VITA ENAMIC® HYBRID CERAMIC

The simple steps for indication, preparation, bonding and polishing
VITA Zahnfabrik has developed a dental hybrid ceramic that is unique worldwide:

VITA ENAMIC is the world's first and only tooth-colored hybrid dental ceramic featuring a dual ceramic-polymer network structure. This special material combines enormous load capacity with high elasticity, allowing simple, efficient and precise fabrication of dental restorations.

VITA ENAMIC – Your benefits:

- Gentle and substance-preserving preparation, as restorations can be ground very precisely and thinly.\(^\text{7-12}\)
- Wide indication range from table tops to non-prep veneers.\(^\text{8,9,15}\)
- Load capacity and elasticity that resembles natural teeth.\(^\text{1,4,5,6,14}\)
- Superior esthetics with integrated natural shade gradient.\(^\text{13}\)
- Antagonist-friendly and similar to enamel.\(^\text{14}\)
- Especially suitable on implants, as the innovative hybrid material absorbs occlusal forces.\(^\text{1,2,3,11}\)

For references see back cover
### Overview of indications

<table>
<thead>
<tr>
<th>Indication</th>
<th>Recommended materials</th>
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</table>
| Anterior and posterior crowns on implants | VITA ENAMIC HT<sup>1</sup>  
  VITA ENAMIC HT multiColor<sup>2</sup> |
| Anterior and posterior crowns | VITA ENAMIC HT<sup>1</sup>  
  VITA ENAMIC HT multiColor<sup>2</sup> |
| Inlays / Onlays / Partial crowns | VITA ENAMIC ST<sup>3</sup> |
| Table tops                  | VITA ENAMIC ST<sup>3</sup> |
| Veneers                     | VITA ENAMIC HT<sup>1</sup>  
  VITA ENAMIC HT multiColor<sup>2</sup> |

### Contraindication

- Bridge restorations
- Free-end restorations
- Parafunction (for example, bruxism)

<sup>1</sup> high translucent material  
<sup>2</sup> for particularly high esthetic requirements  
<sup>3</sup> super translucent material type with distinctive chameleon effect
To ensure clinical success of restorations made from VITA ENAMIC, the following minimum layer thicknesses must be adhered to:

**Anterior crowns**
- Incisal: at least 1.0 mm
- Circumferential: at least 0.8 mm

**Posterior crowns**
- Occlusal: at least 1.0 mm
- Circumferential: at least 0.8 mm

**Inlays**
- Occlusal: at least 1.0 mm
- Isthmus area: at least 1.0 mm

**Onlays**
- Occlusal: at least 1.0 mm

**Table tops**
- Occlusal: at least 1.0 mm

**Veneers**
- Incisal: at least 0.3 mm
- Labial: at least 0.3 mm
- Cervical: at least 0.2 mm
VITA ENAMIC is available in matched VITA SYSTEM 3D-MASTER shades, which is the only tooth shade system available on the market that takes all three color dimensions into account, and integrates them into a systematic classification principle for shade determination and shade reproduction.

<table>
<thead>
<tr>
<th>Variations</th>
<th>Chromaticity</th>
<th>0M1</th>
<th>1M1</th>
<th>1M2</th>
<th>2M1</th>
<th>2M2</th>
<th>2M3</th>
<th>3M1</th>
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<tr>
<td>Etching</td>
<td>Clean spraying/drying</td>
<td>Silanizing</td>
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<tr>
<td><strong>Conditioning the restoration</strong></td>
<td><strong>Etch with 5% hydrofluoric acid (e.g., VITA ADIVA CERA ETCH) for 60 seconds.</strong></td>
<td><strong>Completely remove any remaining acid by using water spray (60 sec.) or clean in the ultrasonic bath. Then dry for 20 sec.</strong></td>
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<td><strong>Conditioning the tooth</strong></td>
<td><strong>Apply silane (e.g., VITA ADIVA C-PRIME) to the etched surfaces. Allow to evaporate completely.</strong></td>
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**Etching**

- **Etch** the tooth substance with 37% phosphoric acid gel (e.g., VITA ADIVA TOOTH-ETCH) for 20 sec.

**Clean spraying/drying**

- Apply bonding system to the tooth substance (e.g., VITA ADIVA T-BOND). Please observe the relevant instructions for use!

**Silanizing**

- Apply luting composite, e.g. VITA ADIVA F-CEM.

For details, see VITA ENAMIC Working Instructions, Print No. 1982.
### Adhesive technique

<table>
<thead>
<tr>
<th>Bonding composite</th>
<th>Crown</th>
<th>Inlay/Onlay/Partial crown/Table top</th>
<th>Veneer</th>
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<tr>
<td>Conventional with adhesive system: Bonding composite with adhesive system: e.g., VITA ADIVA F-CEM with VITA ADIVA T-BOND</td>
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<tr>
<td>Self-adhesive bonding composite: e.g., VITA ADIVA S-CEM</td>
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</table>

### Other recommended bonding systems
- Variolink Esthetic (Ivoclar Vivadent), Vitique (DMG)
- NX3 (KerrHawe), Calibra Ceram (DENTSPLY), RelyX Ultimate (3M ESPE), Bifix QM (VOCO)
- PANAVIA F2.0/PANAVIA V5 (Kuraray), DuoCem (Coltène/Whaledent)
Manual reworking
Use only diamond-coated milling tools or special polishers. When intraorally reworking, use water and exert only slight pressure. Special two-stage polishing assortments were developed for intraoral and extraoral polishing. The use of these assortments allows for successful high-gloss polishing:

**VITA ENAMIC Polishing Set clinical**
First step: prepolishing  7,000 - 10,000 rpm
Second step: high-gloss  5,000 - 8,000 rpm

**VITA ENAMIC Polishing Set technical**
First step: prepolishing  7,000 - 10,000 rpm
Second step: high-gloss  5,000 - 8,000 rpm

Additionally, a goat hair brush and diamond polishing paste can be used for final high-gloss polishing. Then repolish with a dry cotton buff.

Polishing tutorial, see next page
VITA ENAMIC® - Tutorial
Polishing


**13 Steinbrenner H. Multichromatic and highly translucent hybrid ceramic VITA ENAMIC. Int J Comput Dent 2018; 21: 239-250.**
