VOCO: INNOVATIVE SOLUTIONS

VOCO’s reputation for being a global leader in the manufacturing of dental materials and technologies can be traced back to its early beginnings 40 years ago. Based out of Cuxhaven, Germany, VOCO performs extensive research and development in the fields of dental restoratives, adhesives and many other materials and technologies, setting new standards in the creation of innovative dental products and application aids to provide better solutions to dentists throughout the world and here in North America.

VOCO researchers partner and maintain close contact with over 150 universities and research institutes worldwide, and have led several research projects co-sponsored by the German Federal Ministry of Research. This has enabled VOCO to act as a technological forerunner in several material development areas. A leader in Nano-technology, VOCO’s products have received high praise and recognition in North America with 4 and 5 star ratings from the The Dental Advisor, Reality and other independent institutes.

As a global player, VOCO exports to over 100 countries on 6 continents. In the United States, VOCO is proud to offer you products through Patterson Dental, Henry Schein Dental, Benco Dental and Burkhart Dental. Most locations in the US can enjoy next-day delivery through these fine distributors.

In Canada, VOCO products are available through Henry Schein Dental, Patterson Dental, Sinclair Dental, K-Dental and Central Dental.

We are proud to offer you Great Products, Great Quality, Great Support and Great Value.

For detailed information please visit: vocoamerica.com

To order or for more information, contact your local VOCO representative.

1-888-658-2584

Very Truly Yours,

VOCO: INNOVATIVE SOLUTIONS
Innovation
Precision
Excellence
Made in Germany
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**ICONS**

The following icons enable you to quickly find the right product, make a first assessment and judgment within seconds, and quickly gain a general overview. For detailed information regarding the use of any product, please consult the instructions for use.

- **Material composition**
  - Both the fillers and the resin matrix of this product are based purely on silicon oxide.

- **Material composition**
  - This product is based on nano-hybrid technology.

- **Curing of the material**
  - This product either cures through exposure to light or it self-cures chemically.

- **Curing of the material**
  - This product self-cures chemically.

- **Curing of the material**
  - This product cures through exposure to light. The time indicated represents the average time.

- **Method of application**
  - Preparatory conditioning of the tooth surface is not required before application of this material to the tooth.

- **Method of application**
  - Separate etching of the tooth surface is necessary before the adhesive system (bond) is used.

- **Method of application**
  - No separate etching of the tooth surface is required before the adhesive system (bond) is used.

- **Indications**
  - According to the indications, this product is suitable for fillings of the cavity classes listed.

- **Volumetric shrinkage**
  - During setting, this product is subject to the volume shrinkage indicated in percent, measured as a change in percent of total volume.

- **Filler content**
  - This product has a defined filler content, which is indicated in percent by weight.

- **Hardness of the material**
  - This product possesses the shore A hardness shown.

- **Radiopacity**
  - After completion of the working process, this material is highly radiopaque. The value shown indicates the radiopacity in percent relating to the aluminium equivalent.

- **Working directions**
  - This material is suitable for bulk fillings with a maximum layer thickness of 4 mm.

- **Fluoride content**
  - This product contains the level of fluoride indicated.

- **Material compatibility**
  - This product can be used with the materials indicated.

- **Application of the material**
  - This material is available in the non-running, non-dripping NDT®-syringe.

- **CAD/CAM**
  - This product is suitable for use in digital dentistry.

- **Indication of retention time in the mouth**
  - This product is retained in the mouth for the minimum duration shown.

- **Indication of working time**
  - The maximum extraoral working time for this product is as shown.

- **No Parabens**
  - This product does not contain the hormone disrupting class of compounds know as parabens.

- **Indication of wavelength**
  - This material can be light-cured using a UV-LED light source with the wavelength shown.

- **Format of communication data**
  - This product processes the data format indicated.

- **Non-sedimenting**
  - This product is non-sedimenting. The product enables additive manufacturing of objects from homogeneous solution throughout the entire printing process.

- **Application of the material**
  - When heated, the viscosity of this material changes, thus uniting the respective advantages of flowable and sculp-table materials. Specifically designed to be heated for use.
**PREVENTIVE CARE**

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<tr>
<th>Category</th>
<th>Product</th>
<th>Page</th>
</tr>
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<td></td>
<td>CleanJoy</td>
<td>10</td>
</tr>
</tbody>
</table>
**Remin Pro**

**Triple protective dental tooth cream without the risk of milk protein allergies**

**Indications**
- After whitening
- After professional cleaning
- Prevention and control of hypersensitivities

**Advantages**
- Triple protection of fluoride, Nano-hydroxyapatite (calcium and phosphate) and Xylitol
- Nano-hydroxyapatite restores the mineral balance
- 61% more fluoride (1,450 ppm) than the leading brand
- Contains Xylitol known for its cariostatic properties
- No risk of milk protein allergies as with other brands
- Fast-acting and great-tasting
- Easy to apply with a finger, soft toothbrush or in a tray
- CDT Insurance Code 9910 can be used as an application for desensitizing medicament¹

**Presentation**
- REF 2003 12 x 40 g tube melon
- REF 2004 12 x 40 g tube mint
- REF 2005 12 x 40 g tube strawberry
- REF 2006 12 x 40 g tube (4 each x melon, mint, strawberry)
- REF 2007 3 x 40 g tube (1 each x melon, mint, strawberry)

---

**Admira Protect**

**Light-cured, Nano-filled desensitizer**

**Indications**
- Treatment of hypersensitive dentin
- Treatment of cervical areas (including crown margins, after tooth cleaning or tartar removal, exposed cervical areas etc.)

**Advantages**
- No hypersensitivity for up to two years
- Biocompatible ORMOCER® matrix – no glutaraldehyde
- Significant reduction of stimulus transfer through intensive deep sealing of exposed root dentin
- High wear resistance through special Nano-filler technology
- High bond strength
- CDT Insurance Code 9911 can be used as an application of desensitizing resin for cervical/root surface, per tooth¹

**Presentation**
- REF 1651 Pack 50 x .06 ml SingleDose, 50 Micro Tim
- REF 1652 Pack 200 x .06 ml SingleDose, 200 Micro Tim
- REF 1650 4.5 ml bottle
- REF 2249 Micro Tim – 100 pack
- REF 2338 disposable brush holder – 5 pack
- REF 2315 mixing pallets – 20 pack

---

¹ License to use the ADA CDT codes is granted to Kathy S. Forbes, RDH, BS. The ADA is the exclusive owner and copyright holder of the CDT (“Code”). / ² Photo courtesy of PD Dr. T. Pioch, University Hospital, Heidelberg – Germany
**VOCO Profluorid® Varnish**

*Easy, tasteful and transparent*

5% Sodium Fluoride Varnish

---

**Indications**

Treatment of hypersensitive teeth

Sealing the dentinal tubules for cavity preparations or on sensitive root surfaces

---

**Advantages**

- Easy non-messy SingleDose delivery system
- No yellow discoloration of teeth
- In seven flavors without the unpleasant aftertaste of some other brands
- Adheres well to moist surface and sets quickly in seconds after contact with saliva
- High immediate fluoride release to relieve hypersensitivity
- Enhanced flow characteristics allow Profluorid Varnish to reach areas traditional varnishes may miss
- Contains Xylitol
- Does not contain: tree nuts, peanuts, corn, shellfish, eggs, milk protein, soy, gluten, triclosan, petroleum, red dye/artificial coloring, saccharin or aspartame
- CDT Insurance Code 1206 can be used for topical application of fluoride varnish¹
- CPT Insurance Code 99188 for medical claims

---

**Presentation**

<table>
<thead>
<tr>
<th>Flavor</th>
<th>SingleDose 50 x 0.4 ml</th>
<th>SingleDose 200 x 0.4 ml</th>
</tr>
</thead>
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<tr>
<td>melon</td>
<td>REF 1269</td>
<td>REF 1271</td>
</tr>
<tr>
<td>caramel</td>
<td>REF 2226</td>
<td>REF 2229</td>
</tr>
<tr>
<td>cherry</td>
<td>REF 2227</td>
<td>REF 2230</td>
</tr>
<tr>
<td>mint</td>
<td>REF 2228</td>
<td>REF 2231</td>
</tr>
<tr>
<td>bubble gum</td>
<td>REF 2238</td>
<td>REF 2239</td>
</tr>
<tr>
<td>cola lime</td>
<td>REF 2240</td>
<td>REF 2241</td>
</tr>
<tr>
<td>pina colada</td>
<td>REF 2242</td>
<td>REF 2243</td>
</tr>
</tbody>
</table>

---

**Application of Profluorid Varnish**

---

¹ License to use the ADA CDT codes is granted to Kathy S. Forbes, RDH, BS. The ADA is the exclusive owner and copyright holder of the CDT (“Code”).
**VOCO Profluorid® L**

**Clear 5% Sodium Fluoride Liquid Varnish – specially formulated not to interfere with bleaching procedures**

Not available in Canada!

**Indications**
- Treatment of hypersensitive teeth
- Sealing of the dentinal tubules for cavity preparations or on sensitive root surfaces
- Cavity liner under amalgam restorations
- Desensitizer before and after bleaching

**Advantages**
- Profluorid L’s synthetic resin matrix ensures effective desensitizing during bleaching without interfering with the bleaching results. Your patients will feel immediate relief, which makes Profluorid L the product of choice for each bleaching session.
- Thin and clear for perfect esthetics
- Liquid consistency for easy and economical application
- Effective double protection of 5% sodium fluoride and calcium deposits. The sodium fluoride works immediately while the calcium deposits store and release fluoride over time. The perfect formula for immediate and long-term results.
- Free of glutaraldehyde, gluten or methacrylates
- CDT Insurance Code 9910 can be used as an application for desensitizing medicament¹

**Presentation**

| REF 1590 Pack 50 × .04 ml SingleDose, accessories |
| REF 1591 Pack 200 × .04 ml SingleDose, accessories |
| REF 1592 4 g bottle, easy brushes, accessories |
| REF 2245 Easy Brush – 50 pack |
| REF 2315 mixing pallets – 20 pack |

**Application of Profluorid L**

- Bottle
- SingleDose

¹ License to use the ADA CDT codes is granted to Kathy S. Forbes, RDH, BS. The ADA is the exclusive owner and copyright holder of the CDT (“Code”).
Bifluorid 10®

Double Fluoride liquid varnish for the treatment of dentinal hypersensitivity

Not available in the USA!

Indications

Treatment of hypersensitive teeth
Sealing of the dentinal tubules for cavity preparations or on sensitive root surfaces
Cavity liner under amalgam restorations
Desensitizer before and after bleaching

Advantages

• Bifluorid 10’s synthetic resin matrix ensures effective desensitizing during bleaching without interfering with the bleaching results.
• Thin and clear for perfect esthetics
• Liquid consistency for easy and economical application
• Effective double protection of 5% sodium fluoride and 5% calcium fluoride. The sodium fluoride works immediately while the calcium fluoride stores and releases fluoride over time.
• Superior immediate and long-term results.
• Free of glutaraldehyde, colophony, gluten or methacrylates

Fluoridation with Bifluorid 10 after a professional cleaning

Presentation

| REF 1615 | 4 g bottle |
| REF 1616 | 10 g bottle |
| REF 1617 Pack 3 x 10 g bottle |
| REF 1618 Pack 50 x 0.4 ml SingleDose, accessories |
| REF 1619 Pack 200 x 0.4 ml SingleDose, accessories |
| REF 1032 10 ml Solvent bottle |

Mode of action of the sodium and calcium fluoride contained in Bifluorid 10

Tubule A:
Formation of calcium fluoride by the reaction of the sodium fluoride contained in Bifluorid 10 with calcium ions contained in the saliva and dentinal tubuli liquid

Tubule B:
Storage of the calcium fluoride contained in Bifluorid 10 in the tooth substance and tubuli

1 For use with Bifluorid 10
**Grandio Seal**

*Highly filled Nano-hybrid pit and fissure sealant*

**Indications**
- Seals/fills pits and fissures
- Seals damaged enamel surfaces
- Covers caries-prone areas during orthodontic treatments
- Seals deciduous teeth

**Advantages**
- 70% filled by weight for excellent wear resistance
- Low shrinkage
- Superb flow and wetting properties
- Patented NDT®³ (Non-Dripping Technology) Syringes and ultra-fine intraoral tips
- Drip-free, bubble-free placement
- Excellent penetration of the deepest pits and fissures
- One radiopaque shade for optimum visibility
- CDT Insurance Code 1351 can be used as a per tooth sealant to prevent decay²

**Presentation**
- REF 1060 Kit 5 × 2 g syringes with intraoral tips type 45, 5 ml Vococid
- REF 1061 Refill 2 × 2 g syringes, intraoral tips type 45
- REF 2147 intraoral tips type 45 – 100 pack

**Technical Data**
- Filler content 70.2% by weight
- Adhesion to enamel (after 24 hours of storage in water) 16.9 MPa
- Transverse strength 130 MPa
- Transverse strength after thermocycling 107 MPa
- Wear (ACTA) 41.7 μm

**CleanJoy®**

*Minimally abrasive prophy paste*

**Indications**
- Removal of soft and hard surface plaque
- Removal of extrinsic discoloration (e.g. staining from coffee, tea or tobacco)
- Polishing of tooth surfaces as part of professional tooth cleaning, prior to whitening, or following the removal of orthodontic devices
- Cleaning and polishing of restorations as part of professional tooth cleaning
- Removal of residues of temporary cement prior to bonding (cementation)

**Advantages**
- Optimized filler particles for a smooth patient experience without a sandy feeling. Fine Dual Filler (FDF) Technology³ allows for gentle but effective stain removal. All grits are within the ADA-recommended RDA values.
- FDF technology minimizes splatter
- No parabens, nuts or gluten for reduced allergy risks
- Color-coded grits for easy identification
- Contains fluoride and xylitol
- Simple selection process of three delicious flavors: fresh Mint, sweet Caramel and fruity Cherry

**Presentation**
- REF 2096 Pack 200 × 2 g SingleDose fine (green) mint flavor
- REF 2097 Pack 200 × 2 g SingleDose medium (yellow) mint flavor
- REF 2098 Pack 200 × 2 g SingleDose coarse (red) mint flavor
- REF 6102 Pack 200 × 2 g SingleDose fine (green) cherry flavor
- REF 6103 Pack 200 × 2 g SingleDose medium (yellow) cherry flavor
- REF 6104 Pack 200 × 2 g SingleDose coarse (red) cherry flavor
- REF 6094 Pack 200 × 2 g SingleDose fine (green) caramel flavor
- REF 6095 Pack 200 × 2 g SingleDose medium (yellow) caramel flavor
- REF 6096 Pack 200 × 2 g SingleDose coarse (red) caramel flavor

³ US Patent No: 8,641,416 B2.¹ License to use the ADA CDT codes is granted to Kathy S. Forbes, RDH, BS. The ADA is the exclusive owner and copyright holder of the CDT (“Code”).² Used in the two cleaning grits, the polishing grit uses only one filler type.
# DIRECT RESTORATION

## Liner/Etchant
- Calcicur 12
- Calcimol 13
- Calcimol LC 13
- Ionoseal 14
- Vococid 14

## Total-Etch Adhesive
- Solobond Plus 15
- Admira Bond 15

## Self-Etch Adhesive
- Futurabond NR 16
- Futurabond M 16
- Futurabond DC 17
- Futurabond M+ 17
- Futurabond U 18

## Nano-Hybrid Composite
- GrandioSO 19
- GrandioSO x-tra 20
- GrandioSO Light Flow 21
- GrandioSO Flow 22
- GrandioSO Heavy Flow 23
- Grandio 24
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- Amaris Gingiva 26
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## NANO-ORMOCER®
- Admira Fusion 27
- Admira Fusion Flow 28
- Admira Fusion x-tra 29
- Admira Fusion x-base 30

## Bulk-Fill Composite
- VisCalor bulk 33
- VisCalor caps warmer 33
- VisCalor 34

## Pediatric Restorative / Composite Caps Warmer
- Twinky Star 35
- VisCalor Dispenser 35

## Curing Light / Polishers
- Celalux 3 / Dimanto 36

## Reinforcement Strands
- GrandTEC 37

## Glass Ionomer Restorative
- Ionolux 38
- IonoStar Plus 39
- IonoStar Molar 40
- GIC Mixer 40

## Glaze
- Final Varnish LC 41
- Easy Glaze 41
Calcicur®
Ready-to-use calcium hydroxide paste

Indications
Indirect capping for the treatment of caries profunda
Direct capping when the pulp is opened or a pulpotomy is performed
Lining of cavities to prevent exposure to acid media when using cements
For temporary filling of root canals

Advantages
• Suitable for use under any lining or restorative material
• Immediately ready for use
• With high pH (12.5) known for antimicrobial effect
• Calcium hydroxide content of 45%
• Radiopaque
• Promotes the formation of tertiary dentin
• Effective pulp protection

Presentation
| REF 1093   | 2.5 g syringe, intraoral tips type 47 |
| REF 2131   | intraoral tips type 47 - 30 pack     |

[Image of Calcicur® product]

[Calcium hydroxide formula: Ca(OH)₂]

