

# Safety Data Sheet

## Barium Titanate powder

Revision Date: 11/29/2018

Date Issued: 11/29/2018

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

<b>Product name</b>	Barium Titanate powder Barium Titanium Oxide Nanopowder
<b>Product code</b>	NO-0041
<b>CAS</b>	12047-27-7
<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 Ionic Liquids Technologies GmbH Salzstrasse 184 D – 74076 Heilbronn Germany
<b>Telephone</b>	+49 (0)7131-89839-0
<b>Fax</b>	+49 (0)7131-89839-109
<b>Emergency telephone</b>	+49 (0)176-84850874
<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)

Acute toxicity (inhalation), Category 4, H332

Acute toxicity (oral), Category 4, H302

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

Harmful by inhalation and if swallowed.

### 2.2 Label elements

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

Pictogram



Signal word

Warning

Hazard statement(s)

H302

Harmful if swallowed.

H332

Harmful if inhaled.

Precautionary statement(s)

P261

Avoid breathing dust/ fume/ gas/ mist/  
vapours/ spray .

Caution - substance not yet tested completely.

Supplemental Hazard Statements none

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

Hazard symbol(s)



R-phrase(s)

R20/22

Harmful by inhalation and if swallowed.

S-phrase(s)

S23

Do not breathe gas/ fumes/ vapour/ spray

Caution - substance not yet tested completely.

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### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name	Contents	Health(Class)	Risk(R/No.)
Barium Titanate	99.9%		Substance not yet fully tested!
<b>Formula</b>	<b>Molecular Weight</b>		
BaTiO <sub>3</sub>	233.19 g/mol		

### 4 FIRST AID MEASURES

<b>General</b>	Contaminated clothing should be removed.
<b>Inhalation</b>	Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen. Seek immediate medical advise.
<b>Ingestion</b>	Get medical attention immediately.
<b>Skin</b>	Wash the skin immediately with soap and water. Seek immediate medical advise.
<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.

### 5 FIRE FIGHTING MEASURES

<b>Extinguishing media</b>	Use: water spray, carbon dioxide (CO <sub>2</sub> ), extinguishing powder.
<b>Special fire fighting procedures</b>	Incase of fire, the following can be released: Barium oxide
<b>Unusual fire &amp; explosion hazards</b>	Product does not present an explosion hazard.

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### 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions during spill** Wear protective clothing and avoid inhalation of vapor, skin or eye contact.

**Precautions to protect environment** Avoid washing into water courses. Avoid contaminating public drains or water supply.

**Spill cleanup methods** Avoid contact with skin or inhalation of spillage, dust or vapour, Avoid dust formation. Collect and reclaim or dispose in sealed containers in license waste.

### 7 HANDLING AND STORAGE

**Usage precautions** Do not use in confined spaces without adequate ventilation and/or respirator.

**Storage precautions** Store in cool, dry, well ventilated area. Do not store together with oxidizing and acidic materials.

**Storage criteria** Chemical storage.

### 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).

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### 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).

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	solid
<b>Color</b>	white / grey.
<b>Odor/taste</b>	odorless

## 10 STABILITY AND REACTIVITY

<b>Stability</b>	No particular stability concerns.
<b>Conditions to avoid</b>	Avoid contact to strong oxidizers and acids.
<b>Hazardous Decomposition Products</b>	Barium oxide

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### 11 TOXICOLOGICAL INFORMATION

#### Acute toxicity

LD50 Oral - rat > 12.000 mg/kg

#### 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

Harmful if swallowed.

##### Inhalation

Harmful if inhaled. May cause respiratory tract irritation.

##### Skin

May cause irritation

##### Eyes

May cause irritation

#### Additional Information

RTECS: Not available

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

### 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.  
Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

### 14 TRANSPORT INFORMATION

**General**

Not classified as dangerous for transport purposes.

**Road transport notes**

Not classified as dangerous for road transport.

**Rail transport notes**

Not classified as dangerous for rail transport.

**Sea transport notes**

Not classified as dangerous for sea transport.

**Air transport notes**

Not classified as dangerous for air transport.

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### 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

#### **Chemical Safety Assessment**

no data available

#### **Country specific information:**

##### **Germany**

Classification according to German Regulation VwVwS;  
WGK 1 (self classification) - slightly hazardous to water

### 16 OTHER INFORMATION

#### DISCLAIMER

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