

**MATERIAL SAFETY DATA SHEET** according to Regulation (EU) 453/2010  
**DEUREX® SILICA**

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**SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY**

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**1.1. Product identifier**

Trade names: DEUREX® SILICA 200  
DEUREX® SILICA 380  
DEUREX® SILICA S 120

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

Relevant identified uses  
Additive

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

DEUREX AG  
Dr.-Bergius-Str. 8 – 12  
D - 06729 Elsteraue  
Tel.: +49(0)3441 / 8 29 29 29, Fax: +49(0)3441 / 8 29 29 28  
[Material-Safety@Deurex.com](mailto:Material-Safety@Deurex.com)  
[www.Deurex.com](http://www.Deurex.com)

**1.4. Emergency telephone number**

Common poisons information centre of the Federal States  
Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia.  
D-99089 Erfurt  
Tel.: +49(0)361-730730

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**SECTION 2: HAZARDS IDENTIFICATION**

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

Classification according to Regulation (EC) 1272/2008 [CLP]:

H-Phrases: None.

P-Phrases: None.

**2.2. Label elements**

Labelling according to Regulation (EC) 1272/2008 [CLP/GHS]:

None.

**2.3. Other hazards**

Based on the available evidence and when handled correctly, the product poses no danger for humans and the environment. The usual minimum standards for protective measures in the chemical industry must be observed. The substances do not meet the criteria for classification as PBT or vPvB → Chapter 12.

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substances

Chemical identity and characterisation:

Substance name:	Silica
CAS-number:	112926-00-8
EG-number :	231-545-4
REACH-number:	01-2119379499-16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

**General informations:** A hazard originated from the substance can occur during processing in hot state (risk of burning)!

**Following inhalation:** Dust can irritate the respiratory tract. If breathing fumes, smoke and gases produced at higher temperatures, irritations of the respiratory system are possible. Remove the person to fresh air.

**Following skin contact:** May cause mild irritation if product comes into contact with the skin. Rinse contaminated skin with plenty of water. Remove contaminated clothing and shoes. If symptoms persist, seek medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse. In case of contact with hot product apply first aid according to the degree of burn. Cool affected area with cool water. Do not remove solidified product from the skin. Remove clothing only if it does not stick to the skin. Cover affected areas with sterile Metalline fire cloth and provide medical treatment.

**Following eye contact:** Foreign bodies cause mechanical irritation. Remove foreign bodies. in Rinse eye, holding the eye lids apart, thoroughly under running water. In case of complaints seek medical advice.



**Following ingestion:** Rinse the mouth with water. Remove affected person to fresh air. Keep person warm and calm. If material has been swallowed and the affected person is conscious, give small amounts of water to drink. If you experience nausea do not let the person drink more since vomiting can be dangerous. Do not induce vomiting unless directed by medical personnel. If symptoms persist, seek medical attention. Never infuse an unconscious person anything through the mouth. In case of unconsciousness, place in recovery position and seek immediate medical attention.

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

No typical symptoms and effects known. If symptoms persist, seek medical advice.

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

No additional information available.

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## SECTION 5: FIREFIGHTING MEASURES

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### 5.1. Extinguishing media

Suitable extinguishing media:

Foam, dry powder, carbon dioxide, water spray. Extinguishing media that suit the surrounding fire.

Unsuitable extinguishing media:

Water jet.

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

Take precautionary measures against electrostatic charges.

Do not inhale fumes of fire → Chapter 10.

### 5.3. Advice for firefighters

Use approved compressed air breathing apparatus and wear firefighters protective clothing.



Do not empty fire water into drains. Fire residues and contaminated fire water must be disposed according to local regulations.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation.

Personal protection measures / protective equipment → Chapter 8.

### 6.2. Environmental precautions

Contain product mechanically for recovery or disposal. Solidify hot liquid product and collect it in clean containers for recycling or disposal. Do not empty into drains or surface water.

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

Mechanical containment.

Observe Waste Act when disposing the waste and the contaminated material

→ Chapter 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Usual precautions when handling chemicals → Chapter 8.