[170% radiopacity]
[Contains Ca(OH)₂]
Calcimol
Self-cured paste-to-paste calcium hydroxide

**Indications**
- Indirect pulp capping
- Lining under all filling materials

**Advantages**
- Effective protection of the pulp
- Easy application
- Suitable working time
- Short setting time
- Contains 26% calcium hydroxide
- Radiopaque
- Supports the formation of tertiary dentin

**Calcimol LC**
Light-cured, resin modified calcium ion releasing base liner

**Indications**
- Indirect pulp capping
- Lining under all filling materials

**Advantages**
- Calcium ion release promotes hydroxyapatite and tertiary dentin growth
- Has a high pH level (9.5–11) which is considered to have an antimicrobial effect
- Flow on demand – stays where you apply it
- Non-Dripping Technology (NDT®¹) syringe for easy placement without waste
- Virtually eliminates sensitivities by creating a sealed barrier to the pulp
- Suited for pulp capping* and as a base liner under all restorative materials and cements
- High compressive strength for a solid foundation
- Radiopaque for easy X-ray identification
- Acid resistant

**Calcimol LC in the NDT®¹ syringe**
- NDT®¹ means Non-Dripping Technology
- Especially for fine-flowing materials
- Can be dosed and applied precisely
- No loss or waste of material

---

*only for indirect pulp capping

¹US Patent No: 8,641,416 B2
**Ionoseal**

One component light-cured resin modified glass ionomer liner

**Indications**
- Lining under all types of filling material
- Extended fissure sealing
- Restoration of small lesions

**Advantages**
- Saves time: Ready-to-use one component material
- Fast 20 sec. light-cure (2 mm)
- High compressive strength (226 MPa)
- Acid resistant allows for total-etch bonding technique
- Patented NDT® Syringe saves material
- High fluoride release protects against secondary caries
- High biocompatibility
- Radiopaque

**Presentation**
- REF 1326 Pack 3 x 2.5 g syringes, intraoral tips type 41
- REF 2146 intraoral tips type 41 - 100 pack

**Vococid**

Phosphoric etchant gel

**Indications**
- Etching of enamel and dentin in the etch-bond technique

**Advantages**
- Non-dripping gel consistency
- 35% orthophosphoric acid
- Blue color for visual control

**Presentation**
- REF 1063 Pack 1 x 5 ml syringe, accessories
- REF 1224 Pack 5 x 2 ml syringes, accessories
- REF 2310 intraoral tips type 42 - 30 pack
- REF 2132 intraoral tips type 48 - 50 pack
**Solobond Plus**

**Light-cured two bottle adhesive**

**Indications**
Direct restoration with composite restoratives for all cavity classes
Adhesive cementation of crowns, bridges, inlays, onlays and veneers with resin cement
For light-, self- and dual-curing composites

**Advantages**
- “Stick immediately effect” for convenient composite application
- Can be used with or without dentin etching
- Primer and adhesive are moisture tolerant for application of wet-bonding technique
- Durable restoration through CTR-adhesion, equally high dentin adhesion with or without total-etch technique
- Solobond Plus remains elastic and ensures lasting marginal tightness

**Presentation**
- REF 1044 Kit 1 x 4 ml primer, 1 x 4 ml adhesive, 1 x 5 ml Vococid syringe, accessories
- REF 1048 Refill 1 x 4 ml primer
- REF 1049 Refill 1 x 4 ml adhesive
- REF 2315 mixing pallet – 20 pack

**Technical Data**

<table>
<thead>
<tr>
<th>Bonding strength to:</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>enamel (bovine)</td>
<td>24.2 MPa</td>
</tr>
<tr>
<td>- dentin* (total etch)</td>
<td>31.0 MPa</td>
</tr>
<tr>
<td>- dentin* (no etching)</td>
<td>27.9 MPa</td>
</tr>
</tbody>
</table>

**CTR adhesion describes the adhesion mechanisms of VOCO dentin and enamel bonding agents**

**CTR stands for:**
- C = chemical bond through complex formation to dentinal calcium
- C = a second chemical adhesion mechanism through a special monomer to chemically bound phosphate
- T = development of tags in the tubuli
- R = retentive adhesion to free collagen fibers

---

**Admira Bond**

**Light-cured total-etch, one coat, one bottle adhesive**

**Indications**
Direct restoration with all types of light-cured restoratives (ORMOCER®s, composites, compomers)

**Advantages**
- Acetone-based for better water displacement; deeper tubule infiltration and reduced sensitivity
- Unique combination of micro mechanical and chemical bonding for superior high bond strength to dentin and enamel
- Elasticity during peak stress ensures long-lasting marginal seal
- Low uniform film thickness
- More than 15-year proven record of success
- Easy dispensing one-drop bottles

**Presentation**
- REF 2479 4 ml bottle
- REF 2432 Pack 2 x 4 ml bottles
- REF 2315 mixing pallets – 20 pack
**Futurabond NR**

Nano-reinforced single step self-etch adhesive in a SingleDose or bottle delivery system

**Indications**
Light-cured, self-etch adhesive for direct restorations with light-cured filling materials for all cavity classes

**Advantages**
- Over 30 MPa adhesion to dentin and enamel
- No post-operative sensitivities (The Dental Advisor)
- Reinforced with nano particles
  - increased bonding values
  - increased marginal integrity
- Fast-and-easy one-coat application (apply, dry, cure in 35 sec.)
- Moisture tolerant
- No refrigeration or shaking necessary
- Contains fluoride

**Presentation**
- REF 1152 Pack 50 x 0.1 ml SingleDose, accessories
- REF 1153 Pack 200 x 0.1 ml SingleDose, accessories
- REF 1148 Set 4 ml Liquid A, 4 ml Liquid B
- REF 2247 Single Tim – 100 pack
- REF 2315 mixing pallet – 20 pack

**Technical Data**
- Bonding strength to – enamel: 31.4 MPa
  - dentin: 30.6 MPa
- Application time: 20 sec.
- Drying time: 5 sec.
- Curing time: 10 sec.

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**Futurabond M**

One component Nano-reinforced self-etch bond in a bottle delivery system

**Indications**
Light-cured, self-etch adhesive for use with light-cured restoratives in all cavity classes

**Advantages**
- Excellent adhesion to dentin and enamel
- Fast and easy application – one-coat, one-cure technique
- Moisture tolerant
- Excellent wetting properties
- No shaking, no rubbing
- Working time of up to 5 minutes

**Presentation**
- REF 1350 5 ml bottle, accessories
- REF 1351 Pack 3 x 5 ml bottles
- REF 2247 Single Tim – 100 pack
- REF 2315 mixing pallets – 20 pack

---

*stress 3,000 cycles of masticatory load of 250N*
**Futurabond DC**

Self-etch, dual-cured adhesive for all light-, dual- and self-cured resin materials

**Indications**
- Dual-cured, self-etch adhesive for direct and indirect restorations with self-, light- and dual-cured resin materials

**Advantages**
- Over 30 MPa adhesion to dentin and enamel with LC composites and strong bond strength with DC and SC composites
- Virtually no post-operative sensitivities
- Can be used without light – great for endo
- Reinforced with nano particles: increased bonding values, increased marginal integrity
- Fast and easy one-coat application (apply, dry, cure in 35 sec.)
- Moisture tolerant
- No refrigeration or shaking necessary
- Contains fluoride

**Presentation**
- REF 1164 Pack 50 x 0.1 ml SingleDose, accessories
- REF 1165 Pack 200 x 0.1 ml SingleDose, accessories
- REF 1163 Pack 4 ml liquid 1, 4 ml liquid 2, accessories
- REF 2246 Endo Tim (for use in root canal) – 50 pack
- REF 2247 Single Tim – 100 pack
- REF 2315 mixing pallets – 20 pack

**Technical Data**
- Micro-tensile bond strength to dentin: 39.3 MPa (University of Tanta)
- Shear bond strength to dentin: 30.2 MPa (analogous Reinhardt*)
- Shear bond strength to enamel: 36.1 MPa (analogous Reinhardt*)


**Futurabond M+**

Universal adhesive in a bottle delivery system

**Indications**
- Direct and indirect restorations using any light-cured methacrylate-based restorative, core build-up or composite
- Intraoral repair of fillings, ceramic veneers and all-ceramic restorations without an additional primer
- Treatment of hypersensitive tooth necks
- Protective varnish for glass ionomer cement restorations
- Sealing of cavities prior to amalgam restorations or prior to temporary cementation

**Advantages**
- A flexible and reliable solution for every bonding situation
- Can be applied with or without phosphoric acid etchant
- Suitable for direct and indirect restorations
- Secure adhesion to various materials such as metals, zirconium or aluminum oxide, as well as silicate ceramics, without additional primer
- Applied in one layer – only 35 seconds total working time

**Presentation**
- REF 1515 5 ml bottle, accessories
- REF 1516 Pack 3 x 5 ml bottles
- REF 1518 Dual Cure Activator (DCA) bottle 2 ml
- REF 2247 Single Tim – 100 pack
- REF 2315 mixing pallets – 20 pack

**In combination with Futurabond M+ DCA (Dual Cure Activator):**
- Direct and indirect restorations using any self-cured or dual-cured methacrylate-based restorative, core build-up or luting composite
- Cementation of root posts with dual-curing or self-curing composites
Futurabond U
Dual-cured Universal adhesive

Indications
Direct and indirect restorations using any light-cured, self-cured or dual-cured methacrylate-based restorative, core build-up or composite
Intraoral repair of fillings, ceramic veneers and all-ceramic restorations without additional primer
Treatment of hypersensitive tooth necks
Protective varnish for glass ionomer cement restorations
Sealing of cavities prior to amalgam restorations or prior to temporary cementation
Cementation of root posts with dual-curing or self-curing composites

Advantages
• One adhesive for all your adhesive dentistry
  • self-etch, selective-etch or total-etch
  • for all direct or indirect materials without any extra activator
  • bonds to all light-, dual- and self-cured resin materials
  • bonds to metal, zirconia, aluminum oxide, silicate ceramic without any extra primer
• VOCO’s patented SingleDose System eliminates the solvent evaporation problem that exists with bottle systems, ensuring reliable and consistent bond strengths with each use
• Fast and easy one-coat application (apply, dry and cure in 35 sec.)
• Virtually no post-operative sensitivity
• Over 30 MPa adhesion to dentin and enamel with LC composites and strong bond strength with DC and SC composites
• Reinforced with nano particles for permanent bond strength

Presentation
REF 1571 Pack 50 × 0.1 ml SingleDose, accessories
REF 1572 Pack 200 × 0.1 ml SingleDose, accessories
REF 2246 Endo Tim (for use in root canal) – 50 pack
REF 2247 Single Tim – 100 pack

Endo Tim
Indications
Brushes for applying bonding agents and varnishes into the root canal
GrandioSO
Universal light-cured 89% filled Nano-hybrid composite for anterior and posterior fillings of all classes

Indications
Class I - V restorations
Reconstruction of traumatically damaged anteriors
Facetting of discolored anteriors
Correction of shape and shade for improved esthetic appearance
Locking, splinting of loosened teeth
Repairing veneers
Restoration of deciduous teeth
Core build-up under crowns
Composite inlays

Advantages
• 89% fillers by weight
  • outstanding wear resistance
  • enhanced color stability
• 30–50% less resin compared to classic hybrid and pseudo-nano composites
  • low shrinkage of only 1.6% (by volume)
  • non-sticky
  • prolonged working time under ambient light
• Designer Nano particles
  • excellent polishability and polish retention
  • tooth-like modulus of elasticity
  • tooth-like thermal expansion and flexural strength
  • VOCO’s individual cross-contamination prevention packaging for capsules

Technical Data
Filler Content: 89% by weight
73% by volume DIN 51081
Shrinkage: 1.61% (by volume) analogous Watts et al.
Modulus of Elasticity 16,650 MPa ISO 4049
Depth of Cure >2.8 mm/20 s ISO 4049
Radiopacity 320 %AI ISO 4049
Surface Hardness (Micro-Vickers hardness) 211 MHV University of Rostock, Germany
Resistance to Ambient Light 4'30” ISO 4049
Gloss 84 GU DIN 67530
Wear Rate 18 μm 3 body wear (ACTA 200,000)

Presentation
REF 2640 Caps Kit, 80 × 0.25 g caps (A1, A2, A3, GA3.25, B1) shade guide
REF 2600 Syringe Kit, 5 × 4 g syringes (A1, A2, A3, GA3.25, B1) shade guide
REF 9301 Caps Dispenser
Refills (1 × 4 g syringe/16 × 0.25 g caps), each:

<table>
<thead>
<tr>
<th>Shade</th>
<th>1 × 4 g syringe</th>
<th>16 × 0.25 g caps</th>
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<tbody>
<tr>
<td>A1</td>
<td>REF 2610</td>
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<td>A3</td>
<td>REF 2612</td>
<td>REF 2652</td>
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<tr>
<td>A3.5</td>
<td>REF 2614</td>
<td>REF 2654</td>
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<tr>
<td>A4</td>
<td>REF 2615</td>
<td>REF 2655</td>
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<td>REF 2619</td>
<td>REF 2659</td>
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<td>REF 2664</td>
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<td>D3</td>
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<td>REF 2671</td>
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<tr>
<td>Opaque OA3.5</td>
<td>REF 2633</td>
<td>REF 2673</td>
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<tr>
<td>BL (Bleach)</td>
<td>REF 2635</td>
<td>REF 2675</td>
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<tr>
<td>GA3.25</td>
<td>REF 2633</td>
<td>REF 2673</td>
</tr>
<tr>
<td>GA5</td>
<td>REF 2616</td>
<td>REF 2656</td>
</tr>
<tr>
<td>GrandioSO shade guide</td>
<td>REF 2607</td>
<td></td>
</tr>
</tbody>
</table>
**GrandioSO x-tra**

*Esthetic Nano-hybrid bulk-fill composite*

**Indications**
- Class I and II posterior restorations
- Base in Class I and II cavities
- Class V restorations
- Locking, splinting of loose teeth
- Repairing veneers, enamel defects and temporary C&B materials
- Extended fissure sealing
- Restoration of deciduous teeth
- Core build-up

**Advantages**
- Quick and esthetic posterior restorations
- Higher level of hardness than other bulk-fill composites – on the surface, as well as at 4 mm depth of cure
- High filler content (86% by weight) and extremely low polymerization shrinkage (1.4% by volume)
- High shade stability
- Excellent handling and simple high-luster polishing procedure
- In shades A1, A2, A3 and Universal

**Presentation**

<table>
<thead>
<tr>
<th>Shade</th>
<th>1 x 4 g syringe</th>
<th>16 x 0.25 g caps</th>
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<td>A1</td>
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<td>A2</td>
<td>REF 2597</td>
<td>REF 2716</td>
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<td>A3</td>
<td>REF 2598</td>
<td>REF 2717</td>
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**Technical Data**

<table>
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<th>Property</th>
<th>Specification</th>
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<td>Filler Content</td>
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<td>Shrinkage</td>
<td>1.4 Vol. %</td>
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<td>Flexural strength</td>
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<td>Flexural strength after thermo-cycling</td>
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<td>Modulus of elasticity</td>
<td>4034 MPa</td>
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<tr>
<td>Compressive strength</td>
<td>334 MPa</td>
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<tr>
<td>Radiopacity</td>
<td>423 %Al</td>
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<tr>
<td>Water uptake</td>
<td>≤ 0.1 μg/mm²</td>
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<tr>
<td>Solubility in water</td>
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<td>Surface hardness (Micro-Vickers)</td>
<td>222.67 MHV</td>
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<tr>
<td>ACTO-wear rate</td>
<td>44 μm</td>
</tr>
<tr>
<td>Curing depth (10 s)</td>
<td>4.67 mm</td>
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</table>
GrandioSO Light Flow
Extremely flowable, yet highly stable Nano-hybrid composite with an ultra-fine intraoral tip for precise applications

Indications
- Filling/characterization of small cavities
- Filling/characterization of Class III, IV and V cavities
- Extended fissure sealing
- Blocking out undercuts
- Lining or coating cavities
- Repairing fillings, veneers and temporary restorations
- Luting translucent prosthetic pieces

Advantages
- Low viscosity – allows for outstanding flow properties for maximum accessibility of hard-to-reach areas and small cavities.
- Ultra-fine intraoral tip – for precise and pinpoint application and dosage without excess residues for material savings.
- High performance – superior physical properties due to 76% (by weight) nano-hybrid fill rate.
- High esthetics – 8 shades that blend well due to designer nano-particulate
- Excellent handling – NDT®1-syringe (non-drip technology), compatible with all light-curing adhesives

Presentation

<table>
<thead>
<tr>
<th>Shade</th>
<th>Ref.</th>
<th>Shade</th>
<th>Ref.</th>
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<td>REF 2587</td>
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<td>A3.5</td>
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Technical Data

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<td>Filler content (w/w)</td>
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<td>Polymerization shrinkage</td>
<td>3.82% Vol.-% analogous Watts</td>
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<td>Modulus of elasticity</td>
<td>8.7 GPa ISO 4049</td>
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<td>3-point flexural strength</td>
<td>151 MPa ISO 4049</td>
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<tr>
<td>Wear rate (200,000 cycles)</td>
<td>49 μm ACTA 3 body</td>
</tr>
<tr>
<td>Thermocycling</td>
<td>117 MPa ISO 4049</td>
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<tr>
<td>Compressive strength</td>
<td>374 MPa analogous ISO 9917</td>
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<tr>
<td>Radiopacity</td>
<td>230 %Al ISO 4049</td>
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<tr>
<td>Curing depth (800 mW/cm²)</td>
<td>≥ 2.20 mm/20 s ISO 4049</td>
</tr>
<tr>
<td>Water absorption</td>
<td>11 μg/mm³ ISO 4049</td>
</tr>
<tr>
<td>Water solubility</td>
<td>&lt; 0.1 μg/mm³ ISO 4049</td>
</tr>
<tr>
<td>Surface hardness</td>
<td>121 MHV University of Rostock</td>
</tr>
</tbody>
</table>

Treatment of an anterior tooth defect with GrandioSO Light Flow

Initial situation: Enamel fracture on tooth 8
Pre-treatment of enamel fracture
Filling of defect with ultra-fine intraoral tip and GrandioSO Light Flow without excess residues
Final result after finishing

Source: Dr. Walter Denner, Fulda / Germany
GrandioSO Flow
Medium-viscous, light-cured, universal flowable 81% filled Nano-hybrid composite

Indications
Restoration of minimally invasive cavities of all classes
Restorations of small Class I cavities and extended fissure sealing
Restoration of Class II – V cavities including V-shaped defects and cervical caries
Blocking out of undercuts
Lining or coating of cavities
Repair of fillings, veneers and temporary crowns & bridges
Cementing of attachment of translucent prostheses (e.g. all-ceramic crowns etc.)

