

1. Composition

Au + Pt group-metals	49.50%
Au	45.00%
Ag	41.00%
Cu	9.50%
Pd	4.48%
Ru	0.02%

2. Physical Properties

Melting range	885-945°C
Density	12.9 g/cm ³
Young's Modulus	85 GPa
Colour	yellow

3. Mechanical Properties

	as cast	soft	hardened
Condition		ISO 22674: 700°C/10'/H ₂ O	ISO 22674: 700°C/10'/H ₂ O&350°C/15'/air
Hardness HV5	170	120	215
Tensile strength (Rm)	595 MPa	415 MPa	755 MPa
0.2% Proof stress (Rp 0.2%)	435 MPa	245 MPa	610 MPa
Elongation	19 %.	38 %.	12 %.

4. Biological tests

Cytotoxicity test according to ISO 10993-5:

The cytotoxic effect of the alloy was tested with the extract test.
(Project, 114363, 26.09.2011, BSL Bioservice, DE-82152 Planegg, FRG)

Sensitization test according to ISO 10993-10:

The allergic sensitization of the alloy was tested with the maximization test.
(Project 114365, 22.12.2011, BSL Bioservice, DE-82152 Planegg, FRG)

Mutagenicity test (AMES) according to ISO 10993-3:

The mutagenicity was tested with the «Reverse Mutation Assay» using bacteria Salmonella typhimurium.
(Project 114364, 27.10.2011, BSL Bioservice, DE-82152 Planegg, FRG)

Results:

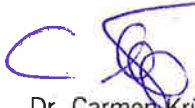
The alloy showed neither a cytotoxic nor a mutagenic potential nor did it cause any allergic sensitization.

5. Certification

This casting alloy corresponds to the standard ISO 22674/Type 4.

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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