Keep away from ignition sources and take precautionary measures against electrostatic charges. Prevent dust formation and raise of dust. In the presence of deposited combustible dust, risk of explosion is expected. When processing explosive dust may be accumulated, which can result in an explosive atmosphere. Good ventilation of the workplace, appropriate extraction and ventilation is required at the processing machines. Waxes are lubricants, danger of slipping!



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

Storage conditions:

Dry and at room temperature (10 – 25 °C).

Relative humidity < 80%.

Avoid direct sunlight and heat, moisture, water and other harmful influences → Chapter 10.

Do not store together with food and feeding stuff.

Storage class: 12 – Non-flammable solids.

### 7.3. Specific end use(s)

Risk of burn when handling with liquid (hot) product.



According to the formulation, the products do not contain:

- Heavy metals
- VOC
- Compounds listed in the Chemicals Prohibition Ordinance
- Substances according to Directive 2002/95/EC – Appendix II
- Substances according to Regulation (EC) 1907/2006 – Appendix XIV (SVHC list)

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1. Control parameters

Components with critical values that require monitoring at the workplace:

EINECS No	Chemical name	Description	Value	Unit
231-545-4	Silica		4	mg/m <sup>3</sup>

### 8.2. Exposure controls

Exposure limitation and controlling are workplace related and must be regulated by the user.

### 8.2.1. Appropriate technical safety devices

Ensure good ventilation - local exhaust. If this is not sufficient, wear respiratory protection.

### 8.2.2. Personal protective equipment

General protective and hygiene measures:

Usual precautions for handling chemicals. Do not eat, drink or smoke during work, and wear suitable protective clothing. Do not breathe dust. Wash hands before breaks. Remove contaminated clothing. After contact, clean skin with water and soap or use suitable cleanser. Do not use organic solvents.

Eye / Face protection:

Wear safety glasses. Wear protective shield when handling hot material.



Skin / Body protection:

Wear protective gloves made of nitrile rubber. Wear heat-resistant gloves when handling hot material.



Wear protective clothing when handling hot material.

Waxes are lubricants, danger of slipping! Wear suitable footwear (antistatic work shoes).



Breathing protection:

If required, wear dust mask for fine particles when processing the product.



Wear respirator filter or breathing apparatus against vapours during thermal processing.

### 8.2.3. Environmental exposure controls

Information on environmental exposure → Chapters 6, 7 and 12.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

General:

Colour:	White
Aggregate state:	Solid
Delivery forms:	Powder
Odour:	None

Further information

Vapor pressure (50 °C)	Not specified
Inflammability /	
Spontaneous ignitability:	Not specified
Flash point:	Not specified
Odor threshold:	Not specified
Solubility in water and fat:	Insoluble
Lower / upper	
explosive limit:	Not specified
Explosive properties:	The products are not explosive, but during processing explosive dust may be accumulated → Chapter 7.1 / 10.3
Ignition temperature:	Not specified
Oxidizing properties:	None
pH value:	3,5 – 5,5
Vapor density:	Not specified
Specific gravity:	2,6 g/cm <sup>3</sup>
Initial boiling point:	Not specified
Melting range:	> 1600 °C
Decomposition temp.:	Not specified
Evaporation rate:	Not specified
n-octanol-water	
partition coefficient:	Not specified
Viscosity, cup efflux time:	Not specified
Viscosity (140 °C)	Not specified

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## SECTION 10: STABILITY AND REACTIVITY

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### 10.1. Reactivity

Unknown.

### 10.2. Chemical stability

The product is stable under normal conditions and the set handling and storage conditions described in Chapter 7.

### 10.3. Possibility of hazardous reactions

The accumulation of dust may increase the possibility of dust explosion.

### 10.4. Conditions to avoid

Keep away from ignition sources and take precautionary measures against electrostatic charges. Avoid dust formation and the raise of dust. Keep away from open fire and flames.

### 10.5. Incompatible materials

Strong oxidants.

