

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### BEECK Natural Stone Hardener OH

Print date: 19.03.2018

Product code: FWB\_B20

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

##### 1.1. Product identifier

BEECK Natural Stone Hardener OH

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

###### Use of the substance/mixture

Hardener for mineral building materials.

The product is to be used exclusively for the applications named in the technical data sheet or in the processing instructions.

Only for commercial use.

##### 1.3. Details of the supplier of the safety data sheet

Company name:	BEECK'SCHE FARBWERKE GmbH	
Street:	Gottlieb-Daimler-Strasse 4	
Place:	D-89150 Laichingen	
Telephone:	+49 (0) 7333 / 9607-11	Telefax: +49 (0) 7333 / 9607-10
e-mail:	info@beeck.com	
Contact person:	Ralf Rieks	Telephone: +49 (0) 7333 / 9607-14
e-mail:	Ralf.Rieks@beeck.com	
Internet:	www.beeck.com	
Responsible Department:	Factory Laichingen, Gottlieb-Daimler-Str. 4, D-89150 Laichingen Tel. +49(0)7333/9607-11 Fax: +49(0)7333/9607-10 Mo-Fr: 8.00 -16.00 hour	
<u>1.4. Emergency telephone number:</u>	United Kingdom +44 870 600 626 / 0870 600 6266 GBK Gefahrgut Büro GmbH +49(0)6132/84463	

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification according to Directive 67/548/EEC or 1999/45/EC

Indications of danger: Xn - Harmful, Xi - Irritant

R phrases:

Flammable.

Harmful by inhalation.

Irritating to eyes and respiratory system.

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

Hazard categories:

Flammable liquid: Flam. Liq. 3

Acute toxicity: Acute Tox. 4

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Flammable liquid and vapour.

Causes serious eye irritation.

Harmful if inhaled.

May cause respiratory irritation.

##### 2.2. Label elements

###### Hazardous components which must be listed on the label

Tetraethyl silicate

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Signal word:

Warning

Pictograms:

GHS02-GHS07



#### Hazard statements

- H226 Flammable liquid and vapour.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.

#### Precautionary statements

- P102 Keep out of reach of children.  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P312 Call a POISON CENTER/doctor if you feel unwell.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P501 Disposal in accordance with the official regulations.

#### Additional advice on labelling

The product is classified and labelled in accordance with the EC directives or respective national laws.

#### 2.3. Other hazards

No more data.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

Silicic acid ester, Tin organic compounds < 1 %

##### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
201-083-8	Tetraethyl silicate	80 - < 85 %
78-10-4	Xn - Harmful, Xi - Irritant R10-20-36/37	
014-005-00-0	Flam. Liq. 3, Acute Tox. 4, Eye Irrit. 2, STOT SE 3; H226 H332 H319 H335	

Full text of R-, H- and EUH-phrases: see section 16.

##### Further Information

On contact with water or humidity formation of: Ethanol

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Show this safety data sheet to the doctor in attendance. Remove from exposure, lie down. Move to fresh air. Consult a physician for severe cases.

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**After inhalation**

Fresh air supply. In case of irregular breathing or respiratory arrest: Oxygen or artificial respiration, if needed. Consult a physician.

**After contact with skin**

Remove and wash contaminated clothing before re-use. Wash contaminated skin areas thoroughly with soap and water. If skin irritation persists, call a physician.

**After contact with eyes**

Rinse with plenty of water immediately, also under the eyelids, for at least 15 minutes. Remove contact lenses, if applicable. Consult an ophthalmologist immediately.

**After ingestion**

Rinse mouth, spit liquid out. The affected person should slowly drink one glass of water. Do not induce vomiting.

In the event of spontaneous nausea and unconsciousness, keep the head back and bring the patient into the recovery position. Keep the respiratory tract open, prevent aspiration. Lay the affected person down, and keep her or him warm and calm. Consult a physician.

**4.2. Most important symptoms and effects, both acute and delayed**

Skin irritation, Eye irritation, visual disturbances, Conjunctivitis, Irritation of mucous membranes cough, headache, dizziness, insomnia, gastrointestinal disturbance,

**4.3. Indication of any immediate medical attention and special treatment needed**

Symptomatic treatment (decontamination and vital functions).

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam, sprayed water stream, dry powder, sand.

**Unsuitable extinguishing media**

Do not use a solid water stream as it may scatter and spread fire.

**5.2. Special hazards arising from the substance or mixture**

Vapour/air-mixtures are explosive at intense warming. Vapours are heavier than air and may spread along floors.

The release of the following substances is possible in a fire: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

Do not breathe in the vapours and combustion gases.

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus for fire fighting, if necessary.

**Additional information**

The combustion gases are partially condensed with the water used to extinguish the fire and end up as a contaminant in this water. Do not let product enter drains.

