#### Safety data sheet according to 2001/58/EG

Valid from: 01.12.2002 Replacement for version of: 01.09.1995

### 1. Description of substances, preparation and company

Company: BINZEL Pty Ltd

42 Hinkler Road Mordialloc

Victoria 3195 Australia Tel.: +61 (0)3 9580 6500 Fax.: +61 (0)3 9580 8796 Internet: www.binzel.com.au

**Product identification:** WT20, (2% Thoriated Tungsten Electrodes)

Colour marking: red

**Product application:** Tungsten electrode for TIG welding

#### 2. Information on components

#### Chemical characteristics:

Tungsten W with 1,8 - 2,2 Wt.-% Thorium oxide (ThO 2)

#### Hazardous substances:

Minor radioactivity due to the additive of natural Thorium.

#### 3. Potential dangers

Thorium is naturally radioactive, care must be taken with respect to welding fume generated (adequate ventilation should be provided) and grinding dust caused by sharpening .

Other dangers depending on welding process.

#### 4. First aid measures

**after inhalation:** In case of prolonged inhaling of

welding fume the persons concerned have to be supplied with fresh air. If irritation persist contact a doctor.

after contact with the skin: N/A

after contact with the eyes: Rinse eyes thoroughly and contact a

doctor.

**after swallowing:** Contact a doctor immediately.





5. Measures necessary in the case of fire

N/A

6. Measures necessary in the case of accidental emissions

N/A

7. Handling and storage

**Handling:** During the TIG-welding, adequate ventilation and air

circulation must be provided together with an exhausting device to absorb welding fume.

**Storage:** store in a dry place

8. Limitation of exposure and personal protective equipment

**Exposure limits:** 

Inhalation of grinding dust must be avoided.

After contact with the skin clean hands immediately.

To avoid or minimize radioactive radiation caused by inhalation of welding fume strictly adhere to themeasures mentioned at 7.

Personal protective equipment:

**Respiratory protection:** not necessary when adequate ventilation is

provided.

Hand protection: Welding gloves

**Eye protection:** Welding glasses or welding shield

**WT20** 



# 9. Physical and chemical properties

Form: bar shaped
Colour: metallic grey
Smell: scentless

**Evaporating point:** approx. 5.900°C **Melting point:** approx. 3.400°C

Flash point: N/A
Inflammability: N/A
Ignition temperature: N/A
Explosion limits: none
Fire supporting characteristics: none
Steam pressure: N/A

**Density:** WT20: 18,95 – 18,86 g/cm<sup>3</sup>

**Solubility in water:** non soluble

Miscellaneous: none

#### 10. Stability and reactivity

Conditions to avoid:

N/A

Substances to avoid:

N/A

Dangerous decomposition products:

N/A

## 11. Information on toxicology

N/A

## 12. Environmental information

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

### 13. Instructions for disposal

Thorium alloyed tungsten electrodes must not be disposed together with conventional or household waste. Left over pieces and grinding dust must be disposed in accordance with local Radiation Protection Laws.

# **WT20**



## 14. Transport regulations

There is no restriction concerning composition (WT10 – WT40) and quantity of transport.

## 15. Regulations

Further regulations only applicable and valid for TIG welding procedure

#### 16. Miscellaneous

All information is based on current state of knowledge; this information does not represent any guarantee of product properties and does not constitute any contractual legal obligation.

Products may only be used as mentioned. If the products are used improperly risks which are not described in the safety data sheet are possible.

Information is provided here in a way which is best understood and acted upon by qualified personnel.

According to the definitions found in EN-60204-1:

Qualified personnel are persons who, based on their special training, knowledge, experience, and due to their knowledge of the relevant standards, are able to assess the tasks assigned to them and identify possible dangers.

# **WT20**

