

Revision date: 08.05.2023  
Replacement of version 0012 of 28.03.2022

Version: 0013



## *KNAUF Performance Materials GmbH*

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

**1.1 Identification of the substance or mixture**

Trade name **Perlfüller Z; Perlfüller F; Perlfüller 20; Perlfüller 20/50; Perlfüller 50**  
Product number **depe0005**

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

Appropriate use:  
The product is used as filler and fine aggregate.

**1.3 Details of the supplier of the safety data sheet**

KNAUF Performance Materials GmbH  
Kipperstraße 19  
D-44147 Dortmund  
Telephone: +49-231-9980-01      Telefax: +49-231-9980-138  
e-mail-address of the competent person responsible for this Safety Data Sheet:  
[info@gefstoff.de](mailto:info@gefstoff.de)

**Technical contact:**

KNAUF Performance Materials GmbH, Kipperstraße 19, D-44147 Dortmund  
Telephone: +49-231-9980-01      Telefax: +49-231-9980-138

**1.4 Emergency telephone number**

Giftnotruf der Charité - Universitätsmedizin Berlin, Campus Benjamin Franklin, Haus VIII (Wirtschaftsgebäude), UG  
Hindenburgdamm 30, 12203 Berlin  
**Giftnotruf Berlin +49-30-30686 700 (Advice in German and English)**  
**(24 hours, Monday – Sunday)**

### SECTION 2: Hazards identification

**2.1 Classification of the substance or mixture**

STOT RE 2; H373 (lung; inhalation)

**2.2 Label elements**

Hazard pictogram(s):



Signal word(s):

Warning

Product identifier:

Perlfüller Z; Perlfüller F; Perlfüller 20; Perlfüller 20/50; Perlfüller 50  
contains quartz (respirable) CAS-No 14808-60-7

Hazard statements:

H373

May cause damage to lungs through prolonged or repeated exposure if inhaled.

Precautionary statements:

P260

Do not breathe dust.

P285

In case of inadequate ventilation wear respiratory protection.

Supplemental hazard information: Not required

---

Trade name:	Perlfüller Z; Perlfüller F; Perlfüller 20; Perlfüller 20/50; Perlfüller 50	
Company/Undertaking:	KNAUF Performance Materials GmbH Kipperstraße 19, D-44147 Dortmund	Revision date: 08.05.2023
Telephone	+49-231-9980-01	
Product number:	depe0005	

---

### 2.3 Other hazards

The product contains quartz as an impurity. Quartz is known to be a silicosis-producing substance to human. Avoid absolutely formation of dust during processing and treatment. According to section 2 of the German TRGS 906: in case of formation of alveolar dust of quartz processing and treatment are considered as carcinogenic activities. The dustiness of the product has been determined in accordance with DIN 33897-2 and EN 15051-Method B. Classification of dustiness according to EN 15051-Method B:  
**Dusting propensity concerning respirable dust**  
Depending on the fraction low up to moderate.  
**Dusting propensity concerning inhalable dust**  
Depending on the fraction moderate up to high.  
The criteria for identifying substances as PBT and vPvB set out in Annex XIII of Regulation (EC) No 1907/2006 shall not apply to inorganic substances.  
The substance does not have endocrine disrupting properties.

---

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

REACH registration number:

According to Annex V (7), perlite is exempted from the obligation to register, if it is not chemically modified.

#### 3.1.1 Main constituent of the substance

This product is perlite of volcanic origin.

CAS No: 130885-09-5

EC No: 603-442-8

Index No: Not listed

#### 3.1.2 Impurity, stabilising additive, or individual constituent

The product contains quartz. The content of the respirable dust fraction is between 1.11% and 1.91% in the dust fraction of perlite.

CAS No: 14808-60-7

EC No: 238-878-4

Index No: Not listed

#### 3.1.3 Additional information

National occupational exposure limit values for various EU member states have been assigned for perlite under the CAS No 93763-70-3 (see subsection 8.1).

---

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### 4.1.1 General information

Take off contaminated clothing immediately and wash before reuse.

Emergency eyewash should be provided in the immediate working surroundings.

#### 4.1.2 In case of inhalation

If liberated dust is inhaled, ensure supply of fresh air.

Dust in throat and nasal passages must be removed immediately.

In the event of symptoms take medical treatment.

