

Properties of Alloy 6019

Alloy 6019 was developed for use in machined cast on abutment/coping components used for dental implant restoration prostheses. The material composition of 60% Au, 19%Pt, 20% Pd, 1% Ir complies with all standard industry mechanical, physical and biocompatibility requirements for use of this alloy in the intended application.

Mechanical Properties of Alloy 6019 - Nominal		
Yield Strength		
Initial	ksi	135
Post 1,800 °F Burnout	ksi	93
Tensile Strength		
Initial	ksi	139
Post 1,800 °F Burnout	ksi	112
Hardness		
Initial	Knoop	278
Post 1,800 °F Burnout	Knoop	247
Modulus	x10 ⁶ psi	20
Physical Properties		
Melting Range	2,579° – 2,732° F	1415° – 1500° C
CTE	6.8 µin/in°F	12.3 µm/m°C
Biocompatibility	Extract	Result
Cytotoxicity ISO 10993-5	1X MEM	Pass
Intracutaneous Study ISO 10993-10	Sodium chloride	Pass

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For More Information

[Contact Us to discuss your application with one of our Materials Specialists.](#)