### 10.6. Hazardous decomposition products

No Hazardous decomposition products

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### 11.1. Information on toxicological effects

Acute toxicity:	LD50 Oral rat > 5000 mg/kg.
Irritating effects:	No significant effects or critical hazards known.
Eye irritation:	No significant effects or critical hazards known.
Sensitisation:	No significant effects or critical hazards known.
Germ cell mutagenicity:	No significant effects or critical hazards known.
Carcinogenicity:	No significant effects or critical hazards known.
Reproductive toxicity:	No significant effects or critical hazards known.

Results of CMR assessment: The substances do not meet the criteria for CMR category 1 or 2.

Further information: When the products are handled correctly, in compliance with the in-dustrial hygiene and the inhalation of dusts and fumes is avoided, there is no health risk.

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## SECTION 12: ECOLOGICAL INFORMATION

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### 12.1. Toxicity

Fish toxicity: LC50 > 10000 mg/kg.  
Duration of exposure: 96 h

### 12.2. Persistence and degradability

Not easily biodegradable.

### 12.3. Bio-accumulative potential

No significant effects or critical hazards known.

### 12.4. Mobility in soil

No significant effects or critical hazards known.

### 12.5. Results of PBT and vPvB assessment

The substances do not meet the criteria for a classification as PBT or vPvB.

### 12.6. Other adverse effects

Water hazard class: Not hazardous to water.

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## SECTION 13: DISPOSAL CONSIDERATION

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### 13.1. Waste treatment methods

The producer of the waste must dispose the product according to its use, specific to the industry and the process, in cooperation with the local waste management company based on local waste disposal regulations and national regulations and laws. Contaminated packaging should be disposed according to local and national regulations and in consultation with the local waste management companies. For Europe, the waste producer sets the waste code in accordance with the European Waste List (Decision 2000/532/EC). According to the present knowledge, the products are not regarded as hazardous waste as defined by EU Directive 91/689/EEC.

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## SECTION 14: TRANSPORT INFORMATION

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Transport only in accordance with ADR for road haulage, RID for rail transportation, ADNR/IMDG for carriage by vessel/sea and IATA for carriage by air.

	Road traffic - ADR -	Barge traffic - ADNR -	Air traffic - IATA -
	Rail traffic - RID -	Maritime traffic - IMDG -	
<b>14.1. UN number</b>	No hazardous materials	No hazardous materials	No hazardous materials
<b>14.2. UN proper shipping name</b>	No hazardous materials	No hazardous materials	No hazardous materials



<b>14.3. Transport hazard class(es)</b>	No hazardous materials	No hazardous materials	No hazardous materials
<b>14.4. Packing group</b>	No hazardous materials	No hazardous materials	No hazardous materials
<b>14.5. Environmental hazards</b>	No hazardous materials	No hazardous materials	No hazardous materials
<b>14.6. Special precautions for user</b> → Chapters 6 to 8.			
<b>14.7. Transport in bulk according to Annex II of MARPOL73/8 and the IBC Code</b> Not applicable.			

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## SECTION 15: REGULATORY INFORMATION

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

Labelling:

According to EC Directives 67/548/EEC and 1999/45/EC: None.

According to Regulation EC/1272/2008: None.

International regulations:

Regulation (EC) 1907/2006

Regulation (EC) 1272/2008

Regulation (EU) 453/2010

Directive 94/62/EC

Directive 2008/98/EC

Directive 2011/65/EU

Directive 2012/19/EU

- respectively in the latest version incl. all amendment and corrections.

National regulations:

Compliance with applicable agreements, regulations and laws of the respective country.

Classification according to GefStoffV. (BRD): No.

Technical Instruction Air (TA<sub>Luft</sub>): Not classified.

Information on employment restrictions: None.

International listing:

The contained substances are listed in the following inventory sheets:

**EINECS** (Europe)      **TSCA** (USA)      **DSL** (Canada)      **AICS** (Australia)

**IECSC** (China)      **PICCS** (Philippines)

**NZIoC** (New-Zealand)

### 15.2. Chemical safety assessment

Not applicable according to Regulation (EC) 1907/2006 [REACH] Article 37 (4).

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## **SECTION 16: OTHER INFORMATION**

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Further information:

The information is based on our present knowledge, it is correct and complete. However, this information is given without a guarantee. It remains the responsibility of the user to satisfy itself whether the information is appropriate and complete for his special use of the product.