

Safety Data Sheet

Tungsten disulfide powder

Revision Date: 1/10/2014

Date Issued: 6/11/2019

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

Product name	Tungsten disulfide powder
Product code	NC-0016
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 - 898390
Fax	+49 (0)7131 - 89839109
Emergency telephone	+49 (0)176-84850874
Email	msds@iolitec.de

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Irritating to eyes, respiratory system and skin.

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Classification (REGULATION (EC) No 1272/2008)

Skin corrosion/irritation, Category 2, H315

Serious eye damage/Eye irritation, Category 2, H319

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



Xi, Irritant.

Risk phrases

R: 36/37/38

Irritating to eyes, respiratory system and skin.

Safety phrases

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

S37/39: Wear suitable gloves and eye/face protection.

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

Hazard statements



Warning

H-phrases

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

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Precautionary statements

P-phrases

P261: Avoid breathing dust/fume/gas/mist/vapours/spray .

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Tungsten(IV)sulfide, 99 %
CAS No.	12138-09-9
Empirical Formula	WS ₂
Molecular weight	247.97 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. Do not induce vomiting. Get medical attention immediately.
Skin	Wash the skin immediately with soap and water.

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Eyes

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

Extinguishing media

Dry Sand, Special Metal extinguishing powder.

Unsuitable extinguishing media

Water

Special fire fighting procedures

No special procedures required.

Unusual fire & explosion hazards

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Protective measures in fire

Wear self-contained breathing apparatus as Combustion may produce hazardous fumes.

In case of fire, sulphur dioxide and tungsten trioxide are formed.

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

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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 closed. Store at moderate temperatures in dry, well ventilated area.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Protective equipment

Safety goggles. Chemical resistant gloves. Protective clothing. Protective mask.

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.

Other protection

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9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Solid

Odor/taste

No characteristic odor.

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PH	N/A
Boiling Point	N/A
Melting Point	1250 °C
Flash Point	N/A
Flammability	N/A
Autoignition Temp	N/A
Oxidizing Properties	N/A
Explosive Properties	N/A
Explosion Limits	N/A
Vapor Pressure	N/A
SG/Density	N/A
Partition Coefficient	N/A
Viscosity	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
Evaporation Rate	N/A
Bulk Density	N/A
Decomposition Temp.	N/A
Solvent Content	N/A
Water Content	N/A
Surface Tension	N/A
Conductivity	N/A
Solubility	insoluble

10 STABILITY AND REACTIVITY

Stability	No particular stability concerns.
Conditions to avoid	Strong acids.

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Hazardous Decomposition

Oxides of Sulfur and Tungsten may be evolved at extreme temperatures.

Products

Consistency of decomposition products

11 TOXICOLOGICAL INFORMATION

unknown.

Ingestion

Harmful if swallowed.

Inhalation

May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

Skin

May cause irritation and allergic reaction.

Eyes

May cause irritation and allergic reaction.

Toxicological tests:

Acute toxicity

LD₅₀ Oral, rat: > 2000 mg/Kg

LC₅₀ inhalation, rat > 5.25 mg/l, 4 h of exposure

Mutagenic effect

Salmonella typhimurium: No Indication of mutagenic effects.

12 ECOLOGICAL INFORMATION

Acute fish toxicity

96 h LC₅₀ (Brachydanio rerio): > 485 µg/l
(Maximum produceable concentration in the case of a weighed portion of 100 mg/l)

Acute toxicity for daphnia

48 h EC₅₀ (Daphnia magna): > 510 µg/l
(Maximum produceable concentration in the case of a weighed portion of 100 mg/l)

Toxicity for algae

72 h EbCo (Scenedesmus subspicatus):

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> 330 µg/l

72 h ErCo (Scenedesmus subspicatus):

> 330 µg/l

(Maximum produceable concentration in the case of a weighed portion of 100 mg/l)

Toxicity to bacteria

3 h EC50 (activated sludge): 8972 mg/l

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

General

Not classified as dangerous for transport purposes.

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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

In accordance with local and national regulations.

16 OTHER INFORMATION

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