#### 4.1.3 In case of contact with skin

No special measures necessary.

#### 4.1.4 In case of contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do.

Do not rub eyes, cornea damage is possible by mechanical stress.

#### 4.1.5 In case of ingestion

No special measures necessary.

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

If liberated dust is inhaled: irritant effect on the respiratory tract, e.g. burning, coughing.

In case of contact of liberated dust with eyes: burning eyes, tears.

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

Treat symptomatically. No information available.

---

---

Trade name:	Perlfüller Z; Perlfüller F; Perlfüller 20; Perlfüller 20/50; Perlfüller 50	
Company/Undertaking:	KNAUF Performance Materials GmbH Kipperstraße 19, D-44147 Dortmund	
Telephone	+49-231-9980-01	Revision date: 08.05.2023
Product number:	depe0005	

---

## SECTION 5: Firefighting measures

- 5.1 Extinguishing media**
- 5.1.1 Suitable extinguishing media**  
Product itself is non-combustible. Fire extinguishing method of surrounding areas must be discussed.
- 5.1.2 Unsuitable extinguishing media**  
Product itself is non-combustible. Fire extinguishing method of surrounding areas must be discussed.
- 5.2 Special hazards arising from the substance or mixture**  
No special hazards have to be mentioned.
- 5.3 Advice for firefighters**  
In case of formation of dust, wear self-contained breathing apparatus.
- 

## SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures**
- 6.1.1 For non-emergency personnel**  
Avoid absolutely formation of dust. Ensure adequate ventilation.  
In case of formation of dust, wear respiratory protection.  
Keep away from unprotected people.
- 6.1.2 For emergency responders**  
For suitable fabric for personal protective clothing see Section 8.
- 6.2 Environmental precautions**  
No special measures necessary.
- 6.3 Methods and material for containment and cleaning up**  
Pick up mechanically. Avoid formation of dust.  
Do not use compressed air for cleaning surfaces or clothing.  
Use approved industrial vacuum cleaner for removal.
- 6.4 Reference to other sections**  
For personal protective equipment see also Section 8.  
For disposal considerations see also Section 13.
- 

## SECTION 7: Handling and storage

- 7.1 Precautions for safe handling**
- 7.1.1 Advice on safe handling**  
Avoid formation of dust.  
When filling, transferring, or emptying of containers, adequate suctioning close to work place necessary.  
Do not compress empty bags, except when contained in another clean bag.  
Dust deposits that cannot be avoided must be taken up regularly.  
Comply with the minimum standards in accordance with TRGS 500<sup>1</sup>.  
In case of release of mineral dust, comply with the protective measures in accordance with TRGS 559<sup>1</sup>.  
In case of dust formation and release of only small amounts of dust (range of grams) the model solutions of the Control Guidance Sheets 100<sup>1</sup>, La-101<sup>1</sup>, 110<sup>1</sup>, 200<sup>1</sup>, 208<sup>1</sup> and 240<sup>1</sup> must be taken into consideration.  
In case of dust formation and release of medium to large amounts of dust (range of kilograms up to tons) the model solutions of the Control Guidance Sheet 300<sup>1</sup> (closed system) must be additionally taken into consideration.  
The consideration of the Good Practice Guide on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it<sup>5</sup> is recommended.
- 7.1.2 Advice on general occupational hygiene**  
Do not inhale dust.  
After worktime and before breaks the affected skin areas must be thoroughly cleaned.  
Take off contaminated clothing immediately and wash before reuse. Store work clothing separately.  
Emergency eyewash should be provided in the immediate working surroundings.

Trade name:	Perlfüller Z; Perlfüller F; Perlfüller 20; Perlfüller 20/50; Perlfüller 50	
Company/Undertaking:	KNAUF Performance Materials GmbH Kipperstraße 19, D-44147 Dortmund	Revision date: 08.05.2023
Telephone	+49-231-9980-01	
Product number:	depe0005	

## 7.2 Conditions for safe storage, including any incompatibilities

### 7.2.1 Advice on protection against fire and explosion

No special measures necessary.

### 7.2.2 Requirements for storage rooms and vessels

Keep only in the original container. Keep container tightly closed.

### 7.2.3 Advice on storage compatibility

Do not store together with hydrofluoric acid.

The information about joint storage given in Table 12 of TRGS 510<sup>1</sup> must be observed.

