

1. Composition

Au + Pt group-metals	83.30%
Au	83.20%
Cu	8.50%
Ag	8.00%
Zn	0.20%
Ir	0.10%

2. Physical Properties

Melting range	915-935°C
Density	16.4 g/cm ³
Young's Modulus	90 GPa
Colour	yellow

3. Mechanical Properties

	as cast	soft	hardened
Condition		700°C/10/H2O	
Hardness HV5	115	115	
Tensile strength (Rm)	395 MPa	355 MPa	
0.2% Proof stress (Rp 0.2%)	215 MPa	245 MPa	
Elongation	41 %.	56 %.	

4. Biological tests

Cytotoxicity test according to ISO 10993-5:

The cytotoxic effect of the alloy was tested with the extract test.
(Project, 981335A, 23.02.1999, 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 981334A, 08.01.1999, 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 100872, 25.03.2010, 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 2.

Corrosion testing according to standard ISO 10271 showed that a total of $1.3 \mu\text{g}/\text{cm}^2 \times 7\text{d}$ 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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