

# Material Data Sheet

## for: Medior® 3

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

### 1. Composition

Au + Pt group-metals	61.00%
Au	55.00%
Ag	26.00%
Cu	10.90%
Pd	5.95%
Zn	2.10%
Ru	0.05%

### 2. Physical Properties

Melting range	875-920°C
Density	13.6 g/cm <sup>3</sup>
Young's Modulus	105 GPa
Colour	pale yellow

### 3. Mechanical Properties

	as cast	soft	hardened
Condition		700°C/10'/H <sub>2</sub> O	700°C/10'/H <sub>2</sub> O&400°C/15'/air
Hardness HV5	295	170	280
Tensile strength (Rm)	930 MPa	560 MPa	905 MPa
0.2% Proof stress (Rp 0.2%)	865 MPa	435 MPa	815 MPa
Elongation	4 %.	35 %.	5 %.

### 4. Biological Testing

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

The cytotoxic effect of the alloy was tested with the Extraction Test. (Project, 222401, 01.05.2007, RCC, Ittingen/Basel, Switzerland)

#### Sensitization Test according to ISO 10993-10:

The allergic sensitization of the alloy was tested with the Maximation Test. (Project 291802, 01.05.2007, RCC, Ittingen/Basel, Switzerland)

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

There have been no AMES test.

#### 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 3.2µg/cm<sup>2</sup>×7d was set free (limit: 200µg/cm<sup>2</sup>×7d).

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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