

# Safety Data Sheet

## Zinc(II)oxide powder

Revision Date: 4/20/2016

Date Issued: 6/8/2018

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

<b>Product name</b>	Zinc(II)oxide powder
<b>Product code</b>	NO-0011
<b>CAS</b>	1314-13-2
<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 aquatic toxicity, Category 1; H400

Chronic aquatic toxicity, Category 1, H410

# Safety Data Sheet

## Zinc(II)oxide powder

Revision Date: 4/20/2016

Date Issued: 6/8/2018

---

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

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 2.2 Label elements

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

Pictogram



Signal word

Warning

Hazard statement(s)

H400

Very toxic to aquatic life.

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261

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

P273

Avoid release to the environment.

P501

Dispose of contents/ container to an approved waste disposal plant.

Caution - substance not yet tested completely.

Supplemental Hazard Statements none

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

Hazard symbol(s)



R-phrases(s)

R50/53

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

# Safety Data Sheet

## Zinc(II)oxide powder

Revision Date: 4/20/2016

Date Issued: 6/8/2018

### S-phrases(s)

S60

This material and its container must be disposed of as hazardous waste.

S61

Avoid release to the environment. Refer to special instructions/ Safety data sheets.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name	Contents	Health(Class)	Risk(R/No.)
Zinc(II)oxide	99.5%		Substance not yet fully tested!
Formula	Molecular Weight		
ZnO	81.39 g/mol		

### 4 FIRST AID MEASURES

<b>General</b>	Contaminated clothing should be removed and washed before being reused.
<b>Inhalation</b>	Remove from exposure and move to fresh air immediately. Get medical aid.
<b>Ingestion</b>	Get medical aid. Wash mouth out with water.
<b>Skin</b>	Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
<b>Eyes</b>	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

### 5 FIRE FIGHTING MEASURES

<b>General Information</b>	Substance is noncombustible
<b>Extinguishing Media</b>	Substance is noncombustible; use agent most appropriate to extinguish surrounding fire

# Safety Data Sheet

## Zinc(II)oxide powder

Revision Date: 4/20/2016

Date Issued: 6/8/2018

### 6 ACCIDENTAL RELEASE MEASURES

#### General Information

Use proper personal protective equipment as indicated in Section 8

#### Spills/Leaks

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Do not let this chemical enter the environment

### 7 HANDLING AND STORAGE

#### Handling

Minimize dust generation and accumulation.  
Avoid breathing dust, vapor, mist, or gas.  
Avoid contact with skin and eyes. Avoid ingestion and inhalation.

#### Storage

Store in a cool, dry place. Store in a tightly closed container

### 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.

# Safety Data Sheet

## Zinc(II)oxide powder

Revision Date: 4/20/2016

Date Issued: 6/8/2018

### 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).

### Exposure Limits

United States OSHA: 5 mg/m<sup>3</sup> TWA (fume); 15 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable fraction); Belgium - TWA: 10 mg/m<sup>3</sup> VLE (dust); 5 mg/m<sup>3</sup> VLE (fumes) Belgium - STEL: 10 mg/m<sup>3</sup> VLE (fumes); France - VME: 5 mg/m<sup>3</sup> VME (fume); 10 mg/m<sup>3</sup> VME (dust); Germany: 5 mg/m<sup>3</sup> TWA (respirable fraction, smoke); Japan: 1 mg/m<sup>3</sup> OEL (respirable dust); 4 mg/m<sup>3</sup> OEL (total dust); Malaysia: 5 mg/m<sup>3</sup> TWA (fume); 10 mg/m<sup>3</sup> TWA (dust); Netherlands: 5 mg/m<sup>3</sup> MAC (smoke) Russia: 0.5 mg/m<sup>3</sup> TWA (aerosol); Spain: 5 mg/m<sup>3</sup> VLA-ED (vapor); 10 mg/m<sup>3</sup> VLA-ED (dust) Spain: 10 mg/m<sup>3</sup> VLA-EC (fume)

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Solid
<b>Color</b>	white
<b>Odor/taste</b>	No characteristic odor.
<b>Melting Point</b>	1975°C

## 10 STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under normal temperatures and pressures.
<b>Conditions to Avoid</b>	Incompatible materials, dust generation.
<b>Incompatibilities with Other Materials</b>	Magnesium, chlorinated rubber, zinc chloride, hydrogen fluoride.

