

# Safety Data Sheet

## Nickel(II)oxide powder

Revision Date: 8/29/2016

Date Issued: 7/3/2019

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

<b>Product name</b>	Nickel(II)oxide powder
<b>Product code</b>	NO-0026
<b>CAS</b>	1313-99-1
<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>	msds@iolitec.de

### 2 HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

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

Skin sensitisation, Category 1, H317

Carcinogenicity (by inhalation), Category 1A, H350i

Specific Target Organ Toxicity - Repeated exposure, Category 1, H372

Hazardous to the aquatic environment: Chronic hazard, Category 4, H413

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

Toxic: danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation. May cause sensitization by skin contact. May cause long-term adverse effects in the aquatic environment.

### 2.2 Label elements

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

Pictogram



Signal word

Danger

Hazard statement(s)

H317

May cause an allergic skin reaction.

H350i

May cause cancer by inhalation.

H372

Causes damage to Organs through prolonged or repeated exposure .

H413

May cause long lasting harmful effects to aquatic life.

Precautionary statement(s)

P261

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

P273

Avoid release to the environment.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection .

P308 + P313

IF exposed or concerned: Get medical advice /attention.

P314

Get medical advice/ attention if you feel unwell.

Caution - substance not yet tested completely.

Supplemental Hazard Statements: none

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

Hazard symbol(s)



R-phrase(s)

R43	May cause sensitisation by skin contact.
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R49	May cause cancer by inhalation.
R53	May cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53	Avoid exposure - obtain special instructions before use.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

Caution - substance not yet tested completely.

### 3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Contents	Health(Class)	Risk(R/No.)
Nickel(II)oxide	99.5%		Substance not yet fully tested!
<b>Formula</b>	<b>Molecular Weight</b>		
NiO	74.69 g/mol		

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### 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.

### 5 FIRE FIGHTING MEASURES

<b>Extinguishing media</b>	Water spray, carbon dioxide, dry chemical powder, or appropriate foam.
<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.

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### 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions during spill** Wear protective clothing and avoid inhalation of powder, fume and vapor as well as 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 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.

### 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.

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### 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).

#### Exposure limits

NiO	mg/m <sup>3</sup>
Denmark TWA	1
Switzerland OEL	0.5
United Kingdom TWA	0.5 (Ni)

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### 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Solid
<b>Odor/taste</b>	No characteristic odor.
<b>Melting Point</b>	~ 1955°C
<b>SG/Density</b>	6.7 g/cm <sup>3</sup> at 20°C
<b>Solubility</b>	Insoluble in water

### 10 STABILITY AND REACTIVITY

<b>Stability</b>	No particular concern when used and stored under appropriate conditions.
<b>Conditions/materials to avoid</b>	Oxidizing agents
<b>Hazardous Decomposition</b>	Hazardous products of decomposition: toxic metal oxide fume.

### 11 TOXICOLOGICAL INFORMATION

#### Acute toxicity

LD50 Subcutaneous-mouse 50 mg/kg

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitization

Maximisation Test-rabbit

May cause sensitisation by skin contact.

(OECD Test Guideline 406)

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### **Germ cell mutagenicity**

no data available

### **Carcinogenicity**

This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Human carcinogen.

IARC:1-Group 1: Carcinogenic to humans (Nickel monoxide)

### **Reproductive toxicity**

no data available

### **Specific target organ toxicity - single exposure**

no data available

### **Specific target organ toxicity - repeated exposure**

Inhalation-Causes damage to organs through prolonged or repeated exposure

### **Aspiration hazard**

no data available

### **Potential health effects**

#### **Ingestion**

Harmful if swallowed.

#### **Inhalation**

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

#### **Skin**

May cause an allergic skin reaction

#### **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.

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### 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

Reg.no. 5368: WGK 1 - low hazard to waters

Classification according to Annex 3 of the Administrative Regulation of Substances Hazardous to Water (VwVwS)

## 16 OTHER INFORMATION

### 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.

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