Advantages
• Outstanding physical properties through 81% filler content
  • strong enough for occlusal surfaces of Class I + II restorations
  • wear resistance of a hybrid
  • excellent color retention
• Excellent wettability
• Thixotropic material that will “flow on demand” without slumping
• Precise application with long bendable tip
• Natural esthetics and exact shade matching with GrandioSO
• Radiopaque
• Patented NDT®¹ (Non-Dripping Technology) syringes

Presentation
REF 2720 Syringe Kit, 5 × 2 g syringes (A1, A2, A3, A3.5, WO)
REF 2146 Intraoral tips type 41 – 100 pack
REF 9301 Caps Dispenser
Refills (2 × 2 g syringes/16 × 0.25 g caps), each:

<table>
<thead>
<tr>
<th>Shade</th>
<th>2 × 2 g syringes, intraoral tips type 41</th>
<th>16 × 0.25 g caps</th>
</tr>
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<tbody>
<tr>
<td>A1</td>
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<td>REF 2742</td>
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<td>A2</td>
<td>REF 2723</td>
<td>REF 2743</td>
</tr>
<tr>
<td>A3</td>
<td>REF 2724</td>
<td>REF 2744</td>
</tr>
<tr>
<td>A3.5</td>
<td>REF 2725</td>
<td>REF 2745</td>
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<tr>
<td>A4</td>
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<td>B1</td>
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<tr>
<td>C2</td>
<td>REF 2732</td>
<td>REF 2743</td>
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<tr>
<td>I (Incisal)</td>
<td>REF 2733</td>
<td>REF 2734</td>
</tr>
<tr>
<td>Opaque OA2</td>
<td>REF 2734</td>
<td>REF 2744</td>
</tr>
<tr>
<td>BL (Bleach)</td>
<td>REF 2736</td>
<td>REF 2737</td>
</tr>
<tr>
<td>WO (White Opaque)</td>
<td>REF 2737</td>
<td>REF 2748</td>
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<tr>
<td>G5</td>
<td>REF 2727</td>
<td>REF 2727</td>
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<tr>
<td>GrandioSO shade guide REF 2607*</td>
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Technical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Filler content</td>
<td>81% (by weight) 65% (by volume)</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>3.19% (by volume) analogus Watts et al.</td>
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<td>Modulus of Elasticity</td>
<td>10,580 MPa ISO 4049</td>
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<td>Depth of cure</td>
<td>&gt;2.51 mm/20 sec ISO 4049</td>
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<tr>
<td>Radiopacity</td>
<td>250 %Al ISO 4049</td>
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<tr>
<td>Radiopacity WO</td>
<td>500 %AI ISO 4049</td>
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<tr>
<td>Wear rate</td>
<td>48 µm (ACTA method: 200,000 cycles)</td>
</tr>
<tr>
<td>Flexural strength</td>
<td>159 MPa ISO 4049</td>
</tr>
</tbody>
</table>

GrandioSO Flow’s WO shade’s extreme radiopacity of 500% Al provides an incredibly sharp contrast to the dental hard tissue and other restorative materials, making it extremely useful for the further physical treatment of a filling. When used as a cavity liner, it clearly marks the proximity of the pulp. It is highly useful for masking discolored areas, and the WO shade can be used for color effects in the creation of highly esthetic restorations.
GrandioSO Heavy Flow
Highly viscous, light-cured, universal flowable
83% filled Nano-hybrid composite

Indications
Restoration of minimally invasive cavities of all classes
Restoration of small Class I cavities and for extended fissure sealing
Restoration of Class II – V cavities including wedge-shaped
defects and cervical caries
Blocking out of undercuts
Lining or coating of cavities
Repair of restorations and veneers
Cementing of attachment of translucent prostheses
(e.g. all-ceramic crowns etc.)

Advantages
• Strong enough for occlusal surfaces of Class I & II restorations
• Superior physical properties through 83% filler content
• Wear resistance of a hybrid
• No undesirable runoff; increased stability in comparison
to conventional flowables
• Simplified filling of undercuts, approximal boxes
  and paragingival areas
• Ideal for proximal and cervical areas
• Ideal for use with the GrandTEC glass fiber system
• Patented NDT®¹ (Non-Dripping Technology) syringes

Presentation
REF 2680 Syringe Kit 5 × 2 g (A1, A2, A3, A3.5,
WO), shade guide, accessories
REF 2148 Intraoral tips type 46 – 100 pack
REF 9301 Caps Dispenser
Refills (2 × 2 g syringes/16 × 0.25 g caps), each:

Shade | 2 × 2 g syringes | 16 × 0.25 g caps
--- | --- | ---
A1 | REF 2684 | REF 2704
A2 | REF 2685 | REF 2705
A3 | REF 2686 | REF 2706
A3.5 | REF 2687 | REF 2707
A4 | REF 2688 | REF 2708
B1 | REF 2690 | REF 2712
B2 | REF 2691 | 
C2 | REF 2692 | 
Opaque OA2 | REF 2693 | 
I (Incisal) | REF 2694 | 
BL (Bleach) | REF 2695 | 
WO (White Opaque) | REF 2696 | 
GA5 | REF 2689 | 
GrandioSO shade guide | REF 2607* |

*Only Above Shades are Available

Technical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Filler Content</td>
<td>83% (by weight) 68% (by volume)</td>
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<td>Shrinkage</td>
<td>2.96% (by volume) analogous, Watts, et al.</td>
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<td>Flexural Modulus</td>
<td>11,850 MPa ISO 4049</td>
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<td>Depth of Cure</td>
<td>&gt;2.5 mm/20 sec. ISO 4049</td>
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<td>Radiopacity</td>
<td>260 %AI ISO 4049</td>
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<td>Compressive Strength</td>
<td>417 MPa ISO 9917</td>
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<tr>
<td>Wear Rate</td>
<td>40 μm 3 body wear (ACTA 200,000)</td>
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<td>Flexural Strength</td>
<td>159 MPa ISO 4049</td>
</tr>
</tbody>
</table>

The visible difference

Stability comparison on a horizontal plane

Flowability comparison on a vertical plane

¹US Patent No: 8,641,416 B2
**Indications**

Class I to V fillings  
Reconstruction of traumatically affected anteriors  
Facetting of discolored anteriors  
Correction of shape and shade to improve esthetic appearance  
Locking, splinting of loose anteriors  
Repair of veneers  
Core build-up under crowns  
Especially suitable for composite inlays

**Advantages**

- 87% fillers by weight
  - outstanding wear resistance
  - enhanced color stability
  - terrific handling characteristics (great sculptability, non-sticky consistency, no slumping)
- 30-50% less resin compared to standard micro hybrids
  - low shrinkage of only 1.57% (by volume)*
  - excellent polishability
  - improved translucency
  - very high biocompatibility
  - VOCP’s individual cross-contamination prevention packaging for capsules

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**Presentation**

REF 1800 Syringe Kit, 5 x 4 g syringes  
(A1, A2, A3, A3.5, B2), shade guide  
REF 1830 Caps Kit, 50 x 0.25 g Caps  
(A1, A2, A3, A3.5, B2), shade guide  
REF 9301 Caps Dispenser  
Refills (1 x 4 g syringe/20 x 0.25 g caps), each:

<table>
<thead>
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<th>Shade</th>
<th>1 x 4 g syringe</th>
<th>20 x 0.25 g caps</th>
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<tbody>
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<td>D3</td>
<td>REF 1819</td>
<td>REF 1849</td>
</tr>
<tr>
<td>I (Incisal)</td>
<td>REF 1820 Reference</td>
<td>REF 1850 Reference</td>
</tr>
<tr>
<td>Opaque OA2</td>
<td>REF 1821 Reference</td>
<td>REF 1851 Reference</td>
</tr>
<tr>
<td>Opaque OA3.5</td>
<td>REF 1822 Reference</td>
<td>REF 1852 Reference</td>
</tr>
<tr>
<td>BL (Bleach)</td>
<td>REF 1823 Reference</td>
<td>REF 1853 Reference</td>
</tr>
<tr>
<td>Grandio shade guide</td>
<td>REF 1899 Reference</td>
<td></td>
</tr>
</tbody>
</table>

**Technical Data**

- Filler content: 87% by weight  
  71.4% by vol.  
  DIN 13922  
- Shrinkage: 1.57% by vol.  
  University of Manchester, GB  
- Surface hardness (Micro Vickers-hardness): 285 MHV  
  University of Rostock, Germany  
- Wear rate: 14 μm  
  3 body wear (ACTA 200,000)  
- Depth of cure: 3 mm/20 sec.  
  ISO 4049  
- Radiopacity: 250 %Al  
  ISO 4049
Amaris
Nano-reinforced simplified shade composite

Indications
Esthetic restoration of Class III, IV and V cavities in anteriors
Esthetic restoration of Class I, III and V cavities in posteriors
Reconstruction of traumatized damaged anteriors
Direct and indirect composite veneers, facing of discolored anteriors
Correction of shade and shape for improved esthetics
Repair of highly esthetic ceramic restorations
Splinting, interlocking of teeth

Advantages
- Easy to polish for high luster gloss anterior
- Nano-reinforced pre-polymerized ISO fillers for low shrinkage and excellent wear for posterior
- Non-sticky consistency makes shaping easy
- Non-sensitive to ambient light guarantees at least 8 minutes working time
- Simply intuitive approach: become an artist in less than 10 minutes
- Natural fluorescence and high color stability
- Patented NDT®¹ (Non-Dripping Technology) syringes

Presentation
REF 1930 Syringe Kit, 8 x 4 g syringes (O1, O2, O3, O4, O5, TL, TN, TD), 2 x 1.8 g syringes Amaris Flow (HT, HO), accessories
REF 1950 Caps Kit, 16 x 0.25 g caps (each O1, O2, O3, O4, O5, TL, TN, TD), 2 x 1.8 g syringes Amaris Flow (HT, HO), accessories
REF 1949 Caps Starter Kit, 4 x 0.25 g caps (each O1, O2, O3, O4, O5), 2 x 1.8 g syringes Amaris Flow (HT, HO), accessories
REF 2144 intraoral tips type 44 – 100 pack
REF 9301 Caps Dispenser
Refills (1 x 4 g syringe / 16 x 0.25 g caps), each:

<table>
<thead>
<tr>
<th>Shade</th>
<th>1 x 4 g syringe</th>
<th>16 x 0.25 g caps</th>
</tr>
</thead>
<tbody>
<tr>
<td>O1</td>
<td>REF 1933</td>
<td>REF 1953</td>
</tr>
<tr>
<td>O2</td>
<td>REF 1934</td>
<td>REF 1954</td>
</tr>
<tr>
<td>O3</td>
<td>REF 1935</td>
<td>REF 1955</td>
</tr>
<tr>
<td>O4</td>
<td>REF 1936</td>
<td>REF 1956</td>
</tr>
<tr>
<td>O5</td>
<td>REF 1937</td>
<td>REF 1957</td>
</tr>
<tr>
<td>O Bleach</td>
<td>REF 1938</td>
<td>REF 1958</td>
</tr>
<tr>
<td>TL (Translucent Light)</td>
<td>REF 1940</td>
<td>REF 1960</td>
</tr>
<tr>
<td>TN (Translucent Neutral)</td>
<td>REF 1941</td>
<td>REF 1961</td>
</tr>
<tr>
<td>TD (Translucent Dark)</td>
<td>REF 1942</td>
<td>REF 1962</td>
</tr>
</tbody>
</table>

Refills (2 x 1.8 g syringe):

Technical Data
- Filler content 80% (by weight)
- Shrinkage 2.0% (by volume)
- ACTA Wear Rate (200,000 cycles) 45 μm
- Flexural Strength (ISO 4049) 120 MPa
- Compressive Strength 375 MPa
- Diametral Tensile Strength (DTS) 51 MPa
- Radiopacity (ISO 4049) 210 %Al
- Translucent shades (10 sec.) > 2.5 mm
- Opaque shades (40 sec.) > 2.0 mm

Pictures are a courtesy of Joyce L. Bassett, DDS, Scottsdale, AZ

¹US Patent No: 8,641,416 B2
Amaris Gingiva
Light-cured, gingiva colored restorative system

Indications
Class V restorations (cervical caries, root erosion, V-shaped defects) especially in cases of retreating gingiva, e.g. as a result of periodontal disease
Covering of exposed discolored hypersensitive necks of teeth, especially in the visible anterior area
Highly esthetic correction of malpositions of teeth, for direct veneers, facings and corrections of the red-white esthetics

Advantages
• Highly esthetic chairside composite restorative which can be adapted to a large variety of gingiva colors
• One basic color and three mixable opaquers can reproduce almost all gingiva colors
• Cervical areas exposed after gingiva recession and cervical V-shaped defects can be restored esthetically and functionally
• Gingiva colors for chairside use
• Advanced composite technique: Amaris® Know-How in gingiva colors for highly esthetic restorations beyond the gingiva margin
• Patented NDT®¹ (Non-Drip Technology) Syringe technology

Presentation
REF 1970 Kit, 3 × 1.2 g opaque in the colors white, light and dark, 1 × 4 g basic color “nature”, accessories
REF 1971 Refill, 1 × 4 g color “nature”
REF 2147 intraoral tips type 45 – 100 pack

Technical Data
<table>
<thead>
<tr>
<th></th>
<th>80% w/w</th>
<th>DIN 51081</th>
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</thead>
<tbody>
<tr>
<td>Filler content</td>
<td>80%</td>
<td>(by weight)</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>2%</td>
<td>(by volume)</td>
</tr>
<tr>
<td>University of Manchester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-Point flexural strength</td>
<td>120 MPa</td>
<td>ISO 4049</td>
</tr>
<tr>
<td>Surface hardness (Micro-Vickers Hardness)</td>
<td>99 MHV</td>
<td>University of Rostock</td>
</tr>
<tr>
<td>Depth of cure (500 mW/cm²)</td>
<td>&gt; 2 mm / 40 s</td>
<td>ISO 4049</td>
</tr>
<tr>
<td>Radiopacity</td>
<td>210 %Al</td>
<td>ISO 4049</td>
</tr>
<tr>
<td>Water solubility</td>
<td>&lt;1 µg/mm²</td>
<td>ISO 4049</td>
</tr>
<tr>
<td>Water absorption</td>
<td>18.4 µg/mm³</td>
<td>ISO 4049</td>
</tr>
</tbody>
</table>

¹US Patent No: 8,641,416 B2
Admira Fusion®
Universal Nano-ORMOCER® restorative material

**Indications**
- Class I to V restorations
- Base in Class I and II cavities
- Reconstruction of traumatically damaged anteriors
- Facetting of discolored anteriors
- Correction of shape and shade for improved esthetic appearance
- Locking, splinting of loose anteriors
- Repairing veneers, small enamel defects and temporary C&B materials
- Extended fissure sealing
- Restoration of deciduous teeth
- Core build-up
- Composite inlays

**Advantages**
- The world’s first all ceramic-based direct universal restorative material
- Pure silicate technology: fillers and matrix are based purely on silicon oxide
- No traditional monomers (such as BisGMA [BPA], TEGDMA, UDMA, HEMA, etc.) for superior biocompatibility
- Nano-ORMOCER® technology reduces shrinkage and shrinkage stress by up to 50% compared to composites and leads to outstanding shade stability
- Non-sticky consistency for easy handling
- Perfect balance of translucency and opacity for natural looking restorations
- Easy to polish to a high shine luster
- High 84% fill rate for high wear resistance
- Compatible with all conventional bonding agents
- VOCO’s individual cross-contamination prevention packaging for capsules

