CENDRES+ MÉTAUX

Material Data Sheet

for: LW N° 7

This alloy corresponds to the standards ISO 22674/Type 4 and ISO 9693-1. It can be applied as a dental Laser wire corresponding to the standard ISO 28319.

1. Composition

Au + Pt group-metals	79.90%
Au	69.90%
Ag	13.30%
Pt	9.50%
Cu	2.90%
In	2.00%
Zn	1.90%
Rh	0.40%
Ir	0.10%

2. Physical Properties

Melting range	915-1005°C
Density	16.4 g/cm^3
Young's Modulus	110 GPa
Linear Coeff. of thermal expansion (25-500°C)	16.2 x10^{-6} K^{-1}
Linear Coeff. of thermal expansion (25-600°C)	16.4 x10^{-6} K^{-1}
Colour	yellow

3. Mechanical Properties

	after firing
Condition	ISO 820°C
Hardness HV5	200
Tensile strength (Rm)	660 MPa
0.2% Proof stress (Rp 0.2%)	485 MPa
Elongation	11 %.
Schwickerath crack initiation test	41.2 MPa

4. Biological tests

Cytotoxicity test according to ISO 10993-5:
The cytotoxicity test has not been realised.

Sensitization test according to ISO 10993-10:

The sensitization test has not been realised.

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

The AMES test has not been realised.

Results:
Biological tests have not been realised.

5. Certification

This alloy corresponds to the standards ISO 22674/Type 4 and ISO 9693-1. It can be applied as a dental Laser wire corresponding to the standard ISO 28319.

Corrosion testing according to standard ISO/DIS 10271 showed that a total of 0.5$\mu g/cm^2 \times 7d$ was released (limit: 200$\mu g/cm^2 x 7d$).

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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