

## 1. Identification of the Substance/Preparation and the Company/Undertaking

### 1.1. Product identifier

Substance or preparation trade name: Tungsten 3 Element

Unique reference numbers(s):  
1.0MM 3  
1.0MM 3/175  
1.6MM 3  
1.6MM 3/175  
2.0MM 3  
2.0MM 3/175  
2.4MM 3  
2.4MM 3/175  
3.2MM 3  
3.2MM 3/175  
4.0MM 3  
4.0MM 3/175  
4.8MM 3  
4.8MM 3/175  
6.4MM 3  
6.4MM 3/175

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Electrodes for Tungsten inert gas welding (TIG)

### 1.3. Details of the supplier of the safety data sheet

Company/undertaking name & address: Parweld Ltd, Long Bank, Bewdley, Worcs, UK  
ABN: 95 000 029 729  
Telephone number: +00 44 1299 266800  
Emergency telephone number: +00 44 1299 266800

### 1.4. Emergency telephone number

**Emergency tel:** +00 44 1299 266800 (office hours only)

## 2: Hazards identification

### 2.1. Classification of the substance or mixture

**No Significant Hazard**

### 2.2. Label elements

**Signal words:**

**Precautionary statements:**

## 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance

## 3. Composition/information on ingredients

### 3.1. Hazardous ingredients

	Conc.	CAS	EINECS	Symbols/Risk phrases
Tungsten	88-100% %	7440-33-7	231-143-9	
Lanthanum (III) oxide	0 - 4%	1312-81-8	215-200-5	
Zirconium Oxide	0-4%	1314-23-4	215-227-2	
Yttrium Oxide	0-4%	1314-36-9	215-223-5	

## 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** None

**Eye contact:** Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist. Contact lenses should be removed. Wash with water.

**Ingestion:** Rinse mouth and drink plenty of water .

**Inhalation:** Move the exposed person to fresh air. Seek medical attention if there are any adverse symptoms.

### 4.2 Most important symptoms and effects, both acute and delayed

**Eye contact:** There may be irritation and redness.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure

### 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Eye bathing equipment should be available on the premises.

## 5: Fire-fighting measures

### 5.1. Extinguishing media

**Water**, A,B,C and Class D dry powder

### 5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion produces Tungsten Trioxide WO<sub>3</sub> (CAS1314-35-8).

### 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes

## 6. Accidental release measures

Personal precautions	Ensure adequate ventilation of the working area..
Environmental precautions	Do not allow product to enter drains. Prevent further spillage if safe.
Clean up methods	Absorb with inert, absorbent material. Sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of soapy water.

## 7. Handling and storage

Handling Avoid contact with eyes and skin. Ensure adequate ventilation of the working area.  
Adopt best Manual Handling considerations when handling, carrying and dispensing.

Storage No special requirements

## 8. Exposure Controls

### 8.1 Exposure limits

Tungsten	7440-33-7 TWA 5 mg/m <sup>3</sup> ST 10 mg/m <sup>3</sup>
Yttrium Oxide	N/A
Lanthanum (III) Oxide	N/A
Zirconium Oxide	1E mg/M <sup>3</sup>

## 8.2 Controls

### Engineering measures

### Hand protection

### Eye protection

### Protective equipment

### Reparatory protection

Ensure adequate ventilation of the working area.

Gloves or hand protection cream

safety spectacles

Wear protective clothing.

Particulate filtering mask (FFP3 type) recommended where dust or aerosols are produced.



## 9. Physical and chemical properties

Appearance: Physical form: Solid.  
Appearance: Metallic grey rods.  
Odour: None.

Important relevant safety parameters:

	Value	Unit	Test method (67/548/EEC) Mel
Flame point	Non Flammable		
Relative density (20°C)	18.62	g/cm3	DIN 51 757
Solubility (20°C)	insoluble		
pH value (20°C), 5%	N/A		
Melting point	3680 °C		
Boiling point	5828 °C		
Freezing Point	N/A		

## 10. Stability and reactivity

Stability Stable under normal conditions.  
Conditions to avoid Oxidation in presence of Oxygen at increase temperature (600 °C plus)  
Materials to avoid Peroxides. Strong acids.

## 11. Toxicological information

No Acute oral, dermal or respiratory toxicity

Tungsten LD<sub>50</sub> oral Rat >2000 mg/KG  
LD<sub>50</sub> dermal Rat >2000 mg/KG  
LD<sub>50</sub> respiratory Rat >5.4mg/l 4Hr exposure

Lanthanum (III) Oxide LD<sub>50</sub> oral Rat >5g/KG

# Material Safety Data



Yttrium Oxide	LD <sub>50</sub> oral Rat	>5g/KG
	Acute Toxicology detected after 4 hours at 32mg/m <sup>3</sup> and above	
Zirconium Oxide	No data	

## 12. Ecological information

Non hazardous in water

## 13 Disposal Considerations

General information	Dispose of in compliance with all local and national regulations.
Disposal methods	Contact a licensed waste disposal company. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.
Disposal of packaging	Empty containers can be sent for disposal or recycling.

## 14. Transport information

Not classified

**Further information The product is not classified as dangerous for carriage.**

## 15. Regulatory information

Risk phrases -N/A.

## 16. Other Information

Regulation (EC) No 1907/2006 of the European Parliament and of the Council, (REACH)