



Nacera[®] Hybrid

Instructions for use

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EN

Product description:

Nacera[®] Hybrid is a tough, radiopaque composite material with optimised, high-density filler technology. **Nacera[®] Hybrid** is available in various colours for use as a blank and block in CAD/CAM technology for the production of inlays/onlays, veneers, partial crowns, crowns, as well as bridges (with a maximum of three units).

General information:

Our application-related information - whether it has been provided orally, in writing or through practical instruction - is drawn from our own experience and can therefore only be considered as a guideline. Our products are subject to continuous further development. We therefore reserve the right to make changes.

Attention: Nacera[®] Hybrid is already a fully polymerised material and must not be sintered/fired.

Hazard notice:

Dust is released during processing which could cause damage to the respiratory tract, as well as irritation to the eyes and skin. Processing must therefore only be performed when the suction system is working properly. Wear gloves, protective goggles and face masks. Do not breathe in grinding dust.

Warning:

When processed and used properly, unwanted side effects from this medical product are extremely rare. Immune reactions (such as allergies) or local paraesthesia cannot be entirely ruled out, however. If you discover unwanted side effects, please let us know - even if there is uncertainty.

When using this product, the dentist must consider known cross-reactions or interactions between this medical product and other substances already in place in the mouth.

Contraindications:

Use of **Nacera[®] Hybrid** is contraindicated if:

- There is a proven allergy to **Nacera[®] Hybrid** ingredients
- The prescribed application technology is not possible
- The templates of the machine prescribed for processing the blanks/blocks cannot be maintained.

Indications:

Production of inlays/onlays, veneers, partial crowns and crowns and (max. 3-unit) bridges in CAD/CAM technology.

Notes on construction:

Nacera[®] Hybrid is fixed in the holder provided and cleaned in advance in line with the instructions from the device manufacturer. Correct fitting must be ensured. The grinding/milling process and the associated machine templates must be sought from the respective machine manufacturer. Prior to commencing all work, one must ensure that the cutting sharpness of the cutters used for the planned milling work is adequate.

Do not fall below the following values:

For crowns, bridges, inlays and onlays:

Preparation angle 4° to 6°



Cervical wall thickness: at least 0.6 mm

Occlusal wall thickness: at least 1.2 mm

Wall thickness under a supporting cusp: at least 1.5 mm

Connector cross sections in the anterior tooth region: 10 mm^2

Connector cross sections in the posterior tooth region: 16 mm^2

In order to increase the stability of the construction, a connector height must be chosen which is as large as is clinically achievable. General statics are to be observed.

Inlay:



Partial crown/onlay:



Crown:



Veneer:



For veneers:

Cervical wall thickness: at least 0.4 mm

Labial wall thickness: at least 0.5 mm

Incisal wall thickness: at least 0.5 mm

The milled/ground works are separated while preventing damage. To avoid thermal damage, ensure low revolutions, minimum contact pressure and adequate cooling. The surface of the milled/ground works must be worked on like a conventional composite and polished for a high-gloss finish.

Important:

Nacera[®] Hybrid should always be processed with the prescribed templates of the machine manufacturer to prevent material overheating. Otherwise, material damage could occur, which could lead to a deterioration of its physical properties.

Surface pre-treatment/modification:

Prior to processing **Nacera[®] Hybrid** restorations - such as painting or veneering - the surface in question must be treated like a composite surface which is being repaired or corrected. In this regard, we recommend sandblasting the surface or lightly roughing with a cutter first. Loosely clinging dust should then be removed with oil-free compressed air. An entirely water-free working process should be ensured. Prior to further processing, the surface must be clean, dry and grease-free. A commercially available, high-grade bond should then be applied and light-cured.

Veneering and characterisation:

The activated surface described under „Surface pre-treatment/modification“ can be veneered using conventional light-curing composites. The instructions for use of the product manufacturers in question should be observed here.

Adhesive bonding:

Adhesive bonding is obligatory for **Nacera® Hybrid**. Light or dual-curing bonding composites must be used. Prior to bonding, the bonding surface of the restoration must be blasted with aluminium oxide powder (25-50 µm, 1,5 bar), cleaned in an ultrasound bath / steam jet and dried using oil-free compressed air. The light intensity of the polymerisation lamp used for curing should be checked prior to use (> 800 mW/cm²).

When using the following products, an optimum marginal integrity was successfully proven through a debonding study*:

Restoration debonding agent: GC G-Multi Primer

Adhesive: GC G-Premio Bond (light-curing)

Bonding composite: GC G-Cem Link Force (light-curing)

Preparation and polishing: Fine-grain diamonds, composite polishers, goat hair brushes and cotton buffing wheels with GC DiaPolisher.

The instructions for use of the manufacturer are to be observed when using comparable products and for more detailed processing information.

Note on storage and shelf life:

To be stored at approx. 5°C to 50°C.

The maximum shelf life is printed onto the sticker of the respective packaging unit and is valid for the prescribed storage temperature.

Troubleshooting:

Fault	Cause	Remedy
Milling/grinding process delivers unclean results/surfaces	Use of incorrect tool	Appropriate tools (specially produced tools for hybrid materials)
Milling/grinding process delivers unclean results/surfaces	Incorrect choice of templates	Check templates and re-configure if necessary
Milling/grinding process delivers inaccurate surfaces and geometries (fit)	Blank/block not fixed in the holder evenly. Impurities in the holder; tool wear	Remove impurities; fix blank/block evenly into the holder; replace tools
Heat generated on workpiece	Excessive tool revolutions	Note templates
Miller/grinder stops	Excessive forward force	Note templates

Nacera® Hybrid must solely be used by dentists and dental specialists. Please pass on all of the aforementioned information to the dentist providing treatment if you are processing this medical product for a custom design.

Disposal:

Small quantities may be disposed of in domestic waste. Pay attention to the safety data sheets that exist for the product during processing.

*Study can be requested.



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