

# Academy Gold™



## High-gold alloy for esthetic gold restorations

<b>Au</b> 77.2	<b>Pt</b> < 1.0	<b>Ag</b> 12.7	<b>Cu</b> 8.5	<b>In</b> < 1.0	<b>Ir</b> < 1.0	<b>Zn</b> < 1.0	<b>Ta</b> < 1.0
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### Advantages

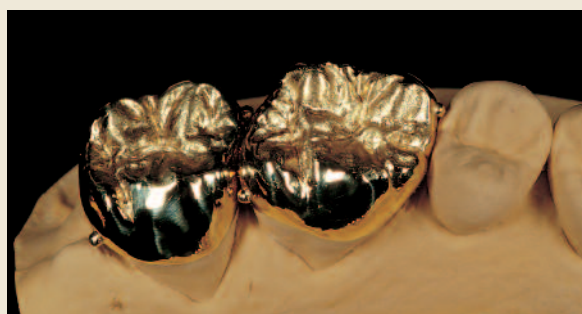
- Palladium-free
- Esthetic, yellow-golden color
- Extended range of indications
- Optimum adaptation properties even after oven hardening
- Excellent casting and processing properties
- Certified biocompatibility

### Indication

Inlays, onlays,  $\frac{3}{4}$  crowns, crowns, short-span bridges

### Technical Data

Color	rich yellow
Type	2
Density (g/cm <sup>3</sup> )	15.9
Melting range (°C)	900 – 940
Casting temperature (°C)	1035 – 1095
Elongation (%)	55
Modulus of elasticity (MPa)	75.200
Vickers hardness	125
0.2 % Proof stress (MPa)	240



# 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



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