



SCIENTIFIC ALLOYS

SPHERES IN MOTION

Technical Data Sheet

Pure Au

Physical Properties:

Alloy: Pure Au

Melting Point/Range: 1064°C Liquidus

Tensile Strength: 19.98 Ksi

Specific Gravity: 19.30 g/cm³

Thermal Conductivity: 310 Wm⁻¹ K⁻¹

Elongation: 42%

Hardness: 25 HB

Electrical Resistivity: 2.20 microhm-cm

Electrical Conductivity: 70% IACS
(International Annealed Copper Standard)

Application:

Pure Au, second to only silver and copper in electrical conductivity, can be used to create Au spheres or as an electroplated coating over less expensive metals where applications allow. Pure gold makes effective, highly reliable electrical connections. They are especially important with safety and high reliability applications that require perfect performance even after long periods of inactivity. Gold spheres can also be quite useful in solid-state electronics devices using low voltages and currents where corrosion and tarnish are a factor. Biocompatibility makes pure gold spheres effective for medical devices and medical implants.

Disclaimer:

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