### 7.2.4 Further information on storage conditions

Store in a dry place.

### 7.2.5 Storage class (for Germany only)

LGK 13 in accordance with TRGS 510<sup>1</sup>.

## 7.3 Specific end use(s)

The product is only intended for the uses mentioned under subsection 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

CAS number	Identification	Limit values	Remarks
130885-09-5	perlite	5 mg/m <sup>3</sup> inhalable aerosol 10 mg/m <sup>3</sup> 4 mg/m <sup>3</sup> 10 mg/m <sup>3</sup> - total dust 4 mg/m <sup>3</sup> - respirable fraction  10 mg/m <sup>3</sup> inhalable aerosol	<b>National limit values – eight hours</b> Austria Belgium Latvia Norway Norway <b>National limit values – short term</b> Austria
14808-60-7	quartz	0.1 mg/m <sup>3</sup> (respirable fraction)  0.05 mg/m <sup>3</sup> respirable aerosol 0.3 mg/m <sup>3</sup> inhalable aerosol 0.1 mg/m <sup>3</sup> respirable aerosol 0.05 mg/m <sup>3</sup> respirable fraction 0.05 mg/m <sup>3</sup> assessment standard* respirable fraction 0.05 mg/m <sup>3</sup> respirable fraction 0.15 mg/m <sup>3</sup> respirable aerosol 0.075 mg/m <sup>3</sup> respirable fraction  0.6 mg/m <sup>3</sup> inhalable aerosol 0.2 mg/m <sup>3</sup> respirable aerosol 0.4 mg/m <sup>3</sup> assessment standard* respirable fraction	<b>EU-exposure limit value in accordance with Directive (EU) 2019/130 eight hours</b> <b>Different national limit values – eight hours</b> Austria Denmark Denmark Finland Germany  Spain Switzerland The Netherlands <b>Different national limit values – short term</b> Denmark Denmark Germany

\* The assessment standard has been fixed in accordance with TRGS 559. It must be taken into account for the risk assessment and the control of the effectiveness of the preventive measures. This standard value must be fallen below.

The methods for measuring chemical agents in workplace atmosphere must meet the general requirements of EN 481, EN 482 and EN 689.

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See also subsection 7.1.

In case of dust formation exhaust ventilation at the object (initiation point) is necessary.

In case of release of dust, additionally comply with the protective measures in accordance with TRGS 559<sup>1</sup>.

The effectiveness of suitable protective measures must be controlled.

Suitable assessment methods are described in the German TRGS 402<sup>1</sup>.

Trade name:	Perlfüller Z; Perlfüller F; Perlfüller 20; Perlfüller 20/50; Perlfüller 50	
Company/Undertaking:	KNAUF Performance Materials GmbH Kipperstraße 19, D-44147 Dortmund	Revision date: 08.05.2023
Telephone	+49-231-9980-01	
Product number:	depe0005	

### 8.2.2 Individual protection measures, such as personal protective equipment

Personal protective equipment needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer/supplier of the personal protective equipment.

#### 8.2.2.1 Eyeface protection

Tightly fitting safety glasses in accordance with EN 166 (in case of dust formation).

#### 8.2.2.2 Skin protection

##### Hand protection:

Work gloves for protection against mechanical damage.

##### Body protection:

Closed work clothing.

#### 8.2.2.3 Respiratory protection

Filtering half mask to protect against particles FFP1 – FFP3 in accordance with EN 149 (in dust-laden atmosphere).

Maximum use concentration for substances with occupational exposure limit values (OELV):

P1-filter up to max. 4 x OELV;

P2-filter up to max. 10 x OELV;

P3-filter up to max. 30 x OELV.

These values are only valid for Germany in accordance with the German DGUV Regel 112-190<sup>2</sup>.

The limitations in wearing time according to the DGUV Regel 112-190<sup>2</sup> (rule of the German employers' liability insurance association) for the use of respirators have to be observed.

#### 8.2.2.4 Thermal hazards

Not relevant.

