

# Thulium Spooled Wire

**Formula:** Tm

**Percentage Purity:** 99%

**Product Shape:** Spooled

**Diameter:** 0.6mm

**Length:** 0.1m

**CAS Number:** 7440-30-4

**UOM Code:** 894-526-93

**SKU:** 1000216999-group

**Product Code:** TM00-WR-000120

## Material Properties for Metals

### Atomic Properties

Element	Value
Atomic number	69
Crystal structure	Hexagonal close packed
Electronic structure	Xe 4f <sup>13</sup> 6s <sup>2</sup>
Valences shown	2,3
Atomic weight( amu )	168.9342
Thermal neutron absorption cross-section( Barns )	115
Atomic radius - Goldschmidt( nm )	0.174
Ionisation potential( No./eV )	1/ 6.18
Ionisation potential( No./eV )	3/ 23.71
Ionisation potential( No./eV )	2/ 12.05

### Mechanical Properties

Element	Value
Hardness - Brinell	53
Material condition	Polycrystalline
Poisson's ratio	0.235
Bulk modulus( GPa )	40.5
Tensile modulus( GPa )	76

## Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	90@20@20°C
Temperature coefficient( $\text{K}^{-1}$ )	0.00195@0-100°C

## Physical Properties

Element	Value
Boiling point( C )	1947
Density( $\text{gcm}^{-3}$ )	9.322@25°C

## Thermal Properties

Element	Value
Melting point( C )	1545
Latent heat of evaporation( $\text{J g}^{-1}$ )	1456
Latent heat of fusion( $\text{J g}^{-1}$ )	109
Specific heat( $\text{J K}^{-1} \text{kg}^{-1}$ )	160@25°C
Thermal conductivity( $\text{W m}^{-1} \text{K}^{-1}$ )	16.9@0-100°C
Coefficient of thermal expansion( $\times 10^{-6} \text{K}^{-1}$ )	11.6@0-400°C