



Academy Gold™ XH

Palladium-free, high gold C&B alloy

Au 70.7	Pt 3.6	Ag 13.7	Cu 10.0	Sn 1.0	Zn 1.0	Ir < 1.0
-------------------	------------------	-------------------	-------------------	------------------	------------------	--------------------

Advantages

- Esthetic, golden yellow color
- High stability
- Excellent processing and polishing properties
- Suitable for bondingsystem and veneering composites
- Certified biocompatibility

Indication

Onlays, $\frac{3}{4}$ crowns, crowns, implant superstructures, telescope and conus crowns, posts, short- and long-span bridges

Technical Data

Color	yellow
Type	4
Density (g/cm ³)	15.6
Melting range (°C)	860 – 925
Casting temperature (°C)	980 – 1040
Elongation (%)	5.0
Modulus of elasticity (MPa)	86.000
Vickers hardness	220
0.2 % Proof stress (MPa)	505



Certificate

Test material: High Gold C&B alloys

Composition in % weight	Au	Pt	Ag	Cu	In	Ir	Sn	Zn	Other
Academy Gold™	77.2	<1.0	12.7	8.5	<1.0	<1.0	–	<1.0	Ta <1.0
Academy Gold™ XH	70.7	3.6	13.7	10.0	–	<1.0	<1.0	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



Dr. George Tysowsky, D. D. S., M. P. H.
Vice President-Technology