![Nano-ORMOCER® Technology](image)

**Presentation**
- REF 2750 Syringe Kit, 5 x 3 g syringes (A1, A2, A3, A3.5, Admira Fusion x-tra), shade guide
- REF 2780 Caps Kit, 75 x 0.2 g caps (15 each of A1, A2, A3, A3.5, Admira Fusion x-tra), shade guide
- REF 9301 Caps Dispenser

**Refills (1 x 3 g syringe / 15 x 0.2 g caps), each:**

<table>
<thead>
<tr>
<th>Shade</th>
<th>1 x 3 g syringe</th>
<th>15 x 0.2 g caps</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>REF 2754</td>
<td>REF 2782</td>
</tr>
<tr>
<td>A2</td>
<td>REF 2755</td>
<td>REF 2783</td>
</tr>
<tr>
<td>A3</td>
<td>REF 2756</td>
<td>REF 2784</td>
</tr>
<tr>
<td>A3.5</td>
<td>REF 2758</td>
<td>REF 2786</td>
</tr>
<tr>
<td>A4</td>
<td>REF 2759</td>
<td>REF 2787</td>
</tr>
<tr>
<td>B1</td>
<td>REF 2762</td>
<td>REF 2790</td>
</tr>
<tr>
<td>B2</td>
<td>REF 2763</td>
<td>REF 2791</td>
</tr>
<tr>
<td>B3</td>
<td>REF 2764</td>
<td>REF 2792</td>
</tr>
<tr>
<td>C2</td>
<td>REF 2766</td>
<td>REF 2794</td>
</tr>
<tr>
<td>D3</td>
<td>REF 2768</td>
<td>REF 2796</td>
</tr>
<tr>
<td>Op2</td>
<td>REF 2770</td>
<td>REF 2798</td>
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<tr>
<td>Op2</td>
<td>REF 2771</td>
<td>REF 2799</td>
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<tr>
<td>Op2</td>
<td>REF 2772</td>
<td>REF 2800</td>
</tr>
<tr>
<td>Op2</td>
<td>REF 2773</td>
<td>REF 2801</td>
</tr>
<tr>
<td>I (Incisal)</td>
<td>REF 2776</td>
<td>REF 2804</td>
</tr>
<tr>
<td>Mixed*</td>
<td>n/a</td>
<td>REF 2806</td>
</tr>
<tr>
<td>G3.25</td>
<td>REF 2757</td>
<td>REF 2785</td>
</tr>
<tr>
<td>G5</td>
<td>REF 2760</td>
<td>REF 2788</td>
</tr>
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</table>

**Admira Fusion Shade Guide**
- REF 2752

**Technical Data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shrinkage</td>
<td>1.25% (by volume)</td>
</tr>
<tr>
<td>Shrinkage stress</td>
<td>3.71 MPa analogous Watts et al.</td>
</tr>
<tr>
<td>Filler content</td>
<td>84% (by weight)</td>
</tr>
<tr>
<td>Depth of Cure</td>
<td>2.71 mm / 20 s</td>
</tr>
<tr>
<td>Radiopacity</td>
<td>305 %AI</td>
</tr>
<tr>
<td>Modulus of elasticity</td>
<td>9,800 MPa</td>
</tr>
<tr>
<td>Thermal expansion coefficient</td>
<td>40.3 *10^-6 / K</td>
</tr>
<tr>
<td>3-Point flexural strength</td>
<td>132 MPa</td>
</tr>
<tr>
<td>Edge stability</td>
<td>171.9 N</td>
</tr>
<tr>
<td>Compressive strength</td>
<td>307 MPa analogous ISO 9917</td>
</tr>
<tr>
<td>Water uptake</td>
<td>13.4 μg / mm³</td>
</tr>
<tr>
<td>Water solubility</td>
<td>≤ 0.1 μg / mm³</td>
</tr>
<tr>
<td>Resistance to ambient light</td>
<td>198 s</td>
</tr>
<tr>
<td>Tensile bond strength on enamel (with Futurabond M+: Self-Etch mode)</td>
<td>30.04 MPa</td>
</tr>
<tr>
<td>Tensile bond strength on dentin (with Futurabond M+: Self-Etch mode)</td>
<td>23.82 MPa</td>
</tr>
</tbody>
</table>

*3 each of B1, C2, D3, BL, Incisal
Admira Fusion® Flow
Flowable light-cured Nano-ORMOCER® direct restorative material

Indications
Filling of small cavities and extended fissure sealing
Blocking out undercuts
Lining or coating cavities
Fillings of Class III-V cavities
Repairing fillings, veneers and temporary restorations
Luting translucent prosthetic pieces
Locking/splinting of loose teeth

Advantages
• The world’s first all ceramic-based direct flowable restorative material
• Pure Silicate Technology: Fillers and matrix are based purely on silicon oxide
• No traditional monomers (such as BisGMA [BPA], TEGDMA, UDMA, HEMA, etc.) for superior biocompatibility
• Nano-ORMOCER® technology reduces shrinkage (2.75% by volume) and shrinkage stress to the level of universal composites
• Inert for outstanding shade stability
• High fill rate of 74% by weight for better wear
• Compatible with conventional adhesives
• Easy to polish to a high shine luster
• Excellent wettability
• Thixotropic material that will “flow on demand” without slumping
• Non-Dripping Technology syringe (NDT®)
• Radiopaque (240% Al)
• 12 shades for esthetic restorations – perfectly matching the shade range of the packable version, Admira Fusion

Presentation
REF 2816 Syringe Kit 5 x 2 g syringes (A1, A2, A3, A3.5, WO), shade guide, accessories
REF 2146 intraoral tips type 41 – 100 pack

<table>
<thead>
<tr>
<th>Shade</th>
<th>2 x 2 g syringes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>REF 2818</td>
</tr>
<tr>
<td>A2</td>
<td>REF 2819</td>
</tr>
<tr>
<td>A3</td>
<td>REF 2820</td>
</tr>
<tr>
<td>A3.5</td>
<td>REF 2821</td>
</tr>
<tr>
<td>A4</td>
<td>REF 2822</td>
</tr>
<tr>
<td>B1</td>
<td>REF 2824</td>
</tr>
<tr>
<td>B2</td>
<td>REF 2825</td>
</tr>
<tr>
<td>C2</td>
<td>REF 2826</td>
</tr>
<tr>
<td>I (Incisal)</td>
<td>REF 2828</td>
</tr>
<tr>
<td>Opaque OA2</td>
<td>REF 2829</td>
</tr>
<tr>
<td>BL (Bleach)</td>
<td>REF 2831</td>
</tr>
<tr>
<td>WO (White Opaque)</td>
<td>REF 2832</td>
</tr>
<tr>
<td>Admira Fusion Shade Guide</td>
<td>REF 2752*</td>
</tr>
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*Only Above Shades are Available

Technical Data
<table>
<thead>
<tr>
<th></th>
<th>2.75% (by volume) analogous</th>
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</thead>
<tbody>
<tr>
<td>Shrinkage</td>
<td>7.27 MPa analogous</td>
</tr>
<tr>
<td>Shrinkage stress</td>
<td>74% (by weight)</td>
</tr>
<tr>
<td>Filler content</td>
<td>2.66 mm / 20 s</td>
</tr>
<tr>
<td>Depth of Cure</td>
<td>240 %Al</td>
</tr>
<tr>
<td>Radiopacity</td>
<td>5,771 MPa</td>
</tr>
<tr>
<td>Modulus of elasticity</td>
<td>281 MPa analogous</td>
</tr>
<tr>
<td>Compressive strength</td>
<td>12 μg / mm³</td>
</tr>
<tr>
<td>Water uptake</td>
<td>&lt; 0.1 μg / mm³</td>
</tr>
<tr>
<td>Water solubility</td>
<td>198 s</td>
</tr>
<tr>
<td>Resistance to ambient light</td>
<td>13.4 μg / mm³</td>
</tr>
<tr>
<td>Surface hardness</td>
<td>66 MPa</td>
</tr>
<tr>
<td>Diametrical tensile strength</td>
<td>20–40 sec</td>
</tr>
</tbody>
</table>
Admira Fusion® x-tra
Single-shade Omni-chromatic Nano-ORMOCER Restorative

Indications
Class I and II posterior restorations
Base in Class I and II cavities
Class V restorations
Locking, splinting of loose anteriors
Repairing veneers, small enamel defects and temporary C&B materials
Extended fissure sealing
Restoration of deciduous teeth
Core build-up

Advantages
• Only one omni-chromatic shade: no guess work and no more wasted shades
• 4 mm depth of cure – saves time
• Easy to polish, highly stain resistant with a high gloss
• Exceptional longevity with low initial shrinkage of only 1.25% by volume
• No traditional monomers (such as BisGMA [BPA], TEGDMA, UDMA, HEMA, etc.) for superior biocompatibility
• Based on innovative Nano-ORMOCER Technology with enhanced physical properties
• Compatible with all conventional bonding agents
• VOCO’s individual cross-contamination prevention packaging for capsules

Presentation
REF 2810 Pack 3 g syringe – universal
REF 2811 Pack 15 × 0.2 g caps – universal
REF 9301 Caps Dispenser

Technical Data
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Shrinkage</td>
<td>1.25% (by volume)</td>
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<tr>
<td>Shrinkage stress</td>
<td>3.87 MPa analogous</td>
</tr>
<tr>
<td>Filler content</td>
<td>84% (by weight)</td>
</tr>
<tr>
<td>Depth of Cure</td>
<td>4.05 mm / 20 s</td>
</tr>
<tr>
<td>Radiopacity</td>
<td>296 %Al</td>
</tr>
<tr>
<td>Modulus of elasticity</td>
<td>10,090 MPa</td>
</tr>
<tr>
<td>3-Point-flexural strength</td>
<td>136 MPa</td>
</tr>
<tr>
<td>Compressive strength</td>
<td>307 MPa analogous ISO 9917</td>
</tr>
<tr>
<td>Water uptake</td>
<td>13.4 μg / mm²</td>
</tr>
<tr>
<td>Water solubility</td>
<td>≤ 0.1 μg / mm²</td>
</tr>
</tbody>
</table>

Admira Fusion x-tra’s single universal shade matches:

Source: Internal VOCO data 2019

*(Bleach)*
Admira Fusion® x-base
Nano-ORMOCER® flowable base restorative material

Indications
Base restorative in Class I and II fillings
As a base/liner for Class I and II fillings
Small, non occlusion-bearing Class I fillings
Class III and V fillings
Extended fissure sealing
Blockout of undercuts
Repair of small enamel defects
Repair small defects in esthetic indirect restorations
Repair of provisional C&B materials
Core build-up

Advantages
• All ceramic-based nano-ORMOCER® Technology
• 4 mm depth of cure for ease and speed
• High fill rate of 72% by weight for better wear
• Extremely low polymerization shrinkage of 2.5% by volume
• Particularly low shrinkage stress with optimal marginal integrity
• Highly biocompatible and extremely color-stable
• Ideal flowability for excellent adaptation
• Outstanding handling, even in difficult-to-access areas
• Available in the patented Non-Dripping Technology (NDT®) syringe
• Compatible with all conventional adhesives
• Compatible with all conventional resin-based and ORMOCER®-based restorative materials

Presentation
REF 2812 Pack 2 x 2 g syringes, accessories
REF 2148 intraoral tips type 46 – 100 pack

Technical Data
<table>
<thead>
<tr>
<th>Property</th>
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<tbody>
<tr>
<td>Shrinkage</td>
<td>2.5% (by vol.) analogous Watts et al.</td>
</tr>
<tr>
<td>Filler content</td>
<td>72.0% (by weight)</td>
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<tr>
<td>Depth of Cure</td>
<td>4.49 mm/20 s</td>
</tr>
<tr>
<td>Radiopacity</td>
<td>250 %Al</td>
</tr>
<tr>
<td>Modulus of elasticity</td>
<td>5,698 MPa</td>
</tr>
<tr>
<td>3-Point flexural strength</td>
<td>104 MPa</td>
</tr>
<tr>
<td>Compressive strength</td>
<td>256 MPa analogous ISO 9917</td>
</tr>
<tr>
<td>Water absorption</td>
<td>16.36 μg/mm³</td>
</tr>
<tr>
<td>Water solubility</td>
<td>&lt;0.1 μg/mm³</td>
</tr>
<tr>
<td>Thermal expansion coefficient</td>
<td>54.7 x 10⁻⁶ K⁻¹</td>
</tr>
</tbody>
</table>

¹US Patent No: 8,641,416 B2
x-tra base®
Fast bulk-fill flowable posterior composite

Indications
Base for Class I and II cavities
Cavity liner under direct restorative materials in Class I and II cavities
Small, non-occlusal stress-bearing Class I restorations according to minimally invasive filling therapy
Class III and V restorations
Extended fissure sealing
Undercut blockout
Repair of small enamel defects
Repair of small defects in esthetic indirect restorations
Repair of temporary C&B materials
Core build-up

Advantages
• 4 mm depth of cure in 10 sec saves time*
• Low shrinkage stress allows bulk-fill speed
• High strength makes it suitable for open and closed sandwich technique
• Smart self-leveling properties for excellent wall adaptation without slumping out of maxillary restorations
• High radiopacity (350% Al) for easy X-ray identification
• Available in patented NDT®¹ (Non-Dripping Technology) syringes or unit dose caps with extra long bendable needle tip
• Available in shades A2 and Universal

Presentation
REF 1790 Pack 2 x 2 g syringe, shade Universal
REF 1791 Pack 2 x 2 g syringe, shade A2
REF 1794 Pack 16 x 0.25 g caps, shade Universal
REF 1795 Pack 16 x 0.25 g caps, shade A2
REF 2148 intraoral tips type 46 – 100 pack
REF 9301 Caps Dispenser

Technical Data
<table>
<thead>
<tr>
<th>Filler Content</th>
<th>75% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shrinkage Stress</td>
<td>5.93 MPa</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>2.54% (by volume)</td>
</tr>
<tr>
<td>Radiopacity</td>
<td>350% Al</td>
</tr>
<tr>
<td>Surface Hardness</td>
<td>100 MHV</td>
</tr>
<tr>
<td>Wear (ACTA)</td>
<td>46.1 μm</td>
</tr>
<tr>
<td>Flexural Strength after TC</td>
<td>141 MPa</td>
</tr>
</tbody>
</table>

¹US Patent No: 8,641,416 B2  *Universal shade
Indications
Class I and II restorations
Core build-up

Advantages
• **x-tra fast**
  - 4 mm cure in 10 sec
  - Use with Futurabond NR/DC/U SingleDose to bond, fill and cure 4 mm in less than 60 sec.
• **x-tra durable**
  - low shrinkage of 1.7% by volume through multi-hybrid filler technology
  - 86% filled by weight for great wear resistance
• **x-tra easy**
  - one universal shade fits all. High translucency provides excellent chameleon effect for good esthetics
  - highly radiopaque (330% Al)
  - perfect for fast core build-ups
• **x-tra safe**
  - VOCO’s individual cross-contamination prevention packaging for capsules

Technical Data
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Filler Content</td>
<td>86% by weight</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>1.7% (by volume)</td>
</tr>
<tr>
<td>Radiopacity</td>
<td>330% Al</td>
</tr>
<tr>
<td>Surface Hardness</td>
<td>142 MHV</td>
</tr>
<tr>
<td>Wear (ACTA)</td>
<td>43 μm</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>145 MPa</td>
</tr>
</tbody>
</table>

Clinical Case
Source: Dr. Ulrich Sachse, Kiel
VisCalor® bulk
Thermo-viscous bulk-fill composite

Indications
Class I and II posterior restorations
Base in Class I and II cavities
Class V restorations
Locking, splinting of loose teeth
Repairing veneers, enamel defects and temporary C&B-materials
Extended fissure sealing
Restoration of deciduous teeth
Core build-up

Advantages
- Thermo-viscous: Initially flowable for optimal adaptability, then immediately sculptable. This 2-in-1 material approach (flowable and packable) saves time
- Bulk-fill with 4mm depth of cure speeds up the procedure
- Easy-Access-Capsule with long and narrow tip for hard-to-reach areas and bubble-free application
- VOCO’s new TVT polymer technology for:
  - fast viscosity change
  - the ability to flow
  - low shrinkage and excellent wear
  - Monoblock concept: one highly-filled material from bottom to top
- Safe to use. VisCalor bulk’s temperature increase during application and polymerization stays within the normal range of pulpal physiology*  

Clinical Case
Initial situation
Minimally invasive prepared cavity at tooth 5
Filling the cavity with VisCalor bulk
Restoration two months after filling

Caps Warmer
Preheating device for composite caps

Indications
Device for warming composite caps

Advantages
- Composite warming increases the viscosity of a composite, making the application easier
- Warms 2 finishing instruments, making it easier to sculpt the composite
- Holds 4 spare composite caps
- 3 heat levels for different viscosities
- No effect on physical properties of VOCO materials

