



SCIENTIFIC ALLOYS

SPHERES IN MOTION

Technical Data Sheet

82Au 18Ni

Physical Properties:

Alloy: 82Au 18Ni

Melting Point/Range: 950°C Eutectic

Tensile Strength: 115 Ksi

Specific Gravity: 8.41 g/cm³

Coefficient of Thermal Expansion: 17.5 x 10⁻⁶/°C

Thermal Conductivity: 28 Wm⁻¹ K⁻¹

Elongation: 14%

Hardness: HB

Electrical Resistivity: 274 X 10⁻⁹ Ω m

Electrical Conductivity: 3.70 X 10⁶/Ω m

Application:

This alloy provides excellent corrosion resistance and exceptional wetting. These spheres are useful for brazing various metals to copper, nickel, and glass sealing alloys. They can serve a wide range of thermal expansion values and can wet a wide range of much harder metals.

Disclaimer:

This is for informational purposes only and assuming proper handling and operation is deemed accurate based on current data.