



# SCIENTIFIC ALLOYS

SPHERES IN MOTION

## Technical Data Sheet

### Pure Ag

#### *Physical Properties:*

**Alloy:** Fine Ag

**Melting Point/Range:** 961°C Liquidus

**Tensile Strength:** 21.05 Ksi

**Specific Gravity:** 10.49 g/cm<sup>3</sup>

**Coefficient of Thermal Expansion:** 19 x 10<sup>-6</sup>/°C

**Thermal Conductivity:** 429 Wm<sup>-1</sup> K<sup>-1</sup>

**Elongation:** 50%

**Hardness:** 25 HB

**Electrical Resistivity:** 1.64 microhm-cm

**Electrical Conductivity:** 105% IACS  
(International Annealed Copper Standard)

### Application:

The high electrically and thermally conductive properties of pure silver make it effective as an electrical connection, highly resistant to corrosion and oxidation. These properties, along with high ductility and strength, make pure Ag spheres useful as precision joints and electrical contacts. Being strong, conductive, and lead free, fine silver can also be used in medicinal or consumer products because of its high luster.

#### Disclaimer:

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