Presentation
REF 9001 Caps Warmer
REF 9003 Caps Warmer Tray

Technical Data
Shrinkage 1.44% (by volume) analogous Watts
Shrinkage stress 4.6 MPa analogous Watts
Filler content 83% (by weight) DIN 51081
Radiopacity 310 %Al ISO 4049
3-point flexural strength 164 MPa ISO 4049
Compressive strength 335 MPa analogous ISO 9917
Water absorption 11 μg/mm² ISO 4049
Water solubility ≤ 0.1 μg/mm² ISO 4049
Abrasion 39 μm ACTA-3-body
Diametral tensile strength 64 MPa
Thermal expansion coefficient α 33·10⁻⁶ / K⁻¹ Fraunhofer Institute Würzburg
Surface hardness 147 MHV University of Rostock

* Braun A; Temperature development inside the tooth during application of a thermo-viscous bulk-fill material; Report to VOCO, University of Aachen, 2019.
VisCalor®
Universal Thermo-viscous composite

**Indications**
- Class I to V restorations
- Base fill (restoration base) in Class I and II cavities
- Reconstruction of anterior teeth damaged by trauma
- Veneering discolored anterior teeth
- Corrections in shape and shade to improve esthetics
- Interlocking, splinting of loose teeth
- Repairing of veneers, enamel defects, and temporary C&B materials
- Extended fissure sealing
- Restoration of deciduous teeth
- Core build-up
- Composite inlays

**Advantages**
- Thermo-viscous: Initially flowable for optimal adaptability, then immediately sculptable
- Easy-Access-Capsule with long and narrow tip for hard-to-reach areas and bubble-free application
- 2-in-1 material (flowable and packable) saves time
- Highly filled for low shrinkage and high strength
- Excellent esthetics with high gloss and extended color stability

**Presentation**
<table>
<thead>
<tr>
<th>Shade</th>
<th>16 x 0.25 g caps</th>
<th>Shade</th>
<th>16 x 0.25 g caps</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>REF 6113</td>
<td>B1</td>
<td>REF 6119</td>
</tr>
<tr>
<td>A2</td>
<td>REF 6114</td>
<td>B2</td>
<td>REF 6120</td>
</tr>
<tr>
<td>A3</td>
<td>REF 6115</td>
<td>Incisal</td>
<td>REF 6121</td>
</tr>
<tr>
<td>GA3.25</td>
<td>REF 6116</td>
<td>OA2</td>
<td>REF 6122</td>
</tr>
<tr>
<td>A3.5</td>
<td>REF 6117</td>
<td>BL</td>
<td>REF 6118</td>
</tr>
</tbody>
</table>

**Technical Data**
- Filler Content: 83% (by weight)
- Compressive strength: 331 MPa
- Skrinkage stress: 4.1 MPa
- Water uptake: 13 μg/mm³
- Radiopacity: 285 %AI
- Flexural strength: 158 MPa
- Volumetric shrinkage: 1.41%
- Water solubility: <0.1 μg/mm³

Source: Dr. Walter Denner, Fulda / Germany
**VisCalor® Dispenser**

**Preheating dispenser for VOCO composite caps**

**Indications**

Heating and application of highly filled composites in caps

**Advantages**

- Increased efficiency – rapid warming and immediate application in one device
- Homogeneous warming thanks to near-infrared technology
- Thoughtful design and proven shape for filling molar cavities
- Two customized programs (VisCalor/VisCalor bulk and additional VOCO composites)

**Presentation**

REF 9143 VisCalor Dispenser – Preheating device
REF 9144 Changeable tops – 2 pcs.
REF 9145 Protective sleeves – 100 pack

---

**Twinky Star**

**Light-cured colored compomer filling material with glitter effect for deciduous teeth**

**Indications**

Filling of deciduous teeth

**Advantages**

- 8 attractive colors
- Fast and easy direct application
- Excellent polishability
- Color guide with original material

**Technical Data**

- Polymerization shrinkage: 2% (by volume) (DIN 13922)
- Filler rate: 77.8% (by weight) (ISO 4049)
- Transverse strength: 116 MPa (ISO 9917)
- Compressive strength: 316 MPa (ISO 9917)
- Wear: 14.6 μm (ACTA 250,000 cycles)

**Presentation**

REF 1680 Kit 40 x 0.25 g caps in eight different colors, color guide
REF 9301 Caps Dispenser
Refill pack 25 x 0.25 g caps each:

<table>
<thead>
<tr>
<th>Shade</th>
<th>Shade</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Gold”</td>
<td>“Green”</td>
</tr>
<tr>
<td>“Silver”</td>
<td>“Orange”</td>
</tr>
<tr>
<td>“Blue”</td>
<td>“Lemon”</td>
</tr>
<tr>
<td>“Pink”</td>
<td>“Berry”</td>
</tr>
</tbody>
</table>

**Shade Guide**

REF 1689
**Celalux 3**

*High intensity, lightweight, cordless LED curing light*

**Indications**

Curing of all light-cured dental materials whose polymerization is activated within a wavelength range of 450–480 nm

**Advantages**

- Only 2.5 oz weight – more user-friendly
- Vibration after 10 and 20 seconds – no more annoying beeps make it more patient-friendly
- High light intensity at 1,300 mW/cm² – ensures high depth of cure
- Wavelength of 450-480 nm – allows curing of virtually all modern materials
- Includes spare battery to eliminate unnecessary down time

**Presentation**

| REF 9090  | Celalux 3 (handpiece, battery charger, power cord with interchangeable main adapters, 2 lithium polymer batteries, 8 mm light guide, rubber shield, operating instructions) |
| REF 9091  | Light guide 8 mm, autoclavable |
| REF 9092  | Device base (Battery) |
| REF 9093  | Rubber shield, 5 pcs. |

**Technical Data**

| Light intensity (output) | 1,300 mW/cm² |
| Wavelength range         | 450–480 nm   |
| Total Operation Time     | > 45 cycles of 20 seconds w/ fully charged battery |
| Operating voltage        | 100–240 V AC 50/60 Hz |
| Handpiece length         | Ø 12.6 mm x L 210 mm |
| Handpiece weight         | 70 g (incl. device base and light guide) |

**Dimanto**

*One-step diamond polisher for pre-polishing and high gloss polishing of resin-based restoratives*

**Indications**

Pre-polishing and high gloss polishing of finished composite restorations  

**Advantages**

- Pre-polish to high gloss with one polisher
- Designed and precisely manufactured for easy insertion into your contra-angle handpiece
- Five diamond-impregnated silicone polishers to meet all your resin-based restorative polishing needs
- Use wet or dry; no polishing paste needed
- Autoclavable

**Presentation**

| REF 2380  | Kit 5 pcs. mixed (one each of small point, large point, small cup, large cup, lens) |
| REF 2381  | Small point (10 pcs.) |
| REF 2382  | Large point (10 pcs.) |
| REF 2383  | Small cup (10 pcs.) |
| REF 2384  | Large cup (10 pcs.) |
| REF 2385  | Lens (10 pcs.) |
GrandTEC
Resin-impregnated, light-cured glass fiber-reinforced strands for use in the dental adhesive technique

Indications
For the reinforcement and stabilization of teeth in the dental adhesive technique

Advantages
- Three times the reinforcement strength compared to polyethylene materials
- The ideal companion for the stabilization of teeth after orthodontic or periodontal therapy
- The perfect reinforcement in the fabrication of crowns and bridges
- For the temporary treatment of missing teeth; can also be used in the osseointegration process of an implant and in trauma therapy
- Compatible with all light-curing bonds and composites in direct and indirect restorations
- Does not rebound, unravel or fall apart when cut or adapted
- Safe and biocompatible
- No special gloves or tools needed

Presentation
REF 1168 5 x glass fiber strands 55 mm each

Technical Data

<table>
<thead>
<tr>
<th></th>
<th>3-point Flexural Strength (2 x 2) (in combination with Grandio Flow)</th>
<th>Modulus of Elasticity (2 x 2) (in combination with Grandio Flow)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>655 MPa analogous ISO 4049</td>
<td>13,600 MPa derived from flexural strength test</td>
</tr>
</tbody>
</table>

The adjacent photo shows a section from a GrandTEC glass fiber, bonded with Grandio Flow. The strong cohesion between the impregnated glass fiber and the flow composite are impressively documented here. The E-modulus of the test specimen achieved a value of more than 13 MPa; the transverse strength is 5x higher than with composites without the additional use of GrandTec glass fiber.

The adjacent enlargement shows the homogeneous progression of the densely packed glass fibers with GrandTEC.
**Ionolux®**

*Light-cured resin-modified glass ionomer restorative material*

### Indications

- Class III and V restorations, primarily cervical fillings and root caries
- Restoration of deciduous teeth
- Small Class I restorations
- Temporary restorations
- Core build-ups
- Linings

### Advantages

- Composite-like esthetics
- Light-curing for fast finish
- Immediately packable after application
- Does not stick to the instrument, easy to shape
- Excellent translucency for better esthetic results
- High fluoride release minimizes secondary caries
- Highly radiopaque
- No dentin conditioner or adhesive needed

### Technical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shear bond strength to dentin</td>
<td>8.7 MPa</td>
<td>ISO/TS 11</td>
</tr>
<tr>
<td>Shear bond strength to enamel</td>
<td>8.7 MPa</td>
<td>ISO/TS 11</td>
</tr>
<tr>
<td>3-Point flexural strength</td>
<td>60.7 MPa</td>
<td>ISO 9917-2</td>
</tr>
<tr>
<td>Compressive strength</td>
<td>219.6 MPa</td>
<td>analogue</td>
</tr>
<tr>
<td>Radiopacity</td>
<td>250 %Al</td>
<td>ISO 9917-1</td>
</tr>
<tr>
<td>Depth of cure (500 mW/cm²)</td>
<td>2 mm/20 s</td>
<td>ISO 4049</td>
</tr>
<tr>
<td>Working time</td>
<td>&gt; 3 min</td>
<td>ISO 9</td>
</tr>
</tbody>
</table>

### Presentation

- REF 2115 Kit 50 application capsules (10 × A1, 30 × A2, 10 × A3)
- REF 2117 Pack 20 application capsules A1
- REF 2118 Pack 20 application capsules A2
- REF 2119 Pack 20 application capsules A3
- REF 2120 Pack 20 application capsules A3.5
- REF 2121 Pack 20 application capsules B1
- REF 2122 Bulk Pack 150 Application capsules A2
- REF 2123 Bulk Pack 150 Application capsules A3
- REF 2331 1 AC Applicator Type 1
- REF 2334 1 AC Applicator Type 2
- REF 9050 GIC Mixing Device

### Clinical Case 1

**Tooth 20 with cervical defect**

*Source: Dr. Isma Goltz, Bremen / Germany*

**Tooth 20 immediately after treatment**

### Clinical Case 2

**Teeth 3, 4 after excavation**

*Source: Prof. Hervé Tassery, PU-PH, Faculty of Odontology, University of Marseille / France*

**Subsequent treatment with Ionolux**

### Non-Stick Handling
**IonoStar® Plus**

**Fast-setting glass ionomer restorative material**

### Indications
- Restorations of non-occlusal bearing Class I cavities
- Semi-permanent restorations of Class I and II cavities
- Restorations of cervical lesions, Class V cavities, root caries
- Restorations of Class III cavities
- Restoration of deciduous teeth
- Base/Liner
- Core build-up
- Temporary restorations
- Extended fissure sealing

### Advantages
- Fast set time saves valuable chair time
- Does not stick to instrument for ease of application
- Two (2) stage consistency for easy adaptation, yet still packable
- Perfect wetting behavior for excellent marginal adaptation
- High translucency for better esthetic results
- Tooth-like fluorescence for better esthetic results
- Excellent physical properties support long-lasting restorations
- High fluoride release minimizes secondary caries

### Presentation

<table>
<thead>
<tr>
<th>REF</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2540</td>
<td>Kit 50 application capsules (10 × A1, 30 × A2, 10 × A3)</td>
</tr>
<tr>
<td>2548</td>
<td>Pack 20 application capsules A1</td>
</tr>
<tr>
<td>2543</td>
<td>Pack 20 application capsules A2</td>
</tr>
<tr>
<td>2544</td>
<td>Pack 20 application capsules A3</td>
</tr>
<tr>
<td>2545</td>
<td>Pack 20 application capsules A3.5</td>
</tr>
<tr>
<td>2546</td>
<td>Bulk Pack 150 Application capsules A2</td>
</tr>
<tr>
<td>2547</td>
<td>Bulk Pack 150 Application capsules A3</td>
</tr>
<tr>
<td>2331</td>
<td>1 AC Applicator Type 1</td>
</tr>
<tr>
<td>2334</td>
<td>1 AC Applicator Type 2</td>
</tr>
<tr>
<td>9050</td>
<td>GIC Mixing Device</td>
</tr>
</tbody>
</table>

### Technical Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>245 MPa</td>
<td>ISO 9917-1</td>
</tr>
<tr>
<td>Radiopacity</td>
<td>230 %Al</td>
<td>ISO 9917-1</td>
</tr>
<tr>
<td>Mixing time</td>
<td>10 s</td>
<td>ISO 9917-1</td>
</tr>
<tr>
<td>Setting time</td>
<td>60 s</td>
<td>ISO 9917-1</td>
</tr>
<tr>
<td>Intraoral setting time</td>
<td>120 s</td>
<td>ISO 991</td>
</tr>
</tbody>
</table>

### Fluorescence

- Glass ionomer material without fluorescence
- IonoStar Plus

### Non-Stick Handling
IonoStar® Molar
Glass ionomer restorative material

Indications
Restorations of non-occlusal bearing Class I cavities
Semi-permanent restorations of Class I and II cavities
Restorations of cervical lesions, Class V cavities, root caries
Restorations of Class III cavities
Restoration of deciduous teeth
Base/Liner
Core build-up
Temporary restorations

Advantages
- Does not stick to instrument for ease of application
- Adjustable consistency so you can pick your preference
- Perfect wetting behavior for excellent marginal adaptation
- Immediately packable; can be shaped immediately after application and remains stable
- High translucency enables better esthetic results
- Excellent physical properties support long-lasting restorations
- High fluoride release that minimizes secondary caries

Presentation
- REF 2520 Kit 50 application capsules
  (10 × A1, 30 × A2, 10 × A3)
- REF 2524 Pack 20 application capsules A1
- REF 2525 Pack 20 application capsules A2
- REF 2526 Pack 20 application capsules A3
- REF 2522 Intro Kit 150 application capsules A2*
- REF 2523 Intro Kit 150 application capsules A3*
- REF 2532 Bulk Pack 150 application capsules A2
- REF 2533 Bulk Pack 150 application capsules A3
- REF 2331 1 AC Applicator Type 1
- REF 2334 1 AC Applicator Type 2
- REF 9050 GIC Mixing Device

Technical Data
- Compressive strength: 275 MPa ISO 9917-1
- Radiopacity: 250 %Al ISO 9917-1
- Mixing time: 10 – 15 s ISO 9917-1
- Setting time: 90 s ISO 9917-1
- Intraoral setting time: 180 s ISO 991

Non-Stick Handling

VOCO GIC Mixer®
Capsule mixing device

Indications
Device for mixing powder and liquid in application capsules

Advantages
- High oscillating frequency of 4,600 rpm, creating a particularly homogeneous mixture of powder and liquid
- Modern design
- Capsule holder allows simple insertion and removal of capsules

Presentation
- REF 9050 GIC Mixing Device

User-friendly
- Quiet and practically vibration-free
- Mixing times can be freely selected between 1 and 99 seconds
### Final Varnish LC

**Light-cured varnish for sealing of glass ionomer fillings**

#### Indications
- Sealing and surface covering of glass ionomer restorations
- Protection against moisture and dehydration

#### Advantages
- Finish temporary and permanent restorations in seconds

#### Presentation
- **REF 1241** Pack 2 x 3 ml bottles
- **REF 2315** mixing pallets – 20 pack

### Easy Glaze®

**Nano-filled, light-cured liquid polish and surface sealant**

#### Indications
- Surface sealing of glass ionomer cements, provisional crowns and bridges and definitive composite restorations
- Protecting glass ionomer cement surfaces against the effects of moisture and dehydration immediately after placement
- Sealing glass ionomer cement liners/build-up restorations before taking impressions
- Sealing and protecting adhesive interfaces between restoration and tooth structure

#### Advantages
- Finish temporary and permanent restorations in seconds
- Natural gloss and tooth-like fluorescence
- Can be used on all types of direct and indirect restorations
- Nano-filled for better wear resistance
- Works with LED, PAC and halogen curing lights
- Protects against staining and discoloration
- Increase patient satisfaction
- Excellent protection of glass ionomers against moisture and dehydration

#### Presentation
- **REF 1016** 5 ml bottle, accessories
- **REF 2245** easy brushes – 50 pack
- **REF 2315** mixing pallets – 20 pack
INDIRECT RESTORATION

VPS Impression Materials
- V-Posil Heavy Soft Fast
- V-Posil Putty Fast 43
- V-Posil Light Fast
- V-Posil X-Light Fast 44
- V-Posil Mono Fast 45
- VOCO Dynamic Dispenser 45

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- Registrado Clear 47
- Registrado Scan 47

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- Clip Flow 49

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- BrackFix 64

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Control Silicone
- Fit Test C & B 67
V-Posil® Heavy Soft Fast · V-Posil® Putty Fast
Time optimized VPS tray material

