

# AISI 316 Stainless Steel Powder

**Formula:** Fe/Cr18/Ni10/Mo 3

**Maximum Particle Size:** 45 $\mu$ m

**Weight:** 500g

**UOM Code:** 132-878-43

**SKU:** 1000039040-group

**Product Code:** FE24-PD-000120

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	160-190
Elongation at break( % )	60
Modulus of elasticity( GPa )	190-210
Izod impact strength( J m <sup>2</sup> )	20-136
Tensile strength( MPa )	460-860

### Electrical Properties

Element	Value
Electrical resistivity( $\mu$ Ohmcm )	70-78
Temperature coefficient( K <sup>-1</sup> )	-

### Thermal Properties

Element	Value
Melting point( C )	1370-1400
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	502@23°C
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	16.3@23°C
Coefficient of thermal expansion( $\times 10^{-6}$ K <sup>-1</sup> )	16-18@20-100°C

### Physical Properties

Element	Value
Density( gcm <sup>3</sup> )	7.96