

# Material Safety Data Sheet

**Silicon oxide, surface modified with amino group**

Revision Date: 1/10/2017

Date Issued: 2/26/2018

## 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY / UNDERTAKING

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Silicon oxide,<br>Surface modified with amino group   |
| <b>Product code</b>        | NO-0056   |
| <b>CAS</b>                 | 7631-86-9   |
| <b>REACH No. :</b>         | A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline. |
| <b>Identified uses</b>     | Laboratory chemicals, Manufacture of substances   |
| <b>Supplier</b>            | IoLiTec<br>Ionic Liquids Technologies GmbH<br>Salzstrasse 184<br>D – 74076 Heilbronn<br>Germany   |
| <b>Telephone</b>           | +49 (0)7131-89839-0   |
| <b>Fax</b>                 | +49 (0)7131-89839-109   |
| <b>Emergency telephone</b> | +49 (0)179-5322578  |
| <b>Email</b>               | <a href="mailto:msds@iolitec.de">msds@iolitec.de</a>  |

## 2 HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

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

Serious eye damage/Eye irritation, Category 2, H319

Specific Target Organ Toxicity - Single exposure: Respiratory tract irritation,

Category 3, H335

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### Classification (67/548/EEC or 1999/45/EC)

Irritating to eyes, respiratory system and skin.

### 2.2 Label elements

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

|  |  |
|--|--|
| Pictogram                                      |   |
| Signal word                                    | Warning  |
| Hazard statement(s)                            |  |
| H319   | Causes serious eye irritation.   |
| H335   | May cause respiratory irritation.  |
| Precautionary statement(s)                     |  |
| P261   | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray .  |
| P280   | Wear protectic gloves/protective clothing/eye protection/face protection .   |
| P305 + P351 + P338                             | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Caution - substance not yet tested completely. |  |
| Supplemental Hazard Statements                 | none   |

#### Labelling (67/548/EEC or 1999/45/EC)

|                  |   |
|------------------|---|
| Hazard symbol(s) |  |
| R-phrased(s)     |   |
| R36/37/38        | Irritating to eyes, respiratory system and skin.                                    |

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### S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36 Wear suitable protective clothing.

Caution - substance not yet tested completely.

### 3 COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient name                                   | Contents                       | Health(Class) | Risk(R/No.)                     |
|---|--------------------------------|---------------|---------------------------------|
| Silicon dioxide, NH <sub>2</sub> -modified        | 99.9%                          |               | Substance not yet fully tested! |
| <b>Formula</b>                                    | <b>Molecular Weight</b>        |               |                                 |
| SiO <sub>2</sub> (-NH <sub>2</sub> ) <sub>x</sub> | 60.09g/mol (SiO <sub>2</sub> ) |               |                                 |

### 4 FIRST AID MEASURES

|                   |  |
|-------------------|--|
| <b>General</b>    | Contaminated clothing should be removed and washed before being reused.  |
| <b>Inhalation</b> | Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/ oxygen.   |
| <b>Ingestion</b>  | Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention immediately.  |
| <b>Skin</b>       | Wash the skin immediately with soap and water.   |
| <b>Eyes</b>       | Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse. |

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## 5 FIRE FIGHTING MEASURES

|   |  |
|---|--|
| <b>Extinguishing media</b>                  | Use extinguishing media appropriate to surrounding fire conditions.                |
| <b>Special fire fighting procedures</b>     | No special procedures required.  |
| <b>Unusual fire &amp; explosion hazards</b> | Emission of toxic fumes  |
| <b>Protective measures in fire</b>          | Wear self-contained breathing apparatus as combustion may produce hazardous fumes. |

## 6 ACCIDENTAL RELEASE MEASURES

|   |   |
|---|---|
| <b>Personal precautions during spill</b>  | Wear protective clothing and avoid inhalation of powder, fume and vapor as well as skin or eye contact.   |
| <b>Precautions to protect environment</b> | Avoid washing into water courses. Avoid contaminating public drains or water supply.  |
| <b>Spill cleanup methods</b>              | Avoid contact with skin or inhalation of spillage, dust or vapor, Avoid dust formation. Collect and reclaim or dispose in sealed containers in license waste. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. |

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### 7 HANDLING AND STORAGE

#### Handling precautions

Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### Storage precautions

Keep container tightly closed.

### 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### Personal protective equipment

##### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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### Exposure limits

| <u>SiO<sub>2</sub></u> | <u>mg/m<sup>3</sup></u> |
|------------------------|-------------------------|
| Germany OEL            | 0.3                     |
| Switzerland OEL        | 0.3                     |
| United Kingdom OEL     | 0.8                     |

## 9 PHYSICAL AND CHEMICAL PROPERTIES

|                      |                        |
|----------------------|------------------------|
| <b>Appearance</b>    | solid                  |
| <b>Color</b>         | white                  |
| <b>Odor/taste</b>    | no characteristic odor |
| <b>Boiling Point</b> | 2.230 °C               |
| <b>Melting Point</b> | 1.600 °C               |
| <b>Bulk Density</b>  | 2,65 g/cm <sup>3</sup> |

## 10 STABILITY AND REACTIVITY

|                                      |   |
|--------------------------------------|---|
| <b>Stability</b>                     | No particular stability concerns.   |
| <b>Conditions/materials to avoid</b> | Strong acids, oxidizing agents, hydrogen fluoride, oxygen difluoride, chlorine trifluoride, ammonia, acetylene. |
| <b>Hazardous Decomposition</b>       | Hazardous products of decomposition: Not known  |

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## 11 TOXICOLOGICAL INFORMATION

### Acute toxicity

no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### Reproductive toxicity

no data available

### Specific target organ toxicity - single exposure

no data available

### Specific target organ toxicity - repeated exposure

no data available

### Aspiration hazard

no data available

### Potential health effects

#### Ingestion

May be harmful if swallowed.

#### Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

#### Skin

May cause irritation

#### Eyes

May cause irritation

### Additional Information

RTECS: Not available

**Full Data on the toxicity of this product are not available. Hazardous properties cannot be excluded.**

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## 12 ECOLOGICAL INFORMATION

Do not allow material to be released to the environment without proper governmental permits.

## 13 DISPOSAL CONSIDERATIONS

**Disposal method** Contact specialist disposal companies. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

## 14 TRANSPORT INFORMATION

|                             |   |
|-----------------------------|---|
| <b>General</b>              | Not classified as dangerous for transport purposes. |
| <b>Road transport notes</b> | Not classified as dangerous for road transport.     |
| <b>Rail transport notes</b> | Not classified as dangerous for rail transport.     |
| <b>Sea transport notes</b>  | Not classified as dangerous for sea transport.      |
| <b>Air transport notes</b>  | Not classified as dangerous for air transport.      |

## 15 REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available



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## Chemical Safety Assessment

no data available

## Country specific information:

Classification according to German Regulation VwVwS; Reg.no. 849:  
non-hazardous to waters

## 16 OTHER INFORMATION

### DISCLAIMER

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