# Safety Data Sheet

## Zinc(II)oxide powder

Revision Date: 4/20/2016

Date Issued: 6/8/2018

---

**Hazardous Decomposition Products** Not available **Hazardous Polymerization** Will not occur.

### 11 TOXICOLOGICAL INFORMATION

#### Acute toxicity

LD50 Oral-mouse 7.950 mg/kg

LC50 Inhalation-mouse 2.500 mg/m<sup>3</sup>

#### Skin corrosion/irritation

Skin-rabbit Mild skin irritation-24 h

#### Serious eye damage/eye irritation

Eyes-rabbit Mild eye irritation-24 h

#### 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

May be harmful if inhaled.

##### Skin

May cause irritation.

##### Eyes

May cause irritation.

# Safety Data Sheet

## Zinc(II)oxide powder

Revision Date: 4/20/2016

Date Issued: 6/8/2018

### Additional Information

RTECS: Not available

**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.

### ECOTOXICOLOGICAL DATA

#### LC50 Fish (96 hours)

Minimum:	1,1 mg/l
Maximum:	2250 mg/l
Median:	1120 mg/l
Study number:	2

Reference for median: Office of Pesticide Programs 2000. Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)). Environmental Fate and Effects Division, U.S.EPA, Washington, D.C.; Gale, N.L., B.G. Wixson, and M. Erten 1992. An Evaluation of the Acute Toxicity of Lead, Zinc, and Cadmium in Missouri Ozark Groundwater. Trace Subst.Environ.Health 25:169-183

#### LC50 Crustaceans (48 hours)

Minimum:	0,098 mg/l
Maximum:	24,6 mg/l
Median:	12,3 mg/l
Study number:	2

Reference for median: Gale, N.L., B.G. Wixson, and M. Erten 1992. An Evaluation of the Acute Toxicity of Lead, Zinc, and Cadmium in Missouri Ozark Groundwater. Trace Subst.Environ.Health 25:169-183

## 13 DISPOSAL CONSIDERATIONS

### Disposal method

Contact specialist disposal companies.  
Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

# Safety Data Sheet

## Zinc(II)oxide powder

Revision Date: 4/20/2016

Date Issued: 6/8/2018

### 14 TRANSPORT INFORMATION

**UN number:** UN 3077

**UN proper shipping name**

ADR/RID:	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S. (ZINCOXIDE)
IMDG:	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S. (ZINCOXIDE)
IATA:	environmentally hazardous substances, solid, n.o.s. (zincoxide)

**Transport hazard class(es)**

ADR/RID:	9
IMDG:	9
IATA:	9

**Packaging group**

ADR/RID:	III
IMDG:	III
IATA:	III

### 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



# Safety Data Sheet

## Zinc(II)oxide powder

Revision Date: 4/20/2016

Date Issued: 6/8/2018

---

### Country specific information:

#### Germany

#### Classification according to German Regulation VwVwS (Annex 3):

Reg.no. 2187: German Regulation WGK 2 (Water hazard class 2)  
hazard to waters.

<b>16 OTHER INFORMATION</b>
-----------------------------

### DISCLAIMER

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT  
PURPOSED TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE.  
IOLITEC SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM  
HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. THIS  
INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED  
AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH  
ANY OTHER MATERIALS OR ANY PROCESS. IT IS THE USER'S  
RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY OF SUCH  
INFORMATION FOR HIS OWN PARTICULAR USE.

IN NO WAY SHALL IOLITEC BE LIABLE FOR ANY CLAIMS, LOSSES OR  
DAMAGES OF ANY THIRD PARTY OR FOR THE LOST PROFITS OR ANY  
SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY  
DAMAGES, HOWSOEVER ARISING, EVEN IF THE COMPANY HAS BEEN  
ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.