

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 10	0.05%

2. Physical Properties

Melting range		870-925°C
Density		13.4 g/cm ³
Young's Modulus	0	105 GPa
Colour		pale yellow

3. Mechanical Properties Condition	as cast	soft 700°C/10'/H2O	hardened 700°C/10'/H2O&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 tests

Cytotoxicity test according to ISO 10993-5:

The cytotoxic effect of the alloy was tested with the extract test. (Project, 222401, 04.06.1991, CCR, DE-6101 Rossdorf, Germany)

Sensitization test according to ISO 10993-10:

The allergic sensitization of the alloy was tested with the maximization test. (Project 291802, 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.

Manufacture, packing and delivery are constantly monitored according to the quality management system standards according to ISO 9001 and ISO 13485.

Cendres + Métaux SA

Dr. Carmen Krüger

Head of Materials Development

Dr. Flavio Campana

Head of Material Testing

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