

Material Data Sheet

for: Abutor

1. Composition

Au + Pt group-metals	97.50%
Au	87.50%
Pt	8.90%
Zn	2.20%
Pd	1.00%
Ag	0.20%
Ir	0.10%
Fe	0.10%

2. Physical Properties

Melting range	1020-1155°C
Density	18.6 g/cm ³
Young's Modulus	105 GPa
Linear Coeff. of thermal expansion (25-500°C)	14.6 x 10 ⁻⁶ K ⁻¹
Linear Coeff. of thermal expansion (25-600°C)	14.9 x 10 ⁻⁶ K ⁻¹
Colour	yellow

3. Mechanical Properties

Condition	cold worked
Hardness HV5	35-60%KV
Tensile strength (Rm)	>160
0.2% Proof stress (Rp 0.2%)	>525 MPa
Elongation	>500 MPa
	>5.5 %

4. Biological Testing

Cytotoxicity Test according to ISO 10993-5:

The cytotoxic effect of the alloy was tested with the Extraction Test.
(Project 030247, RCC, Itingen/Basel, Switzerland)

Sensitization Test according to ISO 10993-10:

The allergic sensitization of the alloy was tested with the Maximization Test.
(Project 030248, RCC, Itingen/Basel, Switzerland)

Results:

The alloy showed no cytotoxic potential nor did it cause any allergic sensitization.

5. Certification

Corrosion testing according to standard ISO 10271 showed, that a total of <0.1 µg/cm² × 7d was set free.

Manufacture, packing and delivery are constantly monitored according to the quality management system standards according to ISO 9001 and ISO 13485.

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