**Indications**

**V-Posil Heavy Soft Fast** is to be used as heavy body material for:
- One-step impression technique (simultaneous technique) using dual viscosities
- Two-step impression technique using dual viscosities
- Functional impressions

**V-Posil Putty Fast** is used as a preliminary material for:
- Two-step putty-wash impression technique
- One-step putty-wash impression technique
- Two-step putty-wash impression technique using a foil (plastic putty spacer)
- One-step putty impression technique for forming functional peripheries

**Advantages**

- Up to 2 minutes of adjustable working time – gives control over the pace of the procedure while the abbreviated 2-minute thermo-activated set time saves time and improves patient comfort
- The rapid snap set reduces the time in the critical zone by up to 50%, minimizing potential distortion due to human error and resulting in less re-takes
- Heavy Soft Fast material offers an optimal viscosity to load the tray but remains soft enough after it sets for easy removal from the mouth
- Lab technicians will appreciate the post-set hydrophilicity (<6° contact angle), which allows for more accurate stone models and better fitting restorations
- Exceptional tear strength and elastic recovery ensures dimensional accuracy of the impression during and after removal

**Presentation**

<table>
<thead>
<tr>
<th>V-Posil Heavy Soft Fast</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF 2565 Cartridge 1 x 380 ml, mixing tips type 30</td>
</tr>
<tr>
<td>REF 2566 Cartridge 2 x 380 ml</td>
</tr>
<tr>
<td>REF 2567 Cartridge 2 x 50 ml, mixing tips type 16</td>
</tr>
<tr>
<td>REF 2568 Cartridge 10 x 50 ml</td>
</tr>
<tr>
<td>REF 2196 mixing tips type 16 – 50 pack (50 ml)</td>
</tr>
<tr>
<td>REF 2203 mixing tips type 30 – 50 pack (380 ml)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>V-Posil Putty Fast</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF 2561 Jar 2 x 450 ml</td>
</tr>
<tr>
<td>REF 2562 Jar 8 x 450 ml</td>
</tr>
<tr>
<td>REF 2563 Cartridge 1 x 380 ml, mixing tips type 30</td>
</tr>
<tr>
<td>REF 2564 Cartridge 2 x 380 ml, mixing tips type 30</td>
</tr>
<tr>
<td>REF 2158 Type 2 dispenser (50 ml cartridge)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VOCO Dynamic Dispenser</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF 9140 380 ml Mixing device, 110 V int. E1</td>
</tr>
</tbody>
</table>
V-Posil® Light Fast · X-Light Fast
Time optimized VPS wash material

Indications
V-Posil Light Fast & V-Posil X-Light Fast are used as syringeable impression materials for:
- Two-step putty-wash impression technique
- One-step putty-wash impression technique
- Two-step impression technique using a foil (plastic putty spacer)
- One-step impression technique (simultaneous technique) using dual viscosities
- Reline impressions
- Fabricating full or partial dentures

Advantages
- Excellent flow without slumping
- Up to 2 minutes of adjustable working time – gives control over the pace of the procedure, while the abbreviated 2-minute thermo-activated set time saves time and improves patient comfort
- Setting times of the light body wash and heavy body tray materials are synchronized (match)
- The rapid snap set reduces the time in the critical zone by up to 50%, minimizing potential distortion due to human error and resulting in less re-takes
- Due to its low polyether-like contact angle of less than 10°, V-Posil’s superior hydrophilicity displaces fluids (saliva, blood, etc.) creating an enhanced contact to the dental anatomy and yielding more precise impressions
- Lab technicians will appreciate the post-set hydrophilicity (< 6° contact angle), which allows for more accurate stone models and better fitting restorations
- Exceptional tear strength and elastic recovery ensures dimensional accuracy of the impression during and after removal

Clinical Case

Presentation

<table>
<thead>
<tr>
<th>V-Posil Light Fast</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF 2573 Cartridge 2 × 50 ml, mixing tips type 7</td>
</tr>
<tr>
<td>REF 2574 Cartridge 10 × 50 ml</td>
</tr>
<tr>
<td>REF 2186 mixing tips type 7 – 50 pack</td>
</tr>
<tr>
<td>REF 2141 intraoral tips type 3 – 50 pack</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>V-Posil X-Light Fast</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF 2575 Cartridge 2 × 50 ml, mixing tips type 7</td>
</tr>
<tr>
<td>REF 2576 Cartridge 10 × 50 ml</td>
</tr>
<tr>
<td>REF 2186 mixing tips type 7 – 50 pack</td>
</tr>
<tr>
<td>REF 2141 intraoral tips type 3 – 50 pack</td>
</tr>
<tr>
<td>REF 2158 Type 2 dispenser (50 ml cartridge)</td>
</tr>
</tbody>
</table>

Source: Mauricio Watanabe, Cristian Sánchez, Brazil

*Source: Prof Dr. Watts, University of Manchester, England, 2002
V-Posil® Mono Fast
Time optimized VPS medium body impression material

**Indications**
V-Posil Mono Fast is used as a medium-bodied tray or syringeable impression material for:
- Taking impressions over fixed/removable restorations and implants (i.e., transferring impression posts and bridge components)
- Functional impressions
- Fabricating crown and bridgework or inlays
- Fabricating full or partial dentures
- Relining impressions
- Transferring root posts when fabricating posts and cores indirectly
- Multi-tray technique
- Use in the simultaneous mixing technique as well as the putty-wash technique

**Advantages**
- Excellent flow without slumping
- Up to 2 minutes of adjustable working time – gives control over the pace of the procedure, while the abbreviated 2-minute thermo-activated set time saves time and improves patient comfort
- Setting times of the light body wash and heavy body tray materials are synchronized (match)
- The rapid snap set reduces the time in the critical zone by up to 50%, minimizing potential distortion due to human error and resulting in less re-takes
- Due to its low polyether-like contact angle of less than 10°, V-Posil’s superior hydrophilicity displaces fluids (saliva, blood, etc.) creating an enhanced contact to the dental anatomy and yielding more precise impressions

**Presentation**
V-Posil Mono Fast
- REF 2569 Cartridge 1 × 380 ml, mixing tips type 30
- REF 2570 Cartridge 2 × 380 ml
- REF 2571 Cartridge 2 × 50 ml, mixing tips type 16
- REF 2572 Cartridge 10 × 50 ml
- REF 2196 mixing tips type 16 – 50 pack (50 ml)
- REF 2203 mixing tips type 30 – 50 pack (380 ml)
- REF 2133 intraoral tips type 6 – 50 pack
- REF 2158 Type 2 dispenser (50 ml cartridge)

**VOCO Dynamic Dispenser**
Dynamic mixing device

**Indications**
Apparatus for automatic dosing and mixing of VOCO impression materials in the 5:1 cartridge

**Advantages**
- Homogeneous dynamic mixing of V-Posil components to ensure consistently high material quality
- Bubble-free dispensing
- Fill level display
- Two feed speeds
- Electronic residual detection

**Presentation**
VOCO Dynamic Dispenser
- REF 9140 Mixing device 110 V int. E1
- REF 2203 mixing tips type 30 – 50 pack
Registrado® X-tra
Extra hard, fast and flexible bite registration A-silicone

Indications
Bite registration
Fixing of face bow registration
Location material for intraoral pin tracing template

Advantages
- Optimal rigidity for precise trimming
- Two-phase set: After 40 sec. the material is hard and dimensionally stable but still elastic for easy removal. Extreme final hardness is reached after 90 sec.
- Firm non-dripping consistency
- Thixotropic for easy application and no occlusion resistance
- Temperature-controlled setting for sufficient application time and short intraoral set time (only 30–40 sec.)
- Good contrast for easy identification
- Convenient trimming with scalpel, scissors or cutter
- Intraoral tips provide a flat ribbon of material for better coverage of the occlusal surface
- No distortion in articulation, especially in free-end situations

Presentation
- REF 2035 Pack 2 x 50 ml 1:1 cartridges, mixing tips type 16, intraoral tips type 2
- REF 2036 Clinic Pack 8 x 50 ml cartridges, mixing tips type 16, intraoral tips type 2
- REF 2196 mixing tips type 16 – 50 pack
- REF 2140 intraoral tips type 2 – 50 pack
- REF 2158 Type 2 dispenser

Intraoral tips provide a flat ribbon of material for better coverage of the occlusal surface
Registrado® Clear
Transparent A-silicone fast-setting bite registration material

Not available in the USA!

**Indications**
- Bite registration
- Registration key for intraoral support pin registration
- Fixation of X-ray balls
- Front and occlusal stamp
- Silicone key for composite fillings

**Advantages**
- High final end hardness and high translucency
- Guaranteed to remain on the occlusal surface with great consistency
- Time controlled curing process – curing time is accelerated when the patient’s mouth is closed
- Perfect for light-curing through the material
- Great dimensional stability (>99%)

**Presentation**
- REF 2037 Pack 1 x 50 ml 1:1 cartridge, accessories
- REF 2196 mixing tips type 16 – 50 pack
- REF 2140 intraoral tips type 2 – 50 pack
- REF 2158 Type 2 dispenser

Registrado® Scan
Scannable addition-curing silicone bite registration material

Not available in Canada!

**Indications**
- Occlusal bite registration
- Fixation of facial arch registries
- Registration key for intraoral support pin registration

**Advantages**
- High final end hardness
- Short intraoral setting time
- Precise occlusion reproduction
- Scan without the use of powder
- Easily incorporated into analog or digital workflow

**Presentation**
- REF 2038 Pack 1 x 50 ml 1:1 cartridge, accessories
- REF 2196 mixing tips type 16 – 50 pack
- REF 2140 intraoral tips type 2 – 50 pack
- REF 2158 Type 2 dispenser
GrandioSO Inlay System
Chairside fabrication of indirect composite inlays

Indications
Single office visit composite inlay system

Advantages
- **Complete kit for chairside fabrication of 15 composite inlays**
  - full added value retained in the practice, no laboratory involvement
  - less expensive than CAD/CAM fabricated inlay
- **Highest quality, perfectly coordinated components**
  - quick and simple fabrication of models
  - the premium composite GrandioSO guarantees durability and esthetics
  - Futurabond DC and Bifix QM for secure bonding and luting
- **Simple and efficient method**
  - easy and convenient to fabricate, even for large multi-surface restorations
  - fabrication of a row of inlays for treatment of neighboring teeth
  - creation of approximal contacts without having to use the time-consuming and expensive matrix technique
  - perfect occlusal anatomy - modeled extra-orally
  - stress-free fabrication of tooth color and durable restorations, even in patients who are reluctant to comply or non-compliant

Presentation
REF 2642 Kit 3 x 50 ml cartridge Die Silcone, 15 x 0.25 g GrandioSO caps (5 each A1, A2, A3), 15 Futurabond DC SingleDose, 10 g QuickMix syringe Bifix QM universal, Dimanto set (one each of small point, large point, small cup, large cup, lens), accessories
REF 1186 Refill Die Silicone 2 x 50 ml cartridge, mixing tips type 20
REF 2202 mixing tips type 20 (Die Silicone) – 50 pack
REF 2191 mixing tips type 11 (Bifix QM) – 50 pack

GrandioSO Inlay System Application
Clip
Light-cured provisional filling material in caps or syringes

Indications
All kinds of temporary fillings, temporary protection for inlay and onlay technique

Advantages
- Can be easily removed in one piece
- Easy handling
- Remains flexible even after curing
- Excellent cavity sealing
- Transparent, no discoloration
- Does not stick to instrument
- No material waste
- Time saving – no handmixing required

Presentation
REF 1284 Pack 2 x 4 g syringes
REF 1285 Tripack 3 x 4 g syringes
REF 1287 Pack 25 x 0.25 g Caps
REF 9301 Caps Dispenser

Technical Data
- Depth of curing: 11 mm
- Surface hardness: 90 Shore A
- Diametrical tensile strength: 27 MPa
- Water solubility (14 days): 0.46%
- Marginal seal behavior: 0.5 VAS

Clip Flow
Light-cured, flowable provisional filling material in syringes

Indications
Temporary inlay and onlay treatments of the cavity
Sealing of openings for implant screws
Relining material for temporary crowns and bridges
Block out material for retentive areas in the dental arch, e.g. before taking impressions
Covering of the gingival margin
Fixing of resin matrices during filling placement
Temporary filling of cavities

Advantages
- Easy to place – easy to remove in one piece
- No damage to preparation boundaries
- Durable and saliva-proof
- Non-sticky
- Time-saving through light-curing
- Elastic
- Flowable
- NDT®¹ (Non-Dripping Technology) syringe

Presentation
REF 1282 Pack 2 x 1.8 g syringe, accessories
REF 2148 application tips type 46 – 100 pack

Technical Data
- Depth of curing: 11 mm
- Surface hardness: 90 Shore A
- Diametrical tensile strength: 27 MPa
- Water solubility (14 days): 0.46%
- Marginal seal behavior: 0.5 VAS

¹US Patent No: 8,641,416 B2
**Provicol®**

Medium retention non-eugenol temporary cement with calcium hydroxide in syringes, cartridges or tubes

**Indications**
Temporary cementation of crowns and bridges

**Advantages**
- Contains calcium hydroxide which is known to have an antimicrobial effect that reduces postoperative sensitivities
- Good adhesion to temporaries
- Low film thickness for easy placement of temporary crowns & bridges for a perfect fit
- Peelable consistency for easy clean-up
- Highly economical direct application
- No eugenol allergies
- No inhibition of curing reaction of resin-based fillings, cementing materials, or glass ionomer cements

**Presentation**
REF 1074 Pack 5 ml QuickMix syringe, mixing tips type 10
REF 2189 mixing tips type 10 – 50 pack
REF 1076 Pack 2 x 65 g cartridges, 40 mixing tips type 6
REF 2185 mixing tips type 6 – 50 pack
REF 1075 Set 25 g base, 25 g catalyst in tubes

**Provicol® QM Plus**

Strong retention non-eugenol temporary cement with calcium hydroxide

**Indications**
Temporary cementation of provisional restorations (crowns, bridges, inlays and onlays)
Temporary cementation of definitive restorations (crowns, bridges, inlays and onlays)
Temporary obturation of small single-surface cavities

**Advantages**
- Increased strength for more retention and secure adhesion
- Contains calcium hydroxide which is known to have an antimicrobial effect that reduces postoperative sensitivities
- Low film thickness for easy placement of temporary crowns & bridges for a perfect fit
- Peelable consistency for easy clean-up
- Highly economical direct application
- No eugenol allergies
- No inhibition of curing reaction of resin-based fillings, cementing materials, or glass ionomer cements
- High level of radiopacity

**Presentation**
REF 1098 Pack 5 ml QuickMix syringe, accessories
REF 2189 mixing tips type 10 – 50 pack
**Provicol® QM Aesthetic**
Translucent zinc oxide, non-eugenol, high retention temporary cement with calcium hydroxide

**Indications**
Temporary cementation of provisional or definitive inlays, onlays, crowns, partial crowns/veneers and bridges
Temporary filling of small one-surface cavities

**Advantages**
- Translucent appearance that will not change the overlying color of the temporary
- Does not permanently adhere to composite-based core-build ups for easy removal
- Very low film thickness (7 µm) enhances the fit and secures an excellent retention
- Semi-elastic consistency allows for an easy clean up and removal
- Contains calcium hydroxide which is known to have an antimicrobial effect that reduces postoperative sensitivities
- Non-eugenol for the use of permanent resin cements and bis-acrylic temporaries
- Radiopaque

**Presentation**
REF 1108 5 ml, QuickMix syringe, accessories
REF 2189 mixing tips type 10 – 50 pack

---

**Bifix® Temp**
Dual-cured, transparent, composite-based temporary cement material

**Indications**
Temporary cementation of provisional restorations

**Advantages**
- White translucent shade – high esthetics
- Dual-cured – fast setting and “tack cure” for excess removal
- Strong adhesion – secures long-term temporaries
- Easy excess removal in light- and self-cure mode – fast working
- 5 micron film thickness – no “jack-ups” of temporaries
- Short mixing tip – less waste

**Presentation**
REF 1055 Pack 5 ml QuickMix syringe universal, accessories
REF 2188 mixing tips type 9 – 50 pack
Structur® 2 SC
Fast setting temporary BIS-Acrylic crown and bridge material in 1:1 cartridge and QuickMix syringe

Indications
Temporary crowns, bridges, inlays and onlays

Advantages
- Fast setting time: less than 1 minute in the mouth
- Strong and wear-resistant
- Better esthetics: available in 8 popular shades
- Long-term color stability and composite-like polishability
- Quick and easy automix application: ideal bubble-free consistency
- Economical due to smallest possible tips: up to 40% less waste
- MMA-free: no unpleasant taste or smell
- Minimal shrinkage
- Low exothermic setting temperature

