

# TZM Molybdenum Alloy Foil (Light Tight)

**Formula:** Mo99/Ti 0.5/Zr 0.1

**Temper:** As Rolled

**Thickness:** 0.25mm

**Length 1:** 300mm

**Length 2:** 300mm

**UOM Code:** 005-008-25

**SKU:** 1000000645-group

**Product Code:** MO01-FL-000170

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Elongation at break( % )	20
Modulus of elasticity( GPa )	320
Tensile strength( MPa )	560-1150

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	5.3-5.5

### Thermal Properties

Element	Value
Maximum use temperature in air( C )	400
Melting point( C )	2500-2600
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	305@23°C
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	126@23°C
Coefficient of thermal expansion( $\times 10^{-6}$ K <sup>-1</sup> )	5.3@20-100°C

### Physical Properties

Element	Value
Density( gcm <sup>3</sup> )	10.22