CENDRES+ MÉTAUX

Material Data Sheet

for: Esteticor® NewStart

This metal-ceramic alloy corresponds to the standards ISO 22674/Type 4 and ISO 9693.

1. Composition

Pt group-metals	58.30%
Pd	58.00%
Ag	29.99%
Sn	6.00%
In	4.00%
Zn	1.70%
Ru	0.30%
B	0.01%

2. Physical Properties

Melting range	1180-1270°C
Density	11.2 g/cm³
Young's Modulus	135 GPa
Linear Coeff. of thermal expansion (25-500°C)	$14.5 \times 10^{-6}\ K^{-1}$
Linear Coeff. of thermal expansion (25-600°C)	$14.9 \times 10^{-6}\ K^{-1}$
Colour	white

3. Mechanical Properties

	as cast	after firing
Condition		ISO 950°C
Hardness HV5	265	220
Tensile strength (Rm)	895 MPa	785 MPa
0.2% Proof stress (Rp 0.2%)	625 MPa	525 MPa
Elongation	22 %.	32 %.
Schwickerath crack initiation test		48 MPa

4. Biological tests

Cytotoxicity test according to ISO 10993-5:

The cytotoxic effect of the alloy was tested with the extract test.
(Project, 981313D, 09.12.1998, 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 981312D, 28.12.1998, BSL Bioservice, DE-82152 Planegg, FRG)

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 metal-ceramic alloy corresponds to the standards ISO 22674/Type 4 and ISO 9693.

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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