

# Aluminum/Magnesium Alloy Wire (Al97.5/Mg 2.5)

**Formula:** Al97.5/Mg 2.5

**Diameter:** 0.5mm

**Length:** 2m

**Temper:** Annealed

**UOM Code:** 005-272-40

**SKU:** 1000000685-group

**Product Code:** AL21-WR-000150

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Elongation at break( % )	14
Modulus of elasticity( GPa )	70
Hardness - Vickers( kgf mm <sup>2</sup> )	70
Shear strength( MPa )	135
Tensile strength( MPa )	210

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	4.95
Temperature coefficient( K <sup>-1</sup> )	-

### Thermal Properties

Element	Value
Melting point( C )	605
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	880@23°C
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	138@23°C
Coefficient of thermal expansion( x10 <sup>-6</sup> K <sup>-1</sup> )	23.7@20-100°C

### Physical Properties

Element	Value
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Density( gcm<sup>3</sup> ) 2.68