
butan-2-one O,O',O"- (methylsilylidyne)tri- oxime	22984-54-9	EC50	6,1 <sup>mg</sup> / <sub>l</sub>	algae (pseudokirch- neriella subcapitata)	72 h
butan-2-one O,O',O"- (methylsilylidyne)tri- oxime	22984-54-9	ErC50	16 <sup>mg</sup> / <sub>l</sub>	algae (pseudokirch- neriella subcapitata)	72 h

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Name of substance	CAS No	Endpoint	Value	Species	Exposure time
butan-2-one O,O',O''- (methylsilylidyne)tri- oxime	22984-54-9	LC50	>100 <sup>mg</sup> / <sub>i</sub>	japanese ricefish/ medaka (Oryzias la- tipes)	96 h
2-propanone, O,O',O''-(ethylsilyli- dyne)trioxime	58190-57-1	LC50	558 <sup>mg</sup> / <sub>l</sub>	fathead minnow (Pimephales pro- melas)	96 h
2-propanone, O,O',O''-(ethylsilyli- dyne)trioxime	58190-57-1	EC50	544,3 <sup>mg</sup> / <sub>l</sub>	daphnia magna	48 h
2-propanone, O,O',O''-(ethylsilyli- dyne)trioxime	58190-57-1	ErC50	252,9 <sup>mg</sup> / <sub>l</sub>	algae (pseudokirch- neriella subcapitata)	72 h
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	LC50	>100 <sup>mg</sup> / <sub>l</sub>	japanese ricefish/ medaka (Oryzias la- tipes)	96 h
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	EC50	843 <sup>mg</sup> / <sub>l</sub>	japanese ricefish/ medaka (Oryzias la- tipes)	96 h
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	EC50	201 <sup>mg</sup> / <sub>l</sub>	daphnia magna	48 h
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	EC50	6,1 <sup>mg</sup> / <sub>l</sub>	algae (pseudokirch- neriella subcapitata)	72 h
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	ErC50	16 <sup>mg</sup> / <sub>l</sub>	algae (pseudokirch- neriella subcapitata)	72 h

# Aquatic toxicity (chronic)

Test data are not available for the complete mixture.

# Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
butan-2-one O,O',O''- (methylsilylidyne)tri- oxime	22984-54-9	EC50	>100 <sup>mg</sup> / <sub>i</sub>	daphnia magna	21 d
butan-2-one O,O',O''- (methylsilylidyne)tri- oxime	22984-54-9	LC50	>100 <sup>mg</sup> / <sub>i</sub>	japanese ricefish/ medaka (Oryzias la- tipes)	14 d
butan-2-one O,O',O''- (methylsilylidyne)tri- oxime	22984-54-9	LC50	>100 <sup>mg</sup> / <sub>l</sub>	daphnia magna	21 d

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Name of substance	CAS No	Endpoint	Value	Species	Exposure time
butan-2-one O,O',O''- (methylsilylidyne)tri- oxime	22984-54-9	NOEC	2,6 <sup>mg</sup> / <sub>l</sub>	algae (pseudokirch- neriella subcapitata)	72 h
butan-2-one O,O',O"- (methylsilylidyne)tri- oxime	22984-54-9	NOEC	50 <sup>mg</sup> / <sub>i</sub>	japanese ricefish/ medaka (Oryzias la- tipes)	14 d
butan-2-one O,O',O"- (methylsilylidyne)tri- oxime	22984-54-9	NOEC	≥100 <sup>mg</sup> / <sub>i</sub>	daphnia magna	21 d
2-propanone, O,O',O''-(ethylsilyli- dyne)trioxime	58190-57-1	NOEC	50 <sup>mg</sup> / <sub>l</sub>	algae (pseudokirch- neriella subcapitata)	72 h
2-propanone, O,O',O''-(ethylsilyli- dyne)trioxime	58190-57-1	growth (EbCx) 20%	151,1 <sup>mg</sup> / <sub>l</sub>	microorganisms	3 h
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	LC50	>100 <sup>mg</sup> / <sub>l</sub>	japanese ricefish/ medaka (Oryzias la- tipes)	14 d
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	LC50	>100 <sup>mg</sup> / <sub>l</sub>	daphnia magna	21 d
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	EC50	>100 <sup>mg</sup> / <sub>l</sub>	daphnia magna	21 d
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	NOEC	2,6 <sup>mg</sup> / <sub>l</sub>	algae (pseudokirch- neriella subcapitata)	72 h
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	NOEC	50 <sup>mg</sup> / <sub>i</sub>	japanese ricefish/ medaka (Oryzias la- tipes)	14 d
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	NOEC	≥100 <sup>mg</sup> / <sub>i</sub>	daphnia magna	21 d

# 12.2 Persistence and degradability

# Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
2-propanone, O,O',O''-(ethylsilyli- dyne)trioxime	58190-57-1	carbon dioxide gen- eration	23,6 %	28 d
2-propanone, O,O',O''-(ethylsilyli- dyne)trioxime	58190-57-1	oxygen depletion	9,1 %	28 d

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Name of substance	CAS No	Process	Degradation rate	Time
butan-2-one-O,O',O''- (vinylsilylidyne)tri- oxime	2224-33-1	biotic/abiotic	20 %	28 d

#### **Biodegradation**

No data available.