Presentation

<table>
<thead>
<tr>
<th>Shade</th>
<th>pack 75 g safety cartridge, mixing tips type 6</th>
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<tbody>
<tr>
<td>A1</td>
<td>REF 1479</td>
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<td>A2</td>
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<tr>
<td>A3</td>
<td>REF 1481</td>
</tr>
<tr>
<td>A3.5</td>
<td>REF 1490</td>
</tr>
<tr>
<td>B1</td>
<td>REF 1482</td>
</tr>
<tr>
<td>B3</td>
<td>REF 1483</td>
</tr>
<tr>
<td>Bleach (BL)</td>
<td>REF 1485</td>
</tr>
<tr>
<td>C2</td>
<td>REF 1486</td>
</tr>
<tr>
<td></td>
<td>REF 1492 Bulk Pack 5 × 75 g cartridges shade A2, mixing tips type 6</td>
</tr>
<tr>
<td></td>
<td>REF 1491 Bulk Pack 5 × 75 g cartridges shade A3, mixing tips type 6</td>
</tr>
<tr>
<td></td>
<td>REF 2185 mixing tips type 6 – 50 pack</td>
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<tr>
<td></td>
<td>REF 2189 mixing tips type 10 – 50 pack</td>
</tr>
<tr>
<td></td>
<td>REF 2158 Type 2 dispenser</td>
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</table>

<table>
<thead>
<tr>
<th>Shade</th>
<th>QuickMix syringe 8 g, mixing tips type 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>REF 1309</td>
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<tr>
<td>A2</td>
<td>REF 1310</td>
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<td>A3</td>
<td>REF 1311</td>
</tr>
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<td>B1</td>
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Technical Data

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<th>Value</th>
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<tr>
<td>Working time</td>
<td>30–50 sec.</td>
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<tr>
<td>Intraoral setting time (ISO 4049)</td>
<td>40–70 sec.</td>
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<tr>
<td>Compressive strength (ISO 9917)</td>
<td>215 MPa</td>
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<tr>
<td>3-Point flexural strength (ISO 4049)</td>
<td>92.7 MPa</td>
</tr>
<tr>
<td>Diametral tensile strength</td>
<td>30 MPa</td>
</tr>
<tr>
<td>Modulus of elasticity analogous (ISO 4049)</td>
<td>2,500 MPa</td>
</tr>
<tr>
<td>Maximum intrapulpal temperature (&lt; 40.5 °C–University of Münster)</td>
<td></td>
</tr>
</tbody>
</table>
Structur® 3
Nano-filled, quick setting, strong temporary crown & bridge material with “Wipe & Go” Technology

Indications
Fabrication of temporary crowns, bridges, inlays, onlays, partial crowns, veneers and temporary posts
Fabrication of long-term temporaries
Lining of pre-fabricated temporary crowns made from composite materials, polycarbonate or metal

Advantages
- **Fast and Economical**
  - no more polishing – just wipe with alcohol for a brilliant gloss
  - only 45 sec. intraoral setting time
  - small mixing tips and no more “bleeding” before changing mixing tips yields at least 20 more units per cartridge compared to 10:1 and 4:1 products
- **Durable**
  - high fracture resistance and compressive strength
  - suited for long-span bridges and long-term provisionals
- **Esthetic**
  - natural gloss and tooth-like fluorescence
  - color stable for long-term use
  - available in eight VITA®¹ matching shades

Presentation
<table>
<thead>
<tr>
<th>Shade</th>
<th>Cartridge 50 ml, mixing tips type 6</th>
<th>Shade</th>
<th>Cartridge 50 ml, mixing tips type 6</th>
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<tbody>
<tr>
<td>A1</td>
<td>REF 2503 B1 REF 2507</td>
<td>A2</td>
<td>REF 2504 B3 REF 2508</td>
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<tr>
<td>A3</td>
<td>REF 2505 C2 REF 2509</td>
<td>A3.5</td>
<td>REF 2506 Bleach (BL) REF 2510</td>
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<tr>
<td>A1.5</td>
<td>REF 2512 Cartridge 5 x 50 ml, shade A2, mixing tips type 6</td>
<td>A2</td>
<td>REF 2513 Cartridge 5 x 50 ml, shade A3, mixing tips type 6</td>
</tr>
<tr>
<td>A3</td>
<td>REF 2514 Cartridge 5 x 50 ml, shade A3, mixing tips type 6</td>
<td>A3</td>
<td>REF 2189 mixing tips type 10 (QM syringe) – 50 pack</td>
</tr>
<tr>
<td>A3.5</td>
<td>REF 2185 mixing tips type 6 (Cartridge) – 50 pack</td>
<td>A1</td>
<td>REF 2187 Type 2 dispenser</td>
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<td></td>
<td>REF 2518 Type 2 dispenser</td>
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<tr>
<td></td>
<td>Structural QuickMix syringe</td>
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</tr>
</tbody>
</table>

Technical Data
- Working time: 30–50 sec.
- Intraoral Setting Time: 40–70 sec.
- Compressive Strength: 509 MPa
- 3-point Flexural Strength: 113 MPa
- Diametral Tensile Strength: 18 MPa
- E-modulus: 1,900 MPa
- Fluorescence: Yes
- Setting temperature: max. 3.6 °F above mouth temp.

¹Not a trademark of VOCO
**Structur® Premium**

Highly durable, fast-setting BIS-Acryl temporary crown and bridge material with added flexural strength

**Indications**
Temporary crowns, bridges, inlays and onlays

**Advantages**
- **Ceramic-like esthetics**
  - brilliant gloss
  - natural fluorescence
- **Hard as enamel**
  - high fracture resistance, compressive and tensile strengths – ideal for long-span bridges
- **Easy handling**
  - fast and easy trimming and polishing
  - minimal inhibition layer
  - 1:1 standard dispenser
  - fast intraoral setting time (30-45 sec.)

**Presentation**

<table>
<thead>
<tr>
<th>Shade</th>
<th>Description</th>
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<tbody>
<tr>
<td>A1</td>
<td>REF 1712 Intro Kit 75 g cartridge, shade A3, dispenser type 2, mixing tips type 6</td>
</tr>
<tr>
<td>A2</td>
<td>REF 1713</td>
</tr>
<tr>
<td>A3</td>
<td>REF 1714</td>
</tr>
<tr>
<td>A3.5</td>
<td>REF 1717</td>
</tr>
<tr>
<td>B1</td>
<td>REF 1718</td>
</tr>
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<td>B3</td>
<td>REF 1715</td>
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<tr>
<td>Bleach</td>
<td>REF 1716</td>
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<td></td>
<td>REF 1719 Bulk Pack 5 × 75 g cartridges, shade A3, mixing tips type 6</td>
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<tr>
<td></td>
<td>REF 2185 mixing tips type 6 (Cartridge) – 50 pack</td>
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<tr>
<td></td>
<td>REF 2158 Type 2 dispenser</td>
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**Technical Data**

<table>
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<tr>
<td>Working time</td>
<td>30 sec.</td>
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<tr>
<td>Setting time in mouth</td>
<td>30-45 sec.</td>
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<tr>
<td>Compressive strength</td>
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<tr>
<td>Diametral tensile strength</td>
<td>48 MPa</td>
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<tr>
<td>Transverse strength (10 min.)</td>
<td>100 MPa</td>
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<tr>
<td>Transverse strength (7 days water storage)</td>
<td>119 MPa</td>
</tr>
<tr>
<td>Flexural modulus</td>
<td>2,500 MPa</td>
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<tr>
<td>Fluorescence</td>
<td>Yes</td>
</tr>
<tr>
<td>Setting temperature</td>
<td>max. 3.6 °F above mouth temp.</td>
</tr>
</tbody>
</table>

**Initial situation**

![Initial situation](Image)

**Structur Premium temporary**

![Structur Premium temporary](Image)

Source: Images are a courtesy of Dr. Frank Milnar
**Grandio Core Dual Cure**

*Grandio’s Nano-technology for core build-ups*

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**Indications**

Adhesive core build-up on vital and non-vital teeth

Cementing of pins and posts

---

**Advantages**

- Dentin-like hardness – eliminates ditching
- Stackable consistency
- Nano particles for tooth-like strength and flexibility
- 77% filled for long-lasting success rates
- High radiopacity (365% Al) for easy X-ray identification
- Suitable as a post cement with long endo tips

---

**Presentation**

| REF 1910 Pack 10 g QuickMix syringe Dentin |
| REF 1911 Pack 10 g QuickMix syringe Blue   |
| REF 1912 Pack 10 g QuickMix syringe White  |
| REF 2191 mixing tips type 11 - 50 pack    |
| REF 2142 intraoral tips type 4 - 50 pack  |

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**Clinical Case**

- High loss of substance in the anterior area after excavation
- Condition after build-up with Grandio Core Dual Cure, ready for impression
- Final restoration

Source: Dr. Walter Denner, Fulda / Germany
Rebilda® DC
Dual-cured core build-up composite in an automix delivery system

Indications
Adhesive core build-up on vital and non-vital teeth
Cementing of fiber-reinforced resin posts

Advantages
- Dual-cured: light-cure to accelerate finishing or simply allow Rebilda to self-cure to maximize working time
- Tooth-like surface hardness – cuts like dentin – eliminates ditching
- Low heat development even with large core volumes
- High adhesion with system bond – fewer parapulpal pins
- 3 shades: blue, white and dentin
- High radiopacity
- Fluoride release from both bond and core build-up material
- Curved intraoral tip assists with hard-to-reach areas

Presentation

Cartridge
REF 1395 Intro Kit 50 g cartridge Rebilda DC dentin shade, 8 ml Futurabond DC, mixing tips type 12, dispenser type 3, accessories
REF 1396 Pack 50 g cartridge Rebilda DC dentin shade, mixing tips type 12, intraoral tips type 3
REF 1397 Pack 50 g cartridge Rebilda DC blue shade, mixing tips type 12, intraoral tips type 3
REF 1398 Pack 50 g cartridge Rebilda DC white shade, mixing tips type 12, intraoral tips type 3
REF 2192 mixing tips type 12 – 50 pack
REF 2141 intraoral tips type 3 – 50 pack
REF 2199 mixing tips type 19 (bendable) - 30 pack
REF 2259 Type 3 dispenser

QuickMix Syringe
REF 1402 Intro Kit 10 g QuickMix syringe Rebilda DC dentin shade, 8 ml Futurabond DC, mixing tips type 11, accessories
REF 1403 Pack 10 g QuickMix syringe Rebilda DC dentin shade, mixing tips type 11, intraoral tips type 4
REF 1404 Pack 10 g QuickMix syringe Rebilda DC blue shade, mixing tips type 11, intraoral tips type 4
REF 1405 Pack 10 g QuickMix syringe Rebilda DC white shade, mixing tips type 11, intraoral tips type 4
REF 2191 mixing tips type 11 – 50 pack
REF 2142 intraoral tips type 4 – 50 pack
REF 2139 intraoral tips type 1 (endo tip) – 50 pack

Technical Data

<table>
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<tr>
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<tbody>
<tr>
<td>Working time</td>
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<tr>
<td>Setting time</td>
<td></td>
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<tr>
<td>Transverse strength</td>
<td>121 MPa</td>
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<tr>
<td>(ISO 4049)</td>
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<tr>
<td>Shear bonding strength</td>
<td>22 MPa</td>
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</tbody>
</table>

Source: Prof. Dr. Jürgen Manhart, Munich / Germany
Rebilda® Post System
Complete post & core system with fiber-reinforced resin posts

Indications
Endodontic post build-up for support and anchorage of coronal restoration in situations with insufficient tooth substance

Advantages
- Highly translucent for excellent esthetics
- High radiopacity (350% Al)
- Dentin-like elasticity for gentle root treatment
- Dentin-like translucency for esthetic restorations
- High retention rate for strong bond
- Excellent light conductivity and diffusion for use with dual-cured materials

Presentation
REF 1770 Intro Kit:
15 posts 3 drills: 5 posts each
(Ø 1.2 mm, Ø 1.5 mm, Ø 2.0 mm),
1 drill each (Ø 1.2 mm, Ø 1.5 mm,
Ø 2.0 mm)
REF 1782 Rebilda Post System Kit II:
5 posts each of (Ø 1.0 mm, Ø 1.2
mm, Ø 1.5 mm, Ø 2.0 mm), 1 drill
each of (Ø 1.0 mm, Ø 1.2 mm, Ø 1.5
mm, Ø 2.0 mm), 5 ml Ceramic Bond,
20 Futurabond U SingleDose, 10 g
QuickMix syringe Rebilda DC dentin,
accessories

Refills (posts):
Rebilda Post 1.0, 5 Posts, Ø 1.0 mm  REF 1775
Rebilda Post 1.2, 5 Posts, Ø 1.2 mm  REF 1772
Rebilda Post 1.5, 5 Posts, Ø 1.5 mm  REF 1773
Rebilda Post 2.0, 5 Posts, Ø 2.0 mm  REF 1774
Ceramic Bond, 5 ml Bottle  REF 1106

Refills (drills):
Rebilda Post 1.0, 1 Drill, Ø 1.0 mm  REF 1780
Rebilda Post 1.2, 1 Drill, Ø 1.2 mm  REF 1777
Rebilda Post 1.5, 1 Drill, Ø 1.5 mm  REF 1778
Rebilda Post 2.0, 1 Drill, Ø 2.0 mm  REF 1779

Post illustrations are not actual size. Ø 1.0 mm is not included in the kit (REF 1770)

Cross-sections show even distribution of the glass fibers
Highly radiopaque
### Indications
Core build-up restorations with root posts for endodontically treated teeth

### Advantages
- Innovative bundled fine posts enable easy placement within any root canal morphology
- Minimizes the need to mechanically prepare root canals, preserving healthy tooth structure and saving valuable chair time
- Increases surface area within build-up restoration, maximizing adhesion and retention values
- Optimal adaptation to all canal anatomies for better ease-of-use
- All materials in the set are perfectly coordinated to maximize the success of the restoration
- **Futurabond U**
  - reliable self-curing
  - high bond strength without separate etching
- **Rebilda® DC**
  - also suitable for post cementation
  - cuts like dentin to minimize ditching
  - excellent physical properties enhance longevity
  - low setting temperature

### Presentation
**Rebilda Post GT** - System

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<thead>
<tr>
<th>Item</th>
<th>Code</th>
<th>Description</th>
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<tr>
<td>REF 1972 Kit 5 posts each of (~ ø 0.8 mm, ~ ø 1.0 mm, ~ ø 1.2 mm, ~ ø 1.4 mm), Ceramic Bond bottle 5 ml, Futurabond U SingleDose 20 pcs., Rebilda DC dentin QuickMix syringe 10 g, accessories</td>
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**Refills Post GT:**

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<td>5 x No. 4 (~ ø 0.8 mm)</td>
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<td>5 x No. 6 (~ ø 1.0 mm)</td>
<td>REF 1974</td>
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<td>5 x No. 9 (~ ø 1.2 mm)</td>
<td>REF 1775</td>
</tr>
<tr>
<td>5 x No. 12 (~ ø 1.4 mm)</td>
<td>REF 1776</td>
</tr>
</tbody>
</table>
Quick Up®
Tissue colored implant pick-up system with new Quick Up method

Indications
Self-cured composite cementation material for attachments such as ball, Locator® and telescopic anchors in full and partial dentures
Reattachment of secondary elements such as bar retainers in acrylic-based dentures

Advantages
- Faster with Quick Up method
  - Work without vent holes and excess material removal
  - Under fill with 2.5 minute fast-setting, self-cured material
  - Finish with light-cured component
- Direct pick-up results in more accuracy compared to indirect method
- Complete system with checking and block out silicone – Fit Test C & B
- Low heat, self-curing material avoids tissue irritations
- Tasteless and odorless
- High bond strength to acrylic denture base
- Allows pick-up of any attachment

Presentation
REF 1625  Kit 7.5 g QuickMix syringe, 2 g syringe Quick Up LC, 4 ml Adhesive, 5 ml QuickMix syringe Fit Test C & B, accessories
REF 1626 Pack 7.5 g Quick Up QuickMix syringe, type 10 mixing tips
REF 1627 Pack 2 g Quick Up LC syringe, type 44 intraoral tips
REF 1628 Pack 4 ml Quick Up adhesive
REF 2189 mixing tips type 10 – 50 pack
REF 2144 intraoral tips type 44 – 100 pack
REF 2247 single tim – 100 pack
REF 2315 mixing pallets –20 pack

Quick Up Application
Implant with fitted attachments
Prosthetic base with the recesses for the attachments already created
Checking the accuracy of the fit with Fit Test C & B
Checking of attachments for fitting accuracy with Fit Test C & B
Blocking-out, covering of primary parts/gingiva with Fit Test C & B
Applying Quick Up from the QuickMix syringe
Applying Quick Up LC to correct deficits and superficial defects
Cemented attachment in the prosthesis

Locator is not a registered trademark of VOCO GmbH.
Ceramic Bond

One component coupling agent (Silane) available in a bottle or SingleDose

**Indications**

Coupling agent for achieving optimal chemical adhesion between silicate or aluminum oxide ceramics (incl. zirconium dioxide) and composite materials

**Advantages**

- Provides optimal conditions for a permanent bond between the indirect restoration and the resin cement

**SingleDose**

- No mixing required
- Easy, quick and hygienic
- No additional devices required
- No spilling in any position

**Presentation**

- REF 1107 Pack 50 x .05 ml SingleDose, accessories
- REF 1106 5 ml bottle
- REF 2247 single tim – 100 pack
- REF 2315 mixing pallets - 20 pack

