

Tungsten electrode

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

TIGZONE[®]
TORCHES

As requested by the applicant, the Material Safety Data Sheet is prepared according to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev_6.

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● WL10 ● WL15 ● WL20 ● WP ● WT20 ● WZ8 ● WC20 ● WR02

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SECTION 1. Identification of the substance/preparation and company

- 1.1 Product Identification** : Tungsten electrode
- 1.2 Model No.** : /
Non-melting electrode for arc welding and cutting processes.
- 1.3 Recommended Use** : Industrial uses for: soldering, brazing, heating elements, emitter, cathode and electrode for lighting industry.
- 1.4 Applicant Name** : EWS European Welding Service GmbH
- 1.5 Applicant Address** : Siemensstr. 89a - D47547 - Germany
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SECTION 2. Hazards identifications

2.1 Hazard Class(GHS):

If the product is a powder, it is flammable and explosive. This product is a solid metal product that is not flammable and is not easily ignited by open flames. Tungsten electrodes may pose a radioactive hazard.

2.2 Pictograms:

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Not applicable

2.3 Signal word:

Not applicable

2.4 Hazard description:

Tungsten electrodes may pose a radioactive hazard.

2.5 Precautionary description:

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

SECTION 3. Composition / information on ingredients

The difference between the single product and mixture: Mixture

Substance name	Conc. (%)	CAS.
Tungsten	>99.96	7440-33-7
Thorium Dioxide	1.80-2.20	1314-20-1
Cerium Dioxide	1.80-2.20	1345-13-7
Lanthanated Dioxide	0.80-2.20	1312-81-8
Zirconium Dioxide	0.15-0.90	1314-23-4
Yttrium Dioxide	0.08-2.20	1314-36-9

SECTION 4. First aid measures

General advice: Show this safety data sheet (SDS) to the doctor in attendance.

4.1 Following eye contact:

In case of contact may cause irritation, immediately flush eyes with plenty of water. Call a physician immediately if eye damage.

4.2 Following skin contact:

Wash with soap and water. Consult a physician if feeling uncomfortable.

4.3 Following inhalation:

Move victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a physician immediately.

4.4 Following ingestion:

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If it is ingested, rinse the mouth with water.

Do not induce vomiting. Never give anything by mouth to an unconscious person.

Seek medical attention immediately.

SECTION 5. Firefighting measures

5.1 Hazardous Characteristics:

Not considered to be a fire hazard. Not easily ignited by fire.

5.2 Extinguishing Media:

Dry powder, Chemical foam, Carbon dioxide, water mist.

5.3 Firefighting procedures:

As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.

Extinguish fire in a safe distance with enough protection

Prevent fire extinguishing water from contaminating surface water or the ground water system.

5.4 Hazardous combustion products:

It may produce irritating or toxic gases.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid contact with eyes and skin.

Ensure adequate ventilation. Clear all fire sources.

Wear appropriate protective measures (SEE SECTION 8).

6.2 Environmental precautions:

Do not empty into drains. If the product contaminated lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

6.3 Cleaning method:

Remove by physical method. Disposal of discarded waste/pollutants refer to SECTION 13..

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SECTION 7. Safe handling and storage

7.1 Handling Notes:

Keep away from heat/sparks/hot surfaces/static discharge.

Avoid sun exposure.

Avoid producing dust.

Keep indoor ventilation or local exhaust device.

7.2 Storage Notes:

Keep away from heat/sparks/hot surfaces/static discharge.

Store in cool, dry and well ventilated space.

Store tungsten electrode containing material in accordance with local regulations for radioactive substances.

Stored in compatible containers.

Keep storage containers sealed.

Do not store with incompatible material (see section 10.2)

SECTION 8. Exposure controls / personal protection

8.1 Occupational Exposure Limit:

No information found

8.2 Engineering Control:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of localexhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn. Ensure that eyewash stations and safety showers are proximal to the work-station location.

