



**MATERIAL
SAFETY
DATA SHEET**

Safety Data Sheet

Issue
10/0206



Tungsten Electrodes Gold (1.5% Lanthanated)

1. General characterization

1.1 Chemical characterization: W + La₂O₃
Tungsten, lanthanated

1.2 Hazardous Ingredients:

Ingredient: Tungsten
Alloying element: max. 1.5% lanthana

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: Lanthanated 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

4. Protection, storage and handling

4.1 Technical protection:

Ventilation: Local exhaust

4.2 Personal protection:

Respiratory protection: use respirators during grinding

Protective gloves: not necessary

Eye protection: safety glasses

Other protective equipment: depending on local conditions

4.3 Storage: No precautions necessary

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

5. Precautions in case of accidents with fire

5.1 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).

5.2 Extinguishing media: dry chemical, sand or
Limestone

5.3 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.

6. Health hazard data

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

6.2 Hazardous mixtures of other liquids, solids or gases:
Lanthana belongs to the rare earth. No toxicity or other adverse
health effects are known.

7. Oecological data

No special prescriptions. Ventilation over filter.