### 8.2.3 Environmental exposure controls

See Section 6.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	solid (granulation 0 – 200 µm)
Colour:	greyish brown
Odour:	odourless
Odour threshold:	no data available
Melting point/freezing point (°C):	approx. 1400
Boiling point/initial boiling point/boiling range (°C):	not applicable
Flammability:	not combustible
Lower explosion limit:	not applicable
Upper explosion limit:	not applicable
Flash point (°C), closed cup:	not applicable
Auto-ignition temperature (°C):	not applicable
Decomposition temperature (°C):	temperature resistance up to 800°C
pH (as supplied) (20°C):	6 – 8.5
Kinematic viscosity (mm <sup>2</sup> /s):	not applicable
Solubility in water:	< 1 wt %
Soluble in:	not determined
Partition coefficient: n-octanol/water (log value):	not applicable
Vapour pressure (20°C) (mbar):	not applicable
Bulk density (g/dm <sup>3</sup> ):	700
Relative vapour density (20°C):	not applicable
Particle characteristics:	dusty
	Classification of dustiness in accordance with DIN 33897-2 and EN 15051-Method B:
	<b>Dusting propensity concerning respirable dust</b>
	Depending on the fraction low up to moderate
	<b>Dusting propensity concerning inhalable dust</b>
	Depending on the fraction moderate up to high

### 9.2 Other information

None.

Trade name: Perlfüller Z; Perlfüller F; Perlfüller 20; Perlfüller 20/50; Perlfüller 50  
 Company/Undertaking: KNAUF Performance Materials GmbH  
 Kipperstraße 19, D-44147 Dortmund  
 Telephone: +49-231-9980-01  
 Product number: depe0005

Revision date: 08.05.2023

## SECTION 10: Stability and reactivity

### 10.1 *Reactivity*

No data available for the product.

### 10.2 *Chemical stability*

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

### 10.3 *Possibility of hazardous reactions*

When used as intended, no hazardous reaction known.

### 10.4 *Conditions to avoid*

When used as intended, no particular conditions known.

### 10.5 *Incompatible materials*

Avoid contact with hydrofluoric acid.

### 10.6 *Hazardous decomposition products*

No hazardous decomposition products known. For hazardous combustion products see subsection 5.2.

## SECTION 11: Toxicological information

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

No data are available for the product.

#### 11.1.1 *Acute toxicity*

LD50 rat, oral	(mg/kg)	No data available.
LD50 rat, dermal	(mg/kg)	No data available.
LC50 rat, inhalation	(mg/l/4h)	No data available.

#### 11.1.2 *Skin corrosion/irritation*

No data available.

#### 11.1.3 *Serious eye damage/irritation*

No data available.

#### 11.1.4 *Respiratory or skin sensitisation*

No evidence of sensitive properties of perlite has been found.

#### 11.1.5 *Germ cell mutagenicity*

The substance is not classified as a germ cell mutagen.

#### 11.1.6 *Carcinogenicity*

The product contains quartz. The content of the respirable dust fraction is between 1.11% and 1.91% in the dust fraction of perlite. Quartz has been declared as carcinogenic category 1 by the German MAK-Commission. This declaration only must be considered as scientific recommendations. It is not in accordance with the regulations. According to section 2 of the German TRGS 906: in case of formation of alveolar dust of quartz processing and treatment are considered as carcinogenic activities.

#### 11.1.7 *Reproductive toxicity*

The substance is not classified as toxic for the reproduction.

#### 11.1.8 *Specific target organ toxicity (STOT)-single exposure*

The substance is not classified as a specific target organ toxicant after single exposure.

#### 11.1.9 *Specific target organ toxicity (STOT)-repeated exposure*

STOT RE 2

May cause damage to lungs through prolonged or repeated exposure if inhaled.

#### 11.1.10 *Aspiration hazard*

The substance is not classified as an aspiration toxicant.

#### 11.1.11 *Symptoms related to the physical, chemical and toxicological characteristics*

If liberated dust is inhaled: irritant effect on the respiratory tract, e.g. burning, coughing.

In case of contact of liberated dust with eyes: burning eyes, tears.

#### 11.1.12 *Delayed and immediate effects as well as chronic effects from short and long-term exposure*

If liberated dust is inhaled: irritant effect on the respiratory tract, e.g. burning, coughing.

In case of contact of liberated dust with eyes: burning eyes, tears.

Frequent inhalation of large quantities of cement dust over a long period of time increases the risk of damage to the lungs. The product contains quartz as an impurity. Quartz is known to be a silicosis-producing substance to human.

### 11.2 *Information on other hazards*

No data available for the substance.