#### **Persistence**

No data available.

## 12.3 Bioaccumulative potential

Test data are not available for the complete mixture.

# Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW
butan-2-one O,O',O''- (methylsilylidyne)trioxime	22984-54-9	0,5 - 0,6	-
2-propanone, O,O',O''- (ethylsilylidyne)trioxime	58190-57-1	3,162	
butan-2-one-O,O',O''- 2224-33-1 (vinylsilylidyne)trioxime		≥0,5 - ≤0,6	<u>-</u>

# 12.4 Mobility in soil

No data available.

#### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

# 12.6 Endocrine disrupting properties

None of the ingredients are listed.

#### 12.7 Other adverse effects

Data are not available.

#### **Remarks**

Wassergefährdungsklasse, WGK (water hazard class): 1

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste.

#### Sewage disposal-relevant information

Do not empty into drains.

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#### Waste treatment of containers/packagings

Completely emptied packages can be recycled.

Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions.

## **SECTION 14: Transport information**

14.1	UN number or ID number	not assigned
14.2	UN proper shipping name	-
14.3	Transport hazard class(es)	-
14.4	Packing group	-
14.5	Environmental hazards	-
14.6	Special precautions for user	-
14.7	Maritime transport in bulk according to IMO instruments	-

## **SECTION 15: Regulatory information**

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

#### Relevant provisions of the European Union (EU)

# Restrictions according to REACH, Annex XVII

Name	Name acc. to inventory	CAS No	Restriction
SILCASIL 320	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	-	R3

#### Legend

- R3 1. Shall not be used in:
  - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
  - tricks and jokes,
  - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
  - 2. Articles not complying with paragraph 1 shall not be placed on the market.
  - 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
  - can be used as fuel in decorative oil lamps for supply to the general public, and
  - present an aspiration hazard and are labelled with H304.
  - 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
  - 5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:

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#### Legend

(a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil – or even sucking the wick of lamps – may lead to life-threatening lung damage"; (b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter fluid may lead to life threatening lung damage'; (c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.';

#### List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

#### **Seveso Directive**

Not assigned.

# Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

None of the ingredients are listed.

#### Regulation on the marketing and use of explosives precursors

None of the ingredients are listed.

#### Regulation on substances that deplete the ozone layer (ODS)

None of the ingredients are listed.

#### Regulation concerning the export and import of hazardous chemicals (PIC)

None of the ingredients are listed.

#### Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

## **National regulations (Germany)**

# Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV)

Wassergefährdungsklasse, WGK

(water hazard class) - classification acc. to annex 1 (AwSV)

# Technical instructions on air quality control (Germany)

Number	Group of substances	Class	Conc.	Mass flow	Mass con- centration	Nota- tion
5.2.5	organic substances	-	≥ 25 wt%	0,5 <sup>kg</sup> / <sub>h</sub>	50 <sup>mg</sup> / <sub>m³</sub>	3)

#### Notation

3) a total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m³, each of which to be indicated as total carbon, shall not be exceeded (except organic particulate matter)

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# Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK) 10

(combustible liquids)

#### Other information

Observe employment restrictions for young people according to § 22 JArbSchG.

# 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier. Chemical safety assessments for substances in this mixture were not carried out.

# **SECTION 16: Other information**

# **Abbreviations and acronyms**

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement con- cerning the International Carriage of Dangerous Goods by Road)
BCF	Bioconcentration factor
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)

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Abbr.	Descriptions of used abbreviations		
IMDG	International Maritime Dangerous Goods Code		
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008		
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval		
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality dur- ing a specified time interval		
LGK	Lagerklasse (storage class according to TRGS 510, Germany)		
log KOW	n-Octanol/water		
NLP	No-Longer Polymer		
NOEC	No Observed Effect Concentration		
PBT	Persistent, Bioaccumulative and Toxic		
PNEC	Predicted No-Effect Concentration		
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals		
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)		
Skin Sens.	Skin sensitisation		
STOT RE	Specific target organ toxicity - repeated exposure		
SVHC	Substance of Very High Concern		
TRGS	Technische Regeln für GefahrStoffe (technical rules for hazardous substances, Germany)		
vPvB	Very Persistent and very Bioaccumulative		

# Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH).

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

# **Classification procedure**

Physical and chemical properties.

Health hazards.

Environmental hazards.

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

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# List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H373	May cause damage to organs (blood) through prolonged or repeated exposure (if swallowed).

# Responsible for the safety data sheet

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#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

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