

Technical data sheet

Hybrid glass ceramic **AMBARINO® High-Class**



Manufacturer

creamed GmbH & Co.
Produktion- und Handels KG
Industriestraße 4a
35041 Marburg
Germany

creamed GmbH & Co.
KG is according to:
■ DIN EN ISO 13485
■ RL 93/42/ECC (CE 0297)

■ Description

Hybrid glass ceramic **AMBARINO® High-Class CAD/CAM**

■ Description

Ambarino® High-Class is a hybrid glass ceramic. This material is a radiotransparent, ultra-hard composite material using an optimised, highly compressed filler technology with a ceramic base. It represents a high-quality alternative to all-ceramic and veneering ceramic.

The special features of Ambarino® High-Class are:

- excellent material properties: uniform, very fine grain size distribution ■ very low tendency to abrasion (very similar to natural enamel)
- extremely comfortable to wear
- excellent polishing qualities (additional compaction, thus the gloss will remain stable for a long period of time)
- natural colour integration (chameleon effect) by using VITA colours

■ Indications

- Inlays, onlays and veneers
- Partial crowns, crowns and bridges (maximum 3-part)

■ Contraindications

- If an allergy to constituents in the blank is known, Ambarino® High-Class should not be used.

■ Options

The Ambarino® High-Class milling blanks are available in Vita shades A1, A2, A3, B1, C2 and D2.

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■ Finishing/surface treatment

Prior to proceeding with the Ambarino® High-Class restorations, the following instructions must be observed: ■ Remove the finished milling work from the blank using a diamond disc under running cooling water.

- Polish the surface to a high gloss (e.g., Ambarino® Super Polish) - use it as if you would use a conventional composite
- During further processing, such as attachment or veneering, the surface in question should be treated as a composite surface which is being repaired or corrected.
- Carefully sandblast the surface or use a router to slightly roughen the surface.
- Use oil-free compressed air to clean loose dust particles (avoid contamination with water or grease)
- Attaching a composite bond (e.g., Ambarino® CFI Bond)
- By following the preceding steps, the surface is activated for further processing

■ Veneering

A veneer can now be applied to the activated surface—as described in section "Surface Treatment"—with conventional light-curing K+B synthetics. The manufacturer recommends Ambarino® Veneering and Ambarino® Stains.

■ Attachment

Before attaching the Ambarino® High-Class restoration work, the surface to be bonded must be pre-treated in the same manner as described in section "Surface treatment" or "Attachment".

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■ Chemical composition

The main component of the composite matrix is based on cross-linked polymer blends (Bis-GMA, urethane dimethacrylate and butanediol dimethacrylate), into which 70.1% ceramic-like, inorganic silicate glass fillers are embedded. The average particle diameter of these fillers is 0.8 μm and their width varies between 0.2 to 10.0 μm . Furthermore, stabilisers, light-stability agents and pigments are included.

■ Physical properties (guidelines)

| | | |
|--------------------------------------|---------------|-------------------------------|
| Elasticity module (at 20°C) | 10,000 | [MPa] or [N/mm ²] |
| Flexural strength β_B | 175 | [MPa] or [N/mm ²] |
| Compression strength R_e (R_p) | 500 | [MPa] or [N/mm ²] |
| Vickers hardness HV 10 | 710 | [MPa] or [N/mm ²] |