#### 11.2.1 *Endocrine disrupting properties*

The substance does not have endocrine disrupting properties.

#### 11.2.2 *Other information*

None.

Trade name:	Perlfüller Z; Perlfüller F; Perlfüller 20; Perlfüller 20/50; Perlfüller 50	
Company/Undertaking:	KNAUF Performance Materials GmbH Kipperstraße 19, D-44147 Dortmund	Revision date: 08.05.2023
Telephone	+49-231-9980-01	
Product number:	depe0005	

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity:

LC50	(fish)	No data available.
EC50	(daphnia)	No data available.
IC50	(algae)	No data available.

#### Behaviour in sewage works:

Inorganic product, insoluble in water. Can be mechanically refined for the most part in waste water cleaning plants.

### 12.2 Persistence and degradability

The product is insoluble in water.

The methods for determining the biological degradability are not applicable to inorganic substances.

Chemical oxygen demand (COD) No data available.

Biochemical oxygen demand (BOD5) No data available.

AOX-hint Not to apply.

### 12.3 Bioaccumulative potential

The methods for determining the bioaccumulative potential are not applicable to inorganic substances.

### 12.4 Mobility in soil

The product has not been tested.

### 12.5 Results of PBT and vPvB assessment

The criteria for identifying substances as PBT and vPvB set out in Annex XIII of Regulation (EC) No 1907/2006 shall not apply to inorganic substances.

### 12.6 Endocrine disrupting properties

The substance does not have endocrine disrupting properties.

### 12.7 Other adverse effects

Ozone depletion potential No data available.

Photochemical ozone creation potential No data available.

Global warming potential No data available.

#### Contains according to the formulation following compounds of directives 2006/11/EC and 80/68/EEC:

None.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste disposal according to official state regulations. Consult the local waste disposal expert about waste disposal.

#### Disposal operations/recovery operations according to Directive 2008/98/EC

Disposal operations D 1 Deposit into or on to land

Recovery operations R 5 Recycling/reclamation of other inorganic materials

#### Properties of waste which render it hazardous in accordance with Annex III of Directive 2008/98/EC

Not relevant.

#### 13.1.1 Product / unused product

Waste disposal corresponding to European Waste Catalogue. Wastes must be classified with respect to their origin and depending on different processing steps. The waste codes mentioned as follows are only constituted as our recommendations. Referring to the particular case they should be completed or revised.

EC waste code 19 12 09

Waste notation minerals (for example sand, stones)

#### Alternative:

EC waste code 01 04 10

Waste notation dusty and powdery wastes other than those mentioned in 01 04 07

#### 13.1.2 Contaminated packaging

Recommendation: Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Recommended cleansing agent: Remove adhering residues mechanically.

Packaging that cannot be cleaned:

EC waste code: 15 01 02

Waste notation: Plastic packaging

Trade name:	Perlfüller Z; Perlfüller F; Perlfüller 20; Perlfüller 20/50; Perlfüller 50	
Company/Undertaking:	KNAUF Performance Materials GmbH Kipperstraße 19, D-44147 Dortmund	Revision date: 08.05.2023
Telephone	+49-231-9980-01	
Product number:	depe0005	

## SECTION 14: Transport information

- 14.1 UN number or ID number**  
No dangerous good in accordance with the UN Model Regulations (ADR/RID/ADN/IMDG/ICAO/IATA).
- 14.2 UN proper shipping name**  
Not relevant.
- 14.3 Transport hazard class(es)**  
Not relevant.
- 14.4 Packing group**  
Not relevant.
- 14.5 Environmental hazards**  
Not relevant.
- 14.6 Special precautions for user**  
Not relevant.
- 14.7 Maritime transport in bulk according to IMO instruments**  
Not relevant.

