

Safety Data Sheet

Issue
10/0206

Tungsten Electrodes Pure



1. General characterization

- 1.1 **Chemical characterization:** Tungsten, pure
- 1.2 **Hazardous Ingredients:** Ingredient: Tungsten
- 1.3 **Condition:** solid
- 1.4 **Appearance:** steel-grey surface
- 1.5 **Odour:** no odour

2. Physical and safety data

- 2.1 **Boiling point:** 5900 C (6173 K)
- 2.2 **Vapour pressure:** not volatile
- 2.3 **Vapour density:** not volatile
- 2.4 **Solubility of water:** insoluble
- 2.5 **Density:** 19.3 g/cm³
- 2.6 **Percent, volatile by volume** 0
- 2.7 **Evaporation rate:** not volatile

Comments: Tungsten has a high density.
Powder/dusts will settle quickly

- 2.8 **Flashpoint:** N/A
- 2.9 **Flammable limits:** N/A
- 2.10 **Others:** Tungsten powder/dust e.g. grinding dust may be a weak fire and explosion hazard depending on particle size and dispersion in air.
- 2.11 **Reactivity data:**
- 2.11.1 **Stability** Stable
- 2.11.2 **Incompatibility:** None known
- 2.11.3 **Hazardous decomposition products:** WO₃- vapour at high temperatures (>800 C, 1073k) not toxic
- 2.11.4 **Hazardous polymerisation:** will not occur

3. Transport

No special precautions needed

4. Prescriptions

No special prescriptions to take into consideration

5. Protection, storage and handling

5.1 Technical protection:

Ventilation: Local exhaust

5.2 Personal protection:

Respiratory protection: use respirators during grinding

Protective gloves: not necessary

Eye protection: safety glasses

Other protective equipment: depending on local conditions

5.3 **Storage:** no precautions necessary

5.4 **Waste disposal:** Dispose of in accordance with federal, state and local laws and regulations.

6. Precautions in case of accidents with fire

6.1 **Spill and leak procedures:** Steps to be taken in case material is spilled or released provide clean-up employees with respirators for dusty conditions (grinding dust).

6.2 **Extinguishing media:** dry chemical, sand or limestone

6.3 **Emergency and first aid procedures:** If a person breathes in large amounts of dust, remove from exposure. If material gets in eyes, flush particles from eyes with water. Consult a physician.

7. Health hazard data

Special health hazard: Reference available at this time do not report ill/health effects as a result of exposure to tungsten, provided safety regulations are observed.

7. Oecological data

No special prescriptions.

Ventilation over filter.