

POWDER 501	
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# Safety Data Sheet

## pursuant to Regulation (EG) No 1907/2006

### 1. Product and company name

#### 1.1 Produktidentifikator

- Trade name: POWDER 501
- Substance name: Silicon dioxide
- CAS Number: 7631-86-9
- EC number: 231-545-4

#### 1.2 Relevant identified uses of the substance or mixture and uses of: which are discouraged

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

Aid  
Filler  
Additive for cementitious building materials

##### - Dealers:

DURAPACT 2.0  
Kompetenzzentrum Faserbeton GmbH  
Büssingstraße 4  
D- 42781 Haan

Phone: +49 (0) 21 29 / 56 78 10  
Fax: +49 (0) 21 29 / 56 78 28  
E-Mail: [info@durapact.de](mailto:info@durapact.de)

#### 1.3 Emergency number

Emergency Phone: +49 6132-84463  
International Emergency Number  
This phone number is 24 hours a day,  
Staffed 7 days a week.

### 2. Possible hazards

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

##### Classification (REGULATION (EC) No 1272/2008)

No hazardous substance or mixture.

#### 2.2 Kennzeichnungselemente

##### Labelling (REGULATION (EC) No 1272/2008)

No hazardous substance or mixture.

#### 2.3 Other hazards

This substance/mixture does not contain components in concentrations equal to or greater than 0,1 %, which are considered either persistent, bioaccumulative and toxic (PBT) or very persistent and very persistent bioaccumulative (vPvB).

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### 3. Composition/information on ingredients

#### 3.1 Chemical characterization: inorganic

- **CAS-No. Designation**  
7631-86-9 Silicon dioxide
- **Identification number(s)**
- **EC number:** 231-545-4

### 4. First aid measures

#### 4.1 Description of first aid measures

- **General information:** In case of accident or discomfort, consult a doctor immediately.
- **After inhalation:**  
Fresh air supply, breathing if necessary, heat. In case of persistent complaints, consult a doctor.
- **After eye contact:**  
Rinse eyes with open eyelid gap for several minutes under running water for at least 15 minutes and consult a doctor.
- **After ingestion:**  
Rinse your mouth and drink plenty of water. DO NOT induce vomiting.  
In case of persistent complaints, consult a doctor.

#### **After skin contact:**

Take off soiled, soaked clothes immediately  
Wash off with: Polyethylene glycol 40

#### 4.2 Main acute and delayed symptoms and effects

No other relevant information available.

#### 4.3 Indications of immediate medical assistance or special treatment

Symptomatic treatment

### 5. Fire-fighting measures

#### 5.1 Extinguishing agents

- **Suitable extinguishing agents:**  
Adapt extinguishing measures to the environment.

#### 5.2. Specific hazards of the substance or mixture

Special hazards in firefighting:

Inhalation of decomposition products can cause damage to health

Hazardous combustion products:

No hazardous combustion products known

#### 5.3 Instructions for firefighting

In case of fire, wear breathing apparatus independent of ambient air, personal protective equipment.

- **Other information –**

Use water spray mist to cool fully sealed containers,  
Do not allow to penetrate into surface water or groundwater.

### 6. Accidental release measures

#### 6.1 Use personal precautions, protective equipment and emergencies

##### **Procedures**

Wear protective equipment. Keep unprotected people away. Ensure adequate ventilation.  
See safeguards and points 7 and 8.

#### 6.2 Environmental protection measures: Prevent contact with soil, surface water or groundwater.

#### 6.3 Methods and materials for retention and cleaning:

Mechanically dust-free pickup.

In suitable containers, return for recovery or disposal.

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#### 6.4 Reference to other sections

See section 7, 8, 11, 12 and 13.

### 7. Handling and storage

#### 7.1 Protective measures for safe handling

Ensure sufficient air exchange and/or extraction in the workrooms.

Wear personal protective equipment.

Inhalation, ingestion and avoid skin and eye contact.

Do not eat, drink or smoke in the area of application.

