

Material Data Sheet

for: PtIr20%

1. Composition

Pt group-metals	100.00%
Pt	80.00%
Ir	20.00%

2. Physical Properties

Melting range	1820-1850°C
Density	21.8 g/cm ³
Young's Modulus	180 GPa
Linear Coeff. of thermal expansion (25-500°C)	9.0 x10 ⁻⁶ K ⁻¹
Linear Coeff. of thermal expansion (25-600°C)	9.1 x10 ⁻⁶ K ⁻¹
Colour	silverwhite

3. Mechanical Properties

Condition	cold worked
Hardness HV5	20-50%KV
Tensile strength (Rm)	>260
0.2% Proof stress (Rp 0.2%)	>800 MPa
Elongation	>780 MPa
	>6.5 %

4. Biological Testing

Cytotoxicity Test according to ISO 10993-5:

The cytotoxic effect of the alloy was tested with the Extraction Test.
(Project 990880C, BSL Bioservice, DE-82152 Planegg, FRG)

Sensitization Test according to ISO 10993-10:

The allergic sensitization of the alloy was tested with the Maximation Test.
(Project 990881C, BSL Bioservice, DE-82152 Planegg, FRG)

Results:

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

5. Certification

Corrosion testing according to standard showed, that a total of 0.0µg/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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