

1. Composition

Au + Pt group-metals	63.50%
Au	60.00%
Ag	22.50%
Cu	12.50%
Pd	3.00%
Zn	1.50%
Pt	0.45%
Ir	0.05%

2. Physical Properties

Melting range	860-900°C
Density	13.8 g/cm ³
Young's Modulus	95 GPa
Colour	yellow

3. Mechanical Properties

	as cast	soft	hardened
Condition		700°C/10'/H ₂ O	700°C/10'/H ₂ O&400°C/15'/air
Hardness HV5	265	170	250
Tensile strength (R _m)	895 MPa	580 MPa	890 MPa
0.2% Proof stress (R _p 0.2%)	830 MPa	475 MPa	845 MPa
Elongation	12 %.	48 %.	10 %.

4. Biological tests

Cytotoxicity test according to ISO 10993-5:

The cytotoxic effect of the alloy was tested with the extract test.
(Project, 222300, 04.06.1991, RCC, Itingen/Basel, Switzerland)

Sensitization test according to ISO 10993-10:

The allergic sensitization of the alloy was tested with the maximization test.
(Project 291791, 24.06.1991, RCC, Itingen/Basel, Switzerland)

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

The AMES test has not been realised.

Results:

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

5. Certification

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

Corrosion testing according to standard ISO 1562 showed that a total of $5.4\mu\text{g}/\text{cm}^2 \times 7\text{d}$ was released (limit: $200\mu\text{g}/\text{cm}^2 \times 7\text{d}$).

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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