Contaminated extinguishing water and soil must be disposed of in accordance with official regulations.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate personnel to safe areas. Do not smoke. Remove all sources of ignition. Provide adequate ventilation.

Use respiratory equipment when gases, vapours/aerosols form. Avoid contact with skin and eyes.

Slipping hazard due to leakage.

**6.2. Environmental precautions**

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

Contact the responsible authority immediately if the product ends up in the soil, a body of water, or the sewer system.

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Entry into rivers or surface water is to be prevented by the erection of barriers made of sand or earth or by other suitable barriers.

**6.3. Methods and material for containment and cleaning up**

Spilled or leaking material is to be soaked up with non-flammable absorbent materials (sand, soil, diatomaceous earth) and put in containers. The containers must be sealed, marked and disposed of safely.

**6.4. Reference to other sections**

See section 8, 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Provide sufficient air exchange and/or exhaust in work rooms. Containers keep tightly closed. Avoid contact with skin and eyes.  
The further treatment / removal of coatings by grinding, burning, etc. may create hazardous dust and/or vapour. Do not breathe vapours/dust.  
When using, do not eat, drink, or smoke.  
Suitable protective equipment: See section 8.

**Advice on protection against fire and explosion**

Keep away from open flames, hot surfaces, and sources of ignition. Do not smoke. Take precautionary measures against static discharges. In use, may form high flammable/explosive vapour air mixture. Vapours are heavier than air and may spread along floors. Flash back possible over considerable distance.

**Further information on handling**

Comply with the health and safety at work laws. Handle, store and transport in compliance with local regulations and in labelled containers that are suitable for this product.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep containers tightly closed in a dry, cool, and well-ventilated place. Protect from humid air and water.

**Advice on storage compatibility**

Store separately from: oxidising agents  
Product reacts with moisture/water.

**Further information on storage conditions**

Never allow product to come in contact with water during storage. On contact with water or humidity formation of: ethanol  
Smoking in the storage rooms is forbidden.  
Already opened containers should be closed thoroughly and should be stored upright in order to prevent leakage.

**7.3. Specific end use(s)**

No data available.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Additional advice on limit values**

Normal and branched chain alkanes  $\geq$  C7: 1200 mg/m<sup>3</sup> (TWA 8h) (excludes n-hexane and n-heptane)

**8.2. Exposure controls****Appropriate engineering controls**

Provide adequate ventilation and/or exhaust ventilation. When workers are facing concentrations above

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the exposure limit, they must use appropriate certified respirators.

#### Protective and hygiene measures

Avoid contact with skin and eyes. Avoid contact with clothing. Take off all contaminated clothing immediately. Remove and wash contaminated clothing before re-use. Do not eat, drink, smoke or take snuff at work. Wash hands before breaks and at the end of the workday.

#### Eye/face protection

Safety glasses at risk of splashing. Safety glasses with side-shields.

#### Hand protection

Protective gloves.

The manufacturer recommends the following glove materials: butyl rubber; Penetration time of the glove material: - 60 min

Safety gloves should be selected for the actual conditions of use and in accordance with the instructions for use provided by the manufacturer.

Preventive skin protection: skin protection cream.

#### Skin protection

Impervious clothing, chemical-resistant (solvent).

#### Respiratory protection

Do not breathe in vapours or spray mist. When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators. filter: ABEK

#### Environmental exposure controls

Do not flush into surface water or sanitary sewer system.

## SECTION 9: Physical and chemical properties

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

Physical state:	liquid
Colour:	colourless - yellowish
Odour:	mild

#### Test method

pH-Value:	n.a.
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#### Changes in the physical state

Melting point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash point:	40 °C DIN EN ISO 2719
Sustaining combustion:	No data available

#### Flammability

Solid:	No data available.
Gas:	No data available.

#### Explosive properties

No data available.

Lower explosion limits:	No data available.
Upper explosion limits:	No data available.
Ignition temperature:	No data available.

#### Auto-ignition temperature

Solid:	No data available.
Gas:	No data available.

Decomposition temperature:	No data available.
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**Oxidizing properties**

No data available.

Vapour pressure:

No data available.

Density (at 25 °C):

0,99 g/cm<sup>3</sup> DIN 51757

Water solubility:

No data available.

**Solubility in other solvents**

No data available.

Partition coefficient:

No data available.

Viscosity / dynamic:  
(at 25 °C)

1,6 mPa·s

Vapour density:

No data available.

Evaporation rate:

No data available.

**9.2. Other information**

No data available.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Hydrolyses in presence of: Water.

Release of: ethanol.

**10.2. Chemical stability**

No decomposition if used as directed.

**10.3. Possibility of hazardous reactions**

No dangerous reactions are known.

**10.4. Conditions to avoid**

Protect from humid air and water.

Keep away from open flames, hot surfaces, and sources of ignition.

