

# Material Safety Data Sheet

## Tungsten powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

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

<b>Product name</b>	Tungsten powder
<b>Product code</b>	NM-0034
<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 – 898390
<b>Fax</b>	+49 (0)7131 – 89839109
<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 (67/548/EEC or 1999/45/EC)**

Flammable solid

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

# Material Safety Data Sheet

## Tungsten powder

Revision Date: 8/14/2019

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Flammable solids, Category 1 (H228)  
Specific Target Organ Toxicity - Single exposure: Respiratory tract irritation,  
Category 3 (H335)

### 2.2 Label elements

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

##### Hazard description:

##### Label for supply



F Highly flammable



Xi Irritant

##### Information pertaining to particular dangers for man and environment

##### Risk phrases

R11: Highly flammable.

R37: respiratory system.

##### Safety phrases

S6: Keep under argon

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

S36: Wear suitable protective clothing.

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

##### Hazard statements



Danger

##### H-phrases

H228: Flammable solid.

H335: May cause respiratory irritation.

##### Precautionary statements

##### P-phrases

P210: Keep away from heat/sparks/open flames/hot surfaces . - No smoking.

P261: Avoid breathing dust/fume.

# Material Safety Data Sheet

## Tungsten powder

Revision Date: 8/14/2019

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P370 + P378: In case of fire: Use sand or fire extinguisher class D for extinction.

P422: Store contents under nitrogen or argon.

### 3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Tungsten
CAS No.	7440-33-7
Empirical Formula	W
Molecular weight	183.84 amu

### 4 FIRST AID MEASURES

General	Contaminated clothing should be removed and washed before being reused.
Inhalation	Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen.
Ingestion	Immediately rinse mouth and provide fresh air. Get medical attention immediately.
Skin	Wash the skin immediately with water.
Eyes	Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention immediately. Continue to rinse for at least 15 minutes.

### 5 FIRE FIGHTING MEASURES

Extinguishing media	Use: extinguishing powder. Do not use water.
Special risks	Flammable powder. Emission of toxic fumes under fire conditions possible.

# Material Safety Data Sheet

## Tungsten powder

Revision Date: 8/14/2019

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---

**Protective measures in fire**

Wear self-contained breathing apparatus and protective clothing.

### 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions during spill** Evacuate area. Shut off all heat or ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Wear self-contained breathing apparatus, rubber boots and gloves.

**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.

### 7 HANDLING AND STORAGE

**Usage precautions**

Avoid contact with eyes, skin and clothing.  
Keep away from heat, sparks and open flame.  
Do not use in confined spaces without adequate ventilation and/or respirator.

**Storage precautions**

Store in a closed container in a cool, dry, well ventilated area. Protect against electrostatic charges.

**Special storage criteria**

Store away from oxidizing and acidic materials.

### 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Protective equipment**

Safety goggles. Chemical resistant gloves.  
Protective clothing. Protective mask when high concentrations are present.

# Material Safety Data Sheet

## Tungsten powder

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### Process control measures

Provide eyewash station and safety shower.  
Use engineering controls to reduce air contamination to permissible exposure levels.

### Ventilation

Provide adequate general and local exhaust ventilation.

### Respirators

Use high efficiency particulate respirator with appropriate filter when high concentrations are presents

### Exposure limits

W	mg/m <sup>3</sup>
ACGIH TLW	1; 3-STEEL (soluble compounds) 5; 10-STEEL (insoluble compounds)
Belgium TWA	5; 10-STEEL
Denmark TWA	5
Finland TWA	5
Korea TLW	5; 10-STEEL
Netherlands MAC-TGG	5
Norway TWA	5
Poland TWA	5
Russia	2-STEEL
Sweden NGV	5
Switzerland MAK-W	5
United Kingdom TWA	5; 10-STEEL

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Solid
<b>Color</b>	Black
<b>Odor/taste</b>	No characteristic odor.
<b>Melting Point</b>	3410°C
<b>Boiling Point</b>	5927°C

# Material Safety Data Sheet

## Tungsten powder

Revision Date: 8/14/2019

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---

<b>Flammability</b>	Highly flammable
<b>Density</b>	19.3 g/cm <sup>3</sup> (20°C)
<b>Water</b>	Insoluble

### 10 STABILITY AND REACTIVITY

<b>Stability</b>	No particular stability concerns if handled according to specifications.
<b>Conditions to avoid</b>	Oxidizing agents
<b>Hazardous Decomposition</b>	Highly flammable in air
<b>Products</b>	Metal oxide fume.

### 11 TOXICOLOGICAL INFORMATION

<b>Ingestion</b>	Harmful if swallowed.
<b>Inhalation</b>	Harmful to mucous membranes.
<b>Skin</b>	Irritating effect
<b>Eyes</b>	Irritating effect

### 12 ECOLOGICAL INFORMATION

<b>Environmental hazards</b>	Avoid washing into water courses. Avoid contaminating public drains or water supply.
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### 13 DISPOSAL CONSIDERATIONS

<b>Disposal method</b>	Contact specialist disposal companies. Dispose of in accordance with Local Authority
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# Material Safety Data Sheet

## Tungsten powder

Revision Date: 8/14/2019

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requirements. Recover and reclaim or recycle, if practical.

### 14 TRANSPORT INFORMATION

#### Land transport RID/ADR

UN#: 3089

Class: 4.1

Packing group: II

Danger code (Kemler): 40

Item: 13c

Proper Shipping Name: Metal powders, flammable, n.o.s. (tungsten)

#### Maritime transport IMDG

UN#: 3089

Class: 4.1

Packing group: II

Proper Shipping Name: Metal powders, flammable, n.o.s. (tungsten)

#### Air transport IATA

UN#: 3089

Class: 4.1

Packing group: II

Proper Shipping Name: Metal powders, flammable, n.o.s. (tungsten)

### 15 REGULATORY INFORMATION

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

#### National safety, health and environmental regulations/legislation specific for the substance or mixture

Classification according to German Regulation WGK2 (self classification);  
hazardous to waters

# Material Safety Data Sheet

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Revision Date: 8/14/2019

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### 16 OTHER INFORMATION

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