#### Hygiene measures:

Keep away from food and drink. Wash hands before breaks and at the end of work.

Keep work clothes separate. Contaminated clothing and gloves before reuse undress and wash off, also the inside.

- **Notes on fire and explosion protection:** The product is non-flammable.

#### 7.2 Conditions for safe storage, taking into account incompatibilities

- **Storage:**

- **Requirements for storage rooms and containers:** Tightly sealed, cool and dry, on a well keep ventilated place

- **Summary Notes:** Not required.

- **Lagerklasse:** 13

- **Classification according to the Industrial Safety Ordinance (BetrSichV):** -

#### 7.3 Specific End Applications No other relevant information available.

### 8. Exposure control and personal protective equipment

#### 8.1 Parameters to monitor

- **Components with workplace-related limit values to be monitored:**

#### 7631-86-9 Silicon dioxide, amorphous

AGW	Long-term value: 4 mg/m <sup>3</sup> DE TRGS 900
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A risk of fruit damage must be required if the occupational exposure limit value and the biological limit value (BGW) can not be feared.

- **DNELs**

#### 7631-86-9 Silicon dioxide, amorphous

Inhalativ	Employees, long-term, systemic effects	4 mg/m <sup>3</sup>
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#### 8.2 Exposure control and monitoring

- **Personal protective equipment:**

- **General protective and hygienic measures:**

The usual precautions when handling chemicals must be observed.

- **Respiratory:**

Use respiratory protection in case of exposure to dust/aerosol.

Filter P3

- **Hand protection:** intact, clean gloves

- **Gloves made of the following materials are suitable for permanent contact:** Gloves made of Rubber

- **Eye protection:** safety goggles with side protection

- **Body protection:** Light protective clothing

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## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

· General information

· Appearance:

Form: Powder

Color: White

· Odour: Odourless

· Odour threshold: Not determined

· pH: Not applicable

· State

Melting point/melting range: 1.710 °C (1,013 hPa)

Boiling point/boiling range: 2230 °C (1,013 hPa)

· Flash point: Not applicable.

· Flammability (solid, gaseous): The substance is non-flammable.

· Ignition temperature: Not applicable.

· Decomposition temperature: Not determined.

· Self-ignition: The product is not spontaneously flammable.

· Risk of explosion: The product is not explosive.

· Explosive limits:

Oxidizing properties: The substance has no oxidizing properties.

· Vapour pressure: Not applicable.

· Density: 2.2 g/cm<sup>3</sup> (20°C, 1,013 hPa)

· Solubility in / Miscibility with

Water: Insoluble (20°C, 1,013 hPa)

· Partition coefficient (n-octanol/water): Not applicable.

Viscosity:

Dynamic: Not applicable.

Kinematic: Not applicable.

· Solvent content:

Organic solvents: 0.0 %

VOC (EU) 0.00 %

### 9.2 Other information

No other relevant information available.

Molecular weight: 60,08 g/mol

Metal corrosion rate: No data available

Self-combustion: No data available

## 10. Stability and reactivity

**10.1 Reactivity** No dangerous reactions known when handled as intended.

**10.2 Chemical stability** No decomposition when stored and handled as intended.

**10.3 Possibility of dangerous reactions** No dangerous reactions known.

**10.4 Conditions to avoid** No other relevant information available.

**10.5 Incompatible Materials:** No other relevant information available.

**10.6 Hazardous decomposition products:** No known hazardous decomposition products.

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## 11. Information on toxicology

### 11.1 Information on toxicological effects

- **Acute toxicity:** not classified according to available information

· <b>Classification-relevant LD/LC50 values:</b>		
<b>7631-86-9 Silicon dioxide, amorphous</b>		
Oral	LD50	5,000 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effect known.
- **Additional toxicological notes:**  
When handled and used properly, the product causes our experience and the information available to us do not have any adverse health effects.