8.3 Respiratory Protection:

Wear filter mask.

If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.

8.4 Eyes Protection:

Wear protective goggle in working time. (Comply with the European Union EN 166 or The U.S. NIOSH

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standard.)If contacting with eyes, flush with plenty of water, If you have discomfort, seek medical advice

8.5 Hands Protection:

Wash with plenty of water if gloves puncture or skin exposure.

Wear protective gloves (such as butyl rubber), passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.

8.6 Sanitary Measure:

Forbid smoking, eating and drinking in working places. Washing hands after handling products.

SECTION 9. Physical and chemical properties

Appearance and Color	Solid
Odour	Odorless
PH value	No Data
Flammability	Non flammable
Flash point(°C,Closed cup)	No Data
Boiling point(°C)	5660°C
Freezing point (°C)	3410°C
Density(g/cm³)	19.3 g/cm ³
Relative steam density (air = 1)	No Data
Vapor pressure(MPa)	No Data
Octanol/water partition coefficient	No Data
Viscosity (mPa/s)	No Data
Evaporation rate (kg/s)	No Data
UEL %(V/V)	No Data
LEL %(V/V)	No Data
Auto-ignition temperature(°C)	No Data
Decomposition temperature(°C)	No Data
Solubility	Insoluble in water

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SECTION 10. Stability and reactivity

10.1 Stability:

Stable under recommended storage and handling conditions (See section 7).

10.2 Material for avoiding:

Strong oxide, acid, alkali, halogen.

10.3 Contact conditions for avoiding:

Fire, High temperature.

10.4 Hazardous decomposition products:

When an electrode is consumed, the fume and gas generated can be volatile and toxic.

SECTION 11. Toxicological information

11.1 Acute toxicity:

No information found.

11.2 Skin corrosion/irritation:

No information found.

11.3 Serious eye damage/irritation:

No information found.

11.4 Respiratory or skin sensitisation:

No information found.

11.5 Germ cell mutagenicity:

No information found.

11.6 Carcinogenicity:

No information found.

11.7 Reproductive toxicity:

No information found.

11.8 STOT-single exposure:

No information found.

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11.9 STOT-repeated exposure:

No information found.

11.10 Aspiration hazard.:

No information found.

SECTION 12. Ecological information

12.1 Ecotoxicity:

According to the environmental protection laws, this product can't be poured into sewers or drainage ditches, can't be discarded in those places which would affect soil and underground water.

12.2 Persistence and degradability:

No data available.

12.3 Bioaccumulative potential:

No data available.

12.4 Mobility in soil:

No data available.

12.5 Other adverse effects:

No data available

SECTION 13. Disposal considerations

13.1 Handling method for waste:

Handling waste according to the local regulations. Contact specific waste disposal company or companies recommended by local laws.

13.2 Handling method for uncleaned packaging:

According to official regulations.

SECTION 14. Transport information

14.1 UN NO.:2909

14.2 Class: 7

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14.3 Packaging group: Not applicable

14.4 Technical name: RADIOACTIVE MATERIAL, EXCEPTED PACKAGE-ARTICLES MANUFACTURED FROM NATURAL URANIUM or DEPLETED URANIUM or NATURAL THORIUM



14.5 Label:

14.6 Attention Notes: Gentle with, prevent collision drag and dump. prohibition with antioxidant and food chemical mixed stowage, transit should prevent sun, fire, rain and high temperature.

SECTION 15. Regulatory information

Hazardous chemicals catalog

International maritime dangerous goods code

Dangerous Goods Number Of United Nations

Technical Instructions for the Safe Transport of Dangerous Goods by Air

Classification and code of dangerous goods

Occupational Safety and Health Act (OSHA)

The principle of classification of transport packaging groups of dangerous goods

Globally Harmonized System of Classification and Labelling of Chemicals

In accordance with all local laws.

SECTION 16. Other information

Disclaimer

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