Callisto® Implant 78

High-gold ceramic alloy

especially for implant superstructures

Au	Pt	Pd	In	Fe	Re	Rh	Ru
78.6	9.7	7.9	3.4	<1.0	<1.0	<1.0	<1.0

Advantages

- **Silver- and copperfree**
- **96% precious metal content**
- **Very high strength**
- **Excellent casting and flow properties**
- **Even grain size distribution (16–25 micron)**

Indications

Onlays, ¾ crowns, PFM Crowns, crowns, telescope/conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical Data

Colour	white
Type	4
Density (g/cm³)	17.6
Melting range (°C)	1135 – 1250
Casting temperature (°C)	1305 – 1365
CTE 25 – 500 °C	13.9
CTE 20 – 600 °C	14.0
Elongation (%)	5.0
Modulus of elasticity (MPa)	110,000
Oxide firing °C / minutes / vacuum	950 / 5 / vacuum
Vickers hardness	240
Proof stress (0.2 % offset) (MPa)	600

Clinical case by H.P. Oss, Austria

ivoclar vivadent®
passion vision innovation

Certificate

Test material: Implant Ceramic alloy

Composition in % weight	Au	Pt	Pd	Ag	Sn	In	Ga	Zn	Fe	Re	Rh	Ru
Callisto® Implant 78	78.6	9.7	7.9	–	–	3.4	–	–	<1.0	<1.0	<1.0	<1.0
Callisto® Implant 60	2.0	<1.0	60.0	25.2	7.5	2.0	1.0	1.6	–	<1.0	–	–

Manufacturer

Ivoclar Vivadent Inc., 175 Pineview Drive, Amherst, NY 14228, USA

Corrosion resistance

The test was conducted according to the international regulations of ISO 1562 and ISO 6871–1: static immersion test through analytical determination of the metal ion release after a 7-day immersion.

Test results: The metal ion release after 7 days of immersion was not significant.

Testing facility: Louisiana State University, Dr. Sakar

Cytotoxicity

The Agar Diffusion test determines the biological reactivity of cell culture on test material.

Test results: The test material is considered non-cytotoxic and meets the requirements of the Agar Diffusion test according to ISO 10993–5.

Mutagenicity

An Ames assay was conducted to determine any possible cancer potential.

Test results: No mutagenicity potential was found to exist in these alloys.

Kligman Maximization

This test evaluated the allergenic potential and/or sensitizing capacity of these alloys.

Test results: Based on the standards set by the study protocol, these alloys exhibited no reaction to the challenge (0 % sensitization).

Sensitivity of oral mucosa

Test to determine the contact sensitivity of these alloys at the buccal oral mucosa.

Test results: No reactions were noted in conjunction with these alloys.

Testing facility: Toxikon Corporation, 15 Wiggins Avenue, Bedford, Massachusetts

Amherst, May 2010

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