## 12. Environmental Information

### 12.1 Toxicity

· <b>Aquatic toxicity:</b>	
<b>7631-86-9 Silicon dioxide, amorphous</b>	
LC50/96h	>10. 000 mg/l (fish, algae)

**12.2 Persistence and degradability:** No data available

**12.3 Bioaccumulation potential:** No data available

**12.4 Mobility in the soil:** no data available

**12.5 PBT and vPvB assessment results:**

This substance/mixture does not contain components in concentrations equal to or greater than 0,1 %, which are considered either persistent, bioaccumulative and toxic (PBT) or very persistent and very persistent bioaccumulative (vPvB).

## 13. Instructions for disposal

### 13.1 Waste treatment process

- **Recommendation:** Disposal in accordance with official regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal in accordance with official regulations.

## 14. Transport details

### 14.1 UN-Number

- **ADR, IMDG, IATA** omitted

### 14.2 Proper UN Shipping Designation

- **ADR, IMDG, IATA** omitted

### 14.3 Transport hazard classes

- **ADR, IMDG, IATA**
- **Class** not applicable

### 14.4 Packing group

- **ADR, IMDG, IATA** omitted

### 14.5 Environmental hazards:

- **Marine pollutant:** No

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**14.6 Special precautions for the Users**

Not applicable.

**14.7 Bulk transport in accordance with Annex II to the MARPOL 73/78 and according to IBC Code**

Not applicable.

· UN "Model Regulation":

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## 15. Regulatory Information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and Products (Annex XVII)	Not applicable
REACH - Candidate list of substances of very high concern (Article 59).	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	Not applicable
Regulation (EC) No 1005/2009 on substances used to reduce Ozone layer	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	Not applicable
Regulation (EC) No 649/2012 of the European Parliament and of the Council concerning the export and import of dangerous chemicals	Not applicable
Water hazard class	NWG not hazardous to water ID number: 849 classification according to AwSV, Appendix 1 (4)
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of Major accident hazards involving dangerous substances. Not applicable	

**15.2 Chemical safety assessment:** A chemical safety assessment has not been carried out.

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## 16. Other information

The information is based on the current state of our knowledge, but it does not represent an assurance of product properties and does not establish a contractual legal relationship.

### · Abbreviations and acronyms:

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Directory of Chemical Substances; ASTM - American Society for Materials Testing; bw - body weight; CLP - Regulation on classification, labelling and packaging of substances, Regulation (EC) No 1272/2008; CMR - carcinogenic, mutagenic or reproductive toxin; DIN - Standard of the German Institute for Standardization; DSL - List of domestic substances (Canada); ECHA - European Chemicals Agency; EC-Number - number of the European Community; ECx - concentration associated with x% reaction; ELx - loading rate associated with x % response; EmS - Contingency Plan; ENCS - Existing and new chemical substances (Japan); ErCx - concentration associated with x % growth rate; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships Carrying Hazardous Chemicals in Bulk; IC50 - Semi-maximum inhibitor concentration; ICAO - International Civil Aviation Organization; IECSC - List of chemical substances present in China; IMDG - Code – International Code for the Carriage of Dangerous Goods by Seagoing Vessels; IMO - International Maritime Organization; ISHL - Occupational Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - List of chemicals present in Korea; LC50 - lethal concentration for 50 % of a test population; LD50 - lethal dose for 50 % of a trial population (mean lethal dose), MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - not otherwise stated; NO(A)EC - concentration at which no (harmful) effect is detectable; NO(A)EL - dose at which no (harmful) effect is detectable; NOELR - No discernible effect charge; NZIoC - New Zealand Chemical Directory; OECD - Organisation for Economic Co-operation and Development; OPPTS - Bureau of Chemical Safety and Pollution Prevention (OSCPP); PBT - persistent, bioaccumulative and toxic substances; PICCS - List of chemicals and chemical substances present in the Philippines; (Q) SAR - (quantitative) structure-activity relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the registration, evaluation, authorisation and restriction of chemicals; RID - Regulation on the international carriage of dangerous goods by rail; SADT - Self-accelerating decomposition temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - List of chemical substances present in Taiwan; TRGS - Technical Rules for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very persistent and very bio-accumulative