

### 1. Composition

Au + Pt group-metals	75.62%
Au	72.00%
Ag	13.70%
Cu	9.78%
Pt	3.60%
Zn	0.90%
Ir	0.02%

### 2. Physical Properties

Melting range	895-940°C
Density	15.5 g/cm <sup>3</sup>
Young's Modulus	90 GPa
Colour	yellow

### 3. Mechanical Properties

	as cast	soft	hardened
Condition		750°C/10/H <sub>2</sub> O	350°C/15/air
Hardness HV5	240	150	220
Tensile strength (Rm)	685 MPa	465 MPa	580 MPa
0.2% Proof stress (Rp 0.2%)	545 MPa	320 MPa	490 MPa
Elongation	17 %.	38 %.	19 %.

### 4. Biological tests

#### Cytotoxicity test according to ISO 10993-5:

The cytotoxic effect of the alloy was tested with the extract test.  
(Project, 100559I, 24.02.2010, 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 81E504, 30.08.1995, BIOMATECH, Rue Pasteur, 38670 CHASSE SUR RHONE, France)

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

The mutagenicity was tested with the «Reverse Mutation Assay» using bacteria Salmonella typhimurium.  
(Project 101033, 06.04.2010, 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 4.

Corrosion testing according to standard ISO 10271 showed that a total of  $1.7\mu\text{g}/\text{cm}^2 \times 7\text{d}$  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.

### Cendres+ Métaux SA



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