

W



Reduced-gold ceramic alloy

W is a reduced-gold ceramic alloy with well-balanced handling properties.

Au 54.0	Pd 26.4	Ag 15.5	Sn 2.5	In 1.5	Re <1.0	Ru <1.0	Li <1.0
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Advantages

- Easy processing and polishing
- Good melting and flow properties
- Compatible to all Ivoclar Vivadent metal-ceramic layering materials
- Certified biocompatibility

Indications

Inlays, Onlays, $\frac{3}{4}$ crowns, crowns, PFM crowns, short- and long-span bridges, telescopic and conus crowns, posts

Technical data

Color	white
Type	4
Density (g/cm ³)	13.8
Melting range (°C)	1230 – 1280
Casting temperature (°C)	1330 – 1390
CTE 25 – 500°C	14.2
Elongation (%)	21.0
Modulus of elasticity (MPa/Nmm ²)	113.000
Oxide firing °C / minutes / vacuum	950 / 1 / no vacuum
Vickers hardness	220
Proof stress (0.2 % offset) (MPa)	445

Certificate

Test material: W

Composition in % weight	Au	Pd	Ag	Sn	In	Re	Ru	Li
W	54.0	26.4	15.5	2.5	1.5	<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 22674: 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 the mutagenicity potential.

Test results: No mutagenicity potential was found to exist in the W alloy.

Amherst, August 2010



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