

## DATA SHEET FOR MULTI TYPE TUNGSTEN - GOLD

### 1.0 CHEMICAL SPECIFICATION

- 1.1 98% Tungsten + 2% Fullers Earth
- 1.2 **Form** : bar-shaped
- 1.3 **Colour** : Gold
- 1.4 **Smell** : scentless

### 2.0 TECHNICAL SAFETY AND PHYSICAL DATA Inspection by:

- |      |   |  |                        |
|------|---|--|------------------------|
| 2.1  | <b>Partition change</b>                 | Melting Point                                | Over 3000° C           |
|      |   | Evaporizing Point                            | Over 4200° C           |
| 2.2  | <b>Density</b>                          | ( 20° C ) approx.                            | 18.8 g/cm <sup>3</sup> |
|      | <b>Bulk Density</b>                     |  | ___ kg/m <sup>3</sup>  |
| 2.3  | <b>Vaporization pressure</b>            | ( ° C ) non transient                        | ___ mbar               |
|      |   | ( ° C )                                      | ___ mbar               |
| 2.4  | <b>Viscosity</b>                        | ( ° C ) non viscous                          | ___ mbar               |
| 2.5  | <b>Solubility in water</b>              | ( 20° C ) non soluble                        | ___ g/l                |
|      | <b>in</b>                               | ( ° C )                                      | ___ g/l                |
| 2.6  | <b>PH index (at 5 g/H<sub>2</sub>O)</b> | ( 20° C )                                    |                        |
| 2.7  | <b>Inflammability</b>                   | ___ ° C non applicable                       | ___ ° C                |
| 2.8  | <b>Ignition temperature</b>             | ___ ° C non applicable                       | ___ ° C                |
| 2.9  | <b>Explosion limits</b>                 | minimum                                      | maximum                |
| 2.10 | <b>Thermal decomposition</b>            | No dangerous chemical reaction under normal  |                        |
| 2.11 | <b>Dangerous decomposition products</b> | temperatures.                                |                        |
| 1.12 | <b>Dangerous/toxic reaction</b>         | From 500°C onwards oxidation to tungsten WO. |                        |
| 2.13 | <b>Miscellaneous</b>                    |  |                        |
| 3.   | <b>TRANSPORT</b>                        | GGVSee/IMDG-Code : UN-No:                    | ICAO/IATA-DGR          |
|      |   | GGVE/GGVS:                                   | RID/ADR: ADNR:         |

### 4. REGULATIONS

Regulations only applicable and valid for the TIG welding procedure, see item 5.

### 5. SAFETY INSTRUCTIONS FOR STORAGE AND OPERATION

#### 5.1 Technical safety instructions

During the process of TIG welding, well-working ventilation and air circulation must be provided as well as exhausting device to absorb welding fume.

#### 5.2 Personal protection gear

Oxygen mask - not necessary when adequate ventilation is provided

Hand protection - welding gloves  
Eye protection - welding goggles or welding shield  
Miscellaneous - there is no danger of possible emerging radioactive  
Thorium regarding operation and storage of  
electrodes

5.3 **Occupation hygiene** see VDI pages

5.4 **Fire and explosion protection** – no particular measurements necessary

**1.5 Disposal**

Electrodes may not be disposed together with conventional waste or household trash. Rest pieces must be disposed of according to the respective regulations of each country.

**1.0 MEASURES NECESSARY IN CASE OF FIRE AND ACCIDENTS**

**1.1 After spilling, leaking, gas leakage**

**1.2 Extinguishing agent**

Suitable materials

Not suitable materials no restrictions

**1.3 First Aid**

In case of prolonged inhaling of welding fume, the person concerned must be supplied with fresh air.

In case of burns, eye or nose irritation, a physician must be consulted.

**7.0 INFORMATION ON TOXICOLOGY**

There is no danger of poisoning or infection in case of mechanical injuries with the electrodes. Damages caused by TIG welding are unknown.

**8.0 INFORMATION ON ECOLOGY**

Proper operation does not cause undue exhaust responsible for the increase of air, water and soil pollution.

**9.0 FURTHER REMARKS REGARDING RADIOACTIVITY**

WS 2 material is mainly used for TIG welding electrodes.