

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

Product name	Tungsten powder
Product code	NM-0033
CAS	7440-33-7
REACH No. :	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.
Identified uses	Laboratory chemicals, Manufacture of substances
Supplier	IoLiTec Ionic Liquids Technologies GmbH Salzstrasse 184 D – 74076 Heilbronn Germany
Telephone	+49 (0)7131-89839-0
Fax	+49 (0)7131-89839-109
Emergency telephone	+49 (0)176-84850874
Email	msds@iolitec.de

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable solids, Category 1 (H228)

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

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

Flammable solid

2.2 Label elements

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

Pictogram



Signal word

Warning

Hazard statement(s)

H228

Flammable solid.

H335

May cause respiratory irritation.

Precautionary statement(s)

P210

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

P261

Avoid breathing dust/fume.

P370 + P378

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

P422

Store contents under nitrogen or argon.

Caution - substance not yet tested completely.

Supplemental Hazard Statements none

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

Hazard symbol(s)



R-phrase(s)

R11

Highly flammable.

R37

Irritating to respiratory system.

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S-phrase(s)

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.

Caution - substance not yet tested completely.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Contents	Health(Class)	Risk(R/No.)
Tungsten	99.9%		Substance not yet fully tested!
Formula	Molecular Weight		
W	183.84 g/mol		

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.

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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.

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 at moderate temperatures in dry, well ventilated area.
Store contents under inert gas (nitrogen or argon). Protect against electrostatic charges.

Special storage criteria

Store away from oxidizing and acidic materials.

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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

W	mg/m ³
ACGIH TLW	1; 3-STEEL (soluble compounds) 5; 10-STEEL (insoluble compounds)
Belgium TWA	5; 10-STEEL
Denmark TWA	5

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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

GERMANY: TECHNICAL INSTRUCTIONS ON AIR QUALITY CONTROL (TA LUFT)

Overall Dust, including fine dust. The emissions of dust in the exhaust gas are not allowed to exceed the following values:

Mass flow: 0,20 kg/hr

Mass conc.: 20 mg/m³

The mass per unit volume of 0,15 g/m³ in exhaust gas is not allowed to be exceeded also on observance or lower deviation of a mass flow of 0,20 kg/h.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid
Color	Black
Odor/taste	No characteristic odor.
Melting Point	3410°C
Boiling Point	5927°C
Flammability	Highly flammable
Density	19.3 g/cm ³ (20°C)
Water	Insoluble

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10 STABILITY AND REACTIVITY

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

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

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Potential health effects

Ingestion	Harmful if swallowed.
Inhalation	Harmful to mucous membranes.
Skin	Irritating
Eyes	Irritating

Additional Information

RTECS: Not available

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

12 ECOLOGICAL INFORMATION

Environmental hazards	Avoid washing into water courses. Avoid contaminating public drains or water supply.
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13 DISPOSAL CONSIDERATIONS

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

UN number: UN 3089

UN proper shipping name

ADR/RID:	METAL POWDER, FLAMMABLE, N.O.S. (TUNGSTEN)
IMDG:	METAL POWDER, FLAMMABLE, N.O.S. (TUNGSTEN)
IATA:	Metal powder, flammable, n.o.s. (tungsten)

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Transport hazard class(es)

ADR/RID: 4.1

IMDG: 4.1

IATA: 4.1

Packaging group

ADR/RID: II

IMDG: II

IATA: II

Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

Special precautions for user

no data available.

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 WGK2 (self classification);
hazardous to waters

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16 OTHER INFORMATION

DISCLAIMER

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