**10.5. Incompatible materials**

strong oxidizers, strong acids, Water

**10.6. Hazardous decomposition products**

ethanol

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

No data is available on the product itself. The following toxicological assessments are based on the toxicological knowledge of the separate components of the product.

Harmful by inhalation.

On contact with water or humidity formation of: ethanol

LD50/oral/rat: 7060 mg/kg (ethanol)

**ATEmix calculated**

ATE (inhalative vapour) 13,75 mg/l; ATE (inhalative aerosol) 1,875 mg/l

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CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
78-10-4	Tetraethyl silicate				
	oral	LD50	6270 mg/kg	Rat	GESTIS
	dermal	LD50	5880 mg/kg	Rabbit	GESTIS
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		

#### **Irritation and corrosivity**

Irritating to eyes and respiratory system.

#### **Severe effects after repeated or prolonged exposure**

Drying out of the skin due to defatting. Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

#### **Practical experience**

##### **Observations relevant to classification**

On contact with water or humidity formation of: ethanol  
ethanol (Central nervous system disorders, Liver injury may occur.)

##### **Other observations**

Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

## SECTION 12: Ecological information

### **12.1. Toxicity**

No data is available on the product itself. The following toxicological assessments are based on the toxicological knowledge of the separate components of the product.

### **12.2. Persistence and degradability**

On contact with water or humidity formation of: ethanol (Readily biodegradable, according to appropriate OECD test.)

### **12.3. Bioaccumulative potential**

No data available.

### **12.4. Mobility in soil**

No data available.

### **12.5. Results of PBT and vPvB assessment**

No data available.

### **12.6. Other adverse effects**

No data available.

#### **Further information**

Do not flush into surface water or sanitary sewer system.

## SECTION 13: Disposal considerations

### **13.1. Waste treatment methods**

#### **Advice on disposal**

Disposal in accordance with the official regulations. Hazardous waste incineration. Must be incinerated in a suitable incineration plant authorised under the Environmental Protection Act.

#### **Waste disposal number of waste from residues/unused products**

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080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other dangerous substances  
Classified as hazardous waste.

#### Waste disposal number of used product

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other dangerous substances  
Classified as hazardous waste.

#### Waste disposal number of contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

#### Contaminated packaging

Packaging can be sent for recycling after being emptied and cleaned. Dispose of non-cleansing packaging in the same way as the product.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

**14.1. UN number:** UN 1292  
**14.2. UN proper shipping name:** TETRAETHYL SILICATE  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Classification code: F1  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 Transport category: 3  
 Hazard No: 30  
 Tunnel restriction code: D/E

#### Inland waterways transport (ADN)

**14.1. UN number:** UN 1292  
**14.2. UN proper shipping name:** TETRAETHYL SILICATE  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Classification code: F1  
 Limited quantity: 5 L  
 Excepted quantity: E1

#### Marine transport (IMDG)



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**14.1. UN number:** UN 1292  
**14.2. UN proper shipping name:** TETRAETHYL SILICATE  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Special Provisions: -  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 EmS: F-E, S-D

#### Air transport (ICAO)

**14.1. UN number:** UN 1292  
**14.2. UN proper shipping name:** TETRAETHYL SILICATE  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
 Hazard label: 3



Limited quantity Passenger: 10 L  
 Passenger LQ: Y344  
 Excepted quantity: E1  
 IATA-packing instructions - Passenger: 355  
 IATA-max. quantity - Passenger: 60 L  
 IATA-packing instructions - Cargo: 366  
 IATA-max. quantity - Cargo: 220 L

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

No data available.

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available.

### SECTION 15: Regulatory information

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

##### EU regulatory information

2004/42/EC (VOC): The EU limit value for this product (product category: II.A /h, Lb) in ready to use form is max 750 g/litre of VOC. The VOC content of this product in ready to use form is max 30 g/l

##### Additional information

No Substances of Very High Concern (SVHC) according REACH Article 57.

##### National regulatory information

Water contaminating class (D): 2 - water contaminating

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**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****Abbreviations and acronyms**

n.a. = not applicable

n.d. = not determined

n.d.a. = no data available

**Relevant R-phrases (Number and full text)**

- |       |  |
|-------|--|
| 10    | Flammable.                                 |
| 20    | Harmful by inhalation.                     |
| 36/37 | Irritating to eyes and respiratory system. |

**Relevant H- and EUH-phrases (Number and full text)**

- |      |                                   |
|------|-----------------------------------|
| H226 | Flammable liquid and vapour.      |
| H319 | Causes serious eye irritation.    |
| H332 | Harmful if inhaled.               |
| H335 | May cause respiratory irritation. |

**Further Information**

The information is based on present levels of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

The product is to be used exclusively for the applications named in the technical data sheet or in the processing instructions.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*