## SECTION 15: Regulatory information

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

#### 15.1.1 Information regarding relevant Union safety, health and environmental provisions

- Regulation (EC) No 1907/2006: Annex V (7) (perlite)  
(exemptions from the obligation to register)
- Conditions of restriction in accordance with Annex XVII Regulation (EC) No 1907/2006: None
- The substance is not classified as a substance of very high concern (SVHC) in accordance with Article 59 of the Regulation (EC) No 1907/2006.
- Observe employment restrictions under the law for the protection of young people at work (94/33/EC).
- Observe Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### 15.1.2 Information regarding national laws/national measures that may be relevant (for Germany only)

- Indications on restriction of occupation: Youth Employment Protection Act must be observed
- Major Accident Ordinance: Not relevant
- Fire and explosion hazards: Not relevant
- Regulation on clean air (TA Luft): Number 5.2.1 (exhaust stream in case of liberation of dust during processing and treatment)
- Water hazard class: Non-hazardous to water  
(according to § 3(2) sentence 2 AwSV)<sup>3</sup>
- German Ordinance on Hazardous Substances (in accordance with EC-Directive 98/24/EC): Articles 6, 7, 8, 9, 14, Annex I No 2 must be observed.

#### In case of liberation of dust during processing and treatment:

- Regulation on Occupational Medical Prevention (ArbMedVV): Annex, Part 1 (1):  
**Obligatory prophylaxis:** The employer shall arrange occupational medical prophylaxis for workers conducting activities with exposure to silicogenic dust, if the occupational exposure limit value is exceeded.  
Annex, Part 1 (2):  
**Prophylaxis offer:** For activities involving silicogenic dust occupational medical prevention has to be offered.
- DGUV Recommendations on Occupational Medical Prevention: silicogenic dust
- Technical Rules for Hazardous Substances<sup>1</sup>: TRGS 400, 402, 500, 510, 555, 559, 600, 900, 906
- Rules of the employers' liability insurance association<sup>2</sup>: DGUV Regel 112-190, 112-192
- Information of the employers' liability insurance association<sup>2</sup>: DGUV Information 240-011
- Classification in accordance with the easy-to-use workplace control scheme for hazardous substances of the Federal Institute for Occupational Safety and Health, version 2.2, 2014<sup>4</sup>: inhalation: hazard group C  
(in case of release of mineral dust, the protective measures in accordance with TRGS 559<sup>1</sup> should be applied preferably)



Trade name:	Perlfüller Z; Perlfüller F; Perlfüller 20; Perlfüller 20/50; Perlfüller 50	
Company/Undertaking:	KNAUF Performance Materials GmbH Kipperstraße 19, D-44147 Dortmund	Revision date: 08.05.2023
Telephone	+49-231-9980-01	
Product number:	depe0005	

**15.2 Chemical safety assessment**

No chemical safety assessment has been carried out.

**SECTION 16: Other information**

- 16.1 Keeping (restrictions)** Not relevant  
**Supply** to industry consumer
- 16.2 Full text of the hazard statements referred to under sections 2 and 3 of the Safety Data Sheet**  
H373 May cause damage to lungs through prolonged or repeated exposure if inhaled.
- 16.3 Key or legend to abbreviations and acronyms used in the safety data sheet**
- ADN: Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
- ADR: Accord relatif au transport international des marchandises dangereuses par route
- AOX: adsorbable organically bound halogens
- AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances that are hazardous to water)
- DGUV: Deutsche Gesetzliche Unfallversicherung (German Social Accident Insurance)
- ICAO/IATA: International Civil Aviation Organisation/International Air Transport Association-Dangerous Goods Regulations
- IMDG-Code: International Maritime Dangerous Goods-Code
- IMO: International Maritime Organization
- LGK: Lagerklasse (storage class)
- NEPSI: Noyau Européen pour la Silice – European Network for Silica
- PBT: persistent, bioaccumulative and toxic
- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer
- TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Hazardous Substances)
- VCI: Verband der chemischen Industrie (German Association of Chemical Industry)
- vPvB: very persistent and very bioaccumulative
- 16.4 Literature references and sources for data**
- <sup>1</sup> <https://www.baua.de>
- <sup>2</sup> <https://www.arbeitssicherheit.de>
- <sup>3</sup> <https://www.umweltbundesamt.de>
- <sup>4</sup> <https://www.baua.de/emkg>
- <sup>5</sup> <https://www.nepsi.eu>
- 16.5 Changes which have been made to the previous version of the safety data sheet**  
Revised sections: 8.1, 15.1.2, 16.3

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Compiled by:	<b>Dr. Michael Urban</b> <b>Fachberatung Gefahrstoff Gefahrgut</b> Vogelbeerweg 3 Tel.: +49-4402-695620	D-26180 Rastede-Ipwege / Germany Fax: +49-4402-695621
--------------	--	--