

# Platinum/Iridium Alloy Straight Wire (Pt90/Ir10)

**Formula:** Pt90/Ir10

**Product Shape:** Straight Wire

**Diameter:** 0.45mm

**Length:** 0.5m

**Temper:** As Drawn

**UOM Code:** 225-269-17

**SKU:** 1000093906-group

**Product Code:** PT02-WR-000240

## Material Properties for Precious Metals

### Mechanical Properties

Element	Value
Hardness - Brinell	130-190
Elongation at break( % )	25
Tensile strength( MPa )	380-620

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	25
Temperature coefficient( $\text{K}^{-1}$ )	0.0013

### Thermal Properties

Element	Value
Melting point( C )	1800
Thermal conductivity( $\text{W m}^{-1} \text{K}^{-1}$ )	31@23
Thermal conductivity( $\text{W m}^{-1} \text{K}^{-1}$ )	31@23C
Coefficient of thermal expansion( $\times 10^{-6} \text{K}^{-1}$ )	8.7@20-100°C

### Physical Properties

Element	Value
Density( $\text{gcm}^{-3}$ )	21.56