

Material Data Sheet

for: Pallorag® 33

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

1. Composition

Au + Pt group-metals	30.00%
Ag	59.50%
Pd	20.00%
Au	10.00%
Cu	9.50%
Zn	1.00%

2. Physical Properties

Melting range	935-1020°C
Density	10.9 g/cm ³
Young's Modulus	95 GPa
Colour	white

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	170	135	230
Tensile strength (R _m)	575 MPa	505 MPa	810 MPa
0.2% Proof stress (R _p 0.2%)	430 MPa	280 MPa	615 MPa
Elongation	15 %.	24 %.	9 %.

4. Biological tests

Cytotoxicity test according to ISO 10993-5:

The cytotoxic effect of the alloy was tested with the extract test.
(Project, 222502, 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 291813, 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.

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