

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH), as amended by Regulation (EU) 2020/878

Product Name: 2% Ceriated Tungsten

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product Identifier: 2% Ceriated Tungsten

SECTION 2: Hazards identification



Hazard Statements:

- H335: May cause respiratory irritation due to dust or fume



SECTION 3: Composition/information on ingredients

| Substance | CAS No. | EC No. | Concentration | Classification |
|------------|-----------|-----------|---------------|------------------|
| | | | | (CLP) |
| Iron | 7439-89-6 | 231-096-4 | 40-50% | - |
| Chromium | 7440-47-3 | 231-157-5 | 10-20% | - |
| Nickel | 7440-02-0 | 231-111-4 | 10-20% | Carc. 2, STOT |
| | | | | RE 1, Skin Sens. |
| | | | | 1 |
| Molybdenum | 7439-98-7 | 231-107-2 | 1-10% | - |
| Manganese | 7439-96-5 | 231-105-1 | 1-10% | - |
| Silicon | 7440-21-3 | 231-130-8 | 1-10% | - |
| Copper | 7440-50-8 | 231-159-6 | 0-0.5% | - |
| Carbon | 7440-44-0 | 231-153-3 | 0-0.5% | - |
| Phosphorus | 7723-14-0 | 231-768-7 | 0-0.5% | - |
| Sulfur | 7704-34-9 | 231-722-6 | 0-0.5% | - |

Mixture of metal alloys in solid wire form. Main constituents

SECTION 4: First aid measures

Inhalation: Move to fresh air. Seek medical advice if symptoms persist. Skin contact: Wash thoroughly with soap and water. Eye contact: Rinse cautiously with water. Remove contact lenses. Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical attention.

SECTION 5: Firefighting measures

Use dry chemical, CO₂ or alcohol-resistant foam. Avoid water jet. Fumes may contain metal oxides. Firefighters should wear SCBA.

SECTION 6: Accidental release measures

Avoid dust formation. Use mechanical means to collect material. Ensure good ventilation.

SECTION 7: Handling and storage

Ensure adequate ventilation. Avoid inhalation of fumes. Store in a dry place in sealed containers.

SECTION 8: Exposure controls/personal protection

Exposure controls/personal protection

Engineering controls: Use local exhaust ventilation. Monitor fume levels. Personal protection: Safety goggles, welding helmet, gloves (EN 388), flame-resistant clothing, and suitable RPE.

Exposure limits (EH40/UK WEL, 4th edition, 2020):

- Nickel (inhalable): 0.5 mg/m³ TWA (Sk)

- Chromium: 0.5 mg/m³ TWA
- Manganese (respirable): 0.05 mg/m³ TWA

SECTION 9: Physical and chemical properties

Form: Solid wire. Colour: Brown. Odour: None. Melting point: ~1440°C. Solubility: Insoluble in water.

SECTION 10: Stability and reactivity

Stable under normal use. Avoid strong acids and oxidisers. No hazardous polymerisation expected.

SECTION 11: Toxicological information

Nickel may cause allergic skin reactions. Prolonged inhalation may affect lungs. Not expected to be acutely toxic. Fumes may irritate respiratory tract.

SECTION 12: Ecological information

Not readily biodegradable. Avoid environmental release. Metal dust may be harmful to aquatic organisms.

SECTION 13: Disposal considerations

Dispose of in accordance with local/national regulations. Do not incinerate. Collect metal waste for recycling where possible.

SECTION 14: Transport information

Not classified as hazardous for transport. No special precautions required.

SECTION 15: Regulatory information

Regulatory information

Regulations: Complies with REACH Regulation (EC) No. 1907/2006, as amended by (EU) 2020/878.

Prepared in anticipation of REACH Revision 2025 (Q4 expected implementation). Complies with UK COSHH Regulations and CLP Regulation (EC) No. 1272/2008.

SECTION 16: Other information

This SDS has been prepared in accordance with Regulation (EU) 2020/878. It is based on the best available knowledge as of issue date.

| Substance | CAS No. | EC No. | Concentration | Classification (CLP) |
|--------------|-----------|-----------|---------------|-------------------------|
| Tungsten | 7440-33-7 | 231-143-9 | ~98% | - |
| Cerium Oxide | 1306-38-3 | 215-150-4 | 1.8-2.2% | - |