Bifix® SE

Dual-cured, universal, self-adhesive resin cement

**Indications**

Cementation of:
- Crowns
- Bridges
- Inlays and onlays
- Endodontic posts made from ceramic, zirconium dioxide and metal

**Advantages**

- Time saving – no additional bond, prime or etch steps needed
- Ease of use – gel-phase cleanup, no refrigeration, no hand-mixing or trituratation required
- High bond strength without an adhesive
- High flexible strength and low water solubility for long-term success
- Low 5–10 micron film thickness – cuts down on adjustment time
- Compatibility with common materials – ceramic and zirconia, CAD/CAM materials, PFM's and metal restorations
- Efficient self-cure mode – sets up completely without any light
- Radiopaque for excellent identification under x-ray

**Presentation**

- REF 1784 Kit 3 x 5 g QuickMix syringes, shades U, T and WO, mixing tips type 14 and 15, type 1 intraoral tips
- REF 1785 Refill 5 g QuickMix syringe, shade U (universal), mixing tips type 14 and 15, type 1 intraoral tips
- REF 1786 Refill 5 g QuickMix syringe, shade T (transparent), mixing tips type 14 and 15, type 1 intraoral tips
- REF 1787 Refill 5 g QuickMix syringe, shade WO (white-opaque), mixing tips type 14 and 15, type 1 intraoral tips
- REF 2194 mixing tips type 14 – 50 pack
- REF 2195 mixing tips type 15 – 50 pack
- REF 2139 intraoral tips type 1 – 50 pack

**Technical Data**

<table>
<thead>
<tr>
<th>Property</th>
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<tr>
<td>Working time (extra-oral)</td>
<td>90 sec</td>
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<tr>
<td>Setting time</td>
<td>4 min</td>
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<tr>
<td>Film thickness</td>
<td>5–10 µm</td>
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<tr>
<td>Curing depth</td>
<td>2 mm/20 sec</td>
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<tr>
<td>Water solubility</td>
<td>1µg/mm²</td>
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<tr>
<td>Flexural Strength</td>
<td>160 MPa (LC), 150 MPa (CC)</td>
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<tr>
<td>Radiopacity</td>
<td>227 %AI</td>
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<tr>
<td>pH (at application)</td>
<td>2.5 (acidic)</td>
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<tr>
<td>pH (after curing)</td>
<td>neutral</td>
</tr>
</tbody>
</table>
Bifix® QM
Dual-cured, radiopaque, resin-based adhesive cement system

Indications
Adhesive cementation of:
Inlays and onlays
Crowns (full and partial)
Veneers, facets
Pins and posts
Bridges and adhesive bridges (Maryland bridges)

Advantages
- Easy gel phase clean-up
- Truly universal for all luting indications and all substrates
- Low film thickness saves occlusal adjustment time
- Low water uptake avoids shade shifting and bond failures
- Fast bonding with dual-cure self-adhesive Futurabond DC
- High radiopacity for easy x-ray identification

Presentation
REF 1217 Kit 10 g syringe universal, Futurabond DC 4 ml liquid 1, 4 ml liquid 2, 5 ml Ceramic Bond, accessories
REF 1218 Refill 10 g syringe universal
REF 1219 Refill 10 g syringe transparent
REF 1759 Refill 10 g syringe white-opaque
REF 1106 Refill 5 ml Ceramic Bond
REF 1163 Pack Futurabond DC 4 ml liquid 1, 4 ml liquid 2
REF 2191 mixing tips type 11 – 50 pack
REF 2142 intraoral tips type 4 – 50 pack
REF 2315 mixing pallets – 20 pack

Technical Data
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Film thickness</td>
<td>5–10 µm</td>
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<tr>
<td>Working time</td>
<td>2.5–3.5 min</td>
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<tr>
<td>Setting time</td>
<td>3 min after inserting the restoration</td>
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<tr>
<td>Curing depth</td>
<td>4 mm/10 s</td>
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<tr>
<td>Water solubility</td>
<td>&lt;0.3 µg/mm²</td>
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<tr>
<td>Compressive strength</td>
<td>297 MPa</td>
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<tr>
<td>Flexural strength</td>
<td>138 (LC) / 113 (CC) MPa</td>
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</tbody>
</table>

Excellent adhesion between Bifix and ceramic.

Source: Prof. Behrend University of Rostock 2006
**Meron® / AC**

Glass ionomer cement

**Indications**
Cementation of crowns, bridges, inlays, onlays, pins, posts and orthodontic bands

**Advantages**
- Very good flow properties for good wetting behavior
- Low film thickness (15-20 µm) that saves occlusal adjustment time
- High translucency for better esthetic results with ceramics
- Easy excess removal – saves time
- High fluoride release
- High bond strength

**Presentation**
- Meron
  - REF 1086 Pack 35 g powder, 15 ml liquid
  - REF 1090 Eco Pack 15 g powder, 7 ml liquid
- Meron AC
  - REF 1242 Pack 50 capsules
  - REF 2331 1 AC Applicator Type 1
  - REF 2334 1 AC Applicator Type 2
  - REF 9050 GIC Mixing Device

**Meron® Plus / AC**

Resin modified glass ionomer cement

**Indications**
Cementation of crowns, bridges, inlays and onlays made from ceramic, zirconium and metal

**Advantages**
- Extremely thin film thickness (< 17 µm)
- Prolonged soft-elastic setting phase offers more time for convenient removal of excess material
- Low setting temperature
- Excellent biocompatibility
- Excellent chemical-physical properties due to the VOCO glass ionomer technology

**Presentation**
- Meron Plus
  - REF 1731 15 g powder
  - REF 1731 10 ml liquid
- Meron Plus AC
  - REF 1736 Pack 50 application capsules
  - REF 1737 Pack 150 application capsules
  - REF 2331 1 AC Applicator Type 1
  - REF 2334 1 AC Applicator Type 2
  - REF 9050 GIC Mixing Device

**Technical Data**
- Working time (ISO 9917-2): 2 min
- Intraoral setting time (ISO 9917-2): 3-5 min
- Compressive strength (ISO 9917-1): 111 MPa
- Film thickness (ISO 9917-2): 11 µm
- Water solubility (ISO 7489): 0.4%
- Shear bond strength to dentin (ISO/TS 11405): 8 MPa
- Adhesion to metal (ISO/TS 11405): 9 MPa
- Radiopacity (ISO 9917-2): > 200 %Al
Meron® Plus QM
Paste-to-Paste resin modified glass ionomer cement in a QuickMix syringe

Indications
Cementation of:
- Metal-based inlays, onlays, crowns and bridges
- High-strength (zirconium dioxide-based) all-ceramic crowns and bridges
- High-strength all-ceramic inlays
- Metal, ceramic and fiber posts

Advantages
- Twice the bond strength to dentin vs. other leading brands
- Up to twice the adhesive values to Zirconium Dioxide than other leading brands
- Quick and easy clean-up of excess material with optional tack cure
- Low film thickness for a precise marginal fit
- Self-adhesive: secure and quick bonding without primer or conditioner
- QuickMix syringe for optimal application and precise mixing

Technical Data
- 3-point flexural strength (after thermocycling** (ISO 9917-2)) 31.0 MPa
- Compressive strength (1 month*) (ISO 9917) 111 MPa
- Shear bond strength to human dentin (ISO/TS 11405) 11.3 MPa
- Shear bond strength to human enamel (ISO/TS 11405) 9.1 MPa
- Shear bond strength to ZrO2 (24 h*) (ISO/TS 11405) 11.8 MPa
- Shear bond strength to lithium disilicate (24 h*) (ISO/TS 11405) 8.8 MPa
- Shear bond strength to non-precious metal (ISO/TS 11405) 10.3 MPa
- Film thickness (ISO 9917-2) 11.7 μm
- Water solubility (ISO 7489) 0.36%
- Working time (ISO 9917-2) 120 sec.
- Setting time (ISO 9917-2) 4 min 30 sec.
- Radiopacity (ISO 9917-2) 198 %Al
- Fluoride release (60 d, 37 °C water storage) 662 ppm

Presentation
- REF 1727 Pack 8.5 g QuickMix syringe
- REF 1728 Set 3 x 8.5 g QuickMix syringe
- REF 2189 mixing tips type 10 – 50 pack

Meron Plus QM Clinical Case
Prepared tooth 11 with chamfer preparation to accommodate the crown
Zirconia crown on tooth 11 on the plaster model
Application of Meron Plus QM in the restoration
Insertion of the restoration
Short-term light-curing (tack curing)
Easy removal of excess material
Additional removal of excess material in the approximal areas using dental floss
Completed treatment

Source: Prof. Dr. Jürgen Manhart, Munich / Germany
BrackFix®
Light-cured orthodontic bracket adhesive

**Indications**
Direct attachment of orthodontic metal and ceramic brackets

**Advantages**
- Optimal adhesive consistency provides stable positioning of the bracket on the tooth surface
- Fluorescent Technology reveals adhesive residues under UV light after bracket removal for easy identification
- Enables an easier, quicker and more precise residue removal step
- Light-cured to give practitioner greater control over the required working time
- Can be exposed to loads (chewing forces) immediately after polymerization

**Presentation**
- REF 1205 Kit 2 x 4 g adhesive syringes, 6 ml primer bottle, accessories
- REF 1206 SE Kit 2 x 4 g adhesive syringe, 40 primer SingleDose, accessories
- REF 1208 Refill 6 ml primer bottle
- REF 1207 Refill 2 x 4 g adhesive syringe
- REF 1209 Refill 50 primer SE SingleDose, accessories
- REF 2247 Single Tim application brushes – 100 pack
- REF 2315 mixing pallets – 20 pack

**BrackFix Application**

- **Etching of enamel surface**
- **Application of BrackFix Primer**
- **Simple application of BrackFix Adhesive to bracket**
- **Simple and secure positioning on the tooth**
- **Tooth 8 (upper right central incisor) prior to polymerization and removal of excess adhesive**
- **Under UVA light (for demonstration purposes)**
- **Illumination with UVA light following removal of brackets**
- **Controlled removal of BrackFix residues**
- **Final check with UVA light: No adhesive residues remain**

Source: Dr. Felipe Moura / Brazil
Ufi Gel® SC
A-silicone based permanent soft denture relining material in a 1:1 cartridge system

Indications
Permanent soft relining for total and partial dentures
To relieve pressure from pressure spots
To dam the palatal vibrating line
In cases of flabby ridge and insufficient adhesion
To cushion sharp-edged alveolar processes
To support the healing process in implantology

Advantages
In-Office
• Complete chairside relining within minutes in one appointment
• Extremely high adhesion between denture and relining material with a special adhesive
• Biocompatible, tasteless and odorless
• Esthetic stable color, shade adaptation effect

Lab
• Fewer working steps than conventional cold-curing products
• Only 1 minute processing of adhesive and short time period in the pressure unit
• Relining can be repaired immediately after setting and up to 14 days after initial relining

Presentation
REF 2041 Kit 50 ml cartridge Ufi Gel SC, 10 ml adhesive, each 10 ml glazing base/catalyst, 10 mixing tips type 8, accessories
REF 2040 Refill 50 ml cartridge, 10 mixing tips type 8
REF 2029 Refill 10 ml Ufi Gel SC adhesive
REF 2047 Refill each 10 ml glazing base/catalyst
REF 2187 mixing tips type 8 – 50 pack

Trimming disk:
REF 2049 trimming discs – 10 pack
Ufi Gel® hard C
Direct hard denture relining material in a 1:1 cartridge based on composite technology

Indications
Hard, permanent chairside relining
Direct and indirect relining
Total or partial relining
External relinings (extended care living facility, homes for the disabled, hospitals)
Extensions of denture margins
Repairs and enlargements
Adaptation layer by layer over the course of years

Advantages
- Complete chairside hard relining in 10–15 minutes
- MMA-free
- Biocompatible with a neutral taste and smell
- Low exothermic temperature (98.6° F)
- Bubble-free automix application ensures a smooth surface
- Esthetic and color stable
- Achieves the same hardness, finishing and cleaning as laboratory-processed relines
- Easy and time-saving working steps

Presentation

| REF 2215 | 80 g cartridge, 10 ml adhesive, mixing tips type 8 |
| REF 2218 | Intro Kit 80 g cartridge, 10 ml adhesive, dispenser type 2, mixing tips type 8 |
| REF 1207 | Refill 80 g cartridge, mixing tips type 8 |
| REF 2217 | 10 ml adhesive bottle |
| REF 2187 | mixing tips type 8 – 50 pack |
| REF 2315 | mixing pallets – 20 pack |

As simple as an impression

Apply adhesive
Apply Ufi Gel hard C
Functional movements
Remove excess

... then let denture full cure in the mouth.
Fit Test® C & B
Control silicone to check the fit of prosthetic pieces

Indications
For the precise control and fit of marginal gaps and adaptation of:
- crowns (full and partial)
- bridges
- inlays/onlays
- cast metal cores, crowns
- metal denture bases
- attachments and other secondary parts of dentures

Advantages
- Fast diagnostic aid/tool for all restorative applications
- QuickMix syringe for easy and precise application
- Optimal blue color for metal and ceramic restorations
- Fast results due to short 45 sec. setting time
- Extremely tear resistant for complete and easy one-piece removal

Presentation
REF 2095 5 ml QuickMix syringe,
mixing tips type 9
REF 2188 mixing tips type 9 – 50 pack

Technical Data
Working time max. 1 min 45 sec.
Setting time 45 secs. – 1 min 15 secs.
Tear resistance 48.5 N

Situation after preparation
Direct application of Fit Test C & B
Seating and intraoral setting
Removal of the restoration
Non-optimal fit is visualized in the restoration ...
... and after removal of Fit Test C & B.

Source: Dr. Arne Kersting, Germany
# DIGITAL TECHNOLOGY

## CAD/CAM Blocks/Disc
- Grandio blocs: 70
- Grandio disc: 71
- Structur CAD: 71

## Polymerization Unit
- OtoFlash: 72

## V-Print Materials
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- V-Print cast: 75
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DIGITAL WORKFLOW

ADDITIVE VS. SUBTRACTIVE

DIGITAL SCAN

C.A.M. SOFTWARE

C.A.D. SOFTWARE

C.A.D. / C.A.M. MATERIALS

C.A.M. – COMPUTER AIDED MANUFACTURING

POST PROCESSING

Cleansing, removing support structures, post-exposure, grinding and polishing

Cleansing, removing sprue, polishing

Full Crown
Temporary Crown
Partial Crown
Inlay
Onlay
Bridge
Temporary Bridge
Surgical Guide
Dentures
Casting
Night Guards
Study Models
Model
Splint

1 Computer Aided Manufacturing
2 Computer Aided Design
Grandio blocs
Nano-ceramic hybrid CAD/CAM block

Indications
Crowns, inlays, onlays, veneers
Implant supported crowns

Advantages
• 86% filled for enhanced strength and excellent wear resistance
• Tooth-like elasticity and thermal expansion allows for thinner crown margins
• Natural esthetics with enhanced color stability and polish retention
• No firing or glazing required, reducing steps and saving time for true one-appointment dentistry
• Easy intraoral polishability, characterization and repair

Presentation
REF 6000 Blocks Kit 2 × Gr. 12 (A2 LT, A2 HT), 3 × Gr. 14L (A1 LT, A2 LT, A2 HT), Bifix QM QuickMix syringe 10 g universal, Futurabond U SingleDose 5 pcs., Ceramic Bond bottle 5 ml, Dimanto set, accessories

Gr. 12

Gr. 14L

Source: Dr. Felipe Moura, Brazil

Technical Data
Compressive strength 530 MPa analog ISO 9917
Biaxial Flexural strength 333 MPa
Modulus of elasticity 18.28 GPa
Thermal expansion coefficient 16.0·10^-6 K^-1
Filler content 86% by weight
Radiopacity 308 %Al
Water absorption 13.6 μg/mm³ analog ISO 4049
Water solubility < 0.1 μg/mm³ analog ISO 4049
Vickers hardness (HV) 154.6
Two-body-wear (specimen) 59.9 μm
Two-body-wear (antagonist) 98.1 μm

*Available in the US & Canada ONLY through Henry Schein and Patterson Dental
Grandio disc
Nano-ceramic hybrid CAD/CAM disc

Indications
Crowns, inlays, onlays, veneers, implant supported crowns

Advantages
- 86% filled for enhanced strength and excellent wear resistance
- Tooth-like elasticity and thermal expansion allows for thinner crown margins
- Natural esthetics with enhanced color stability and polish retention
- No firing or glazing required, reducing steps and saving time
- Zero shrinkage allows for 20% more restorations per disc than zirconia

Presentation
<table>
<thead>
<tr>
<th>Shade</th>
<th>Low translucent (LT) Ø 98.4 mm, 15 mm</th>
<th>Shade</th>
<th>High translucent (HT) Ø 98.4 mm, 15 mm</th>
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<tbody>
<tr>
<td>A1 LT</td>
<td>REF 6050</td>
<td>A1 HT</td>
<td>REF 6057</td>
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<td>A2 LT</td>
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<td>REF 6058</td>
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<td>A3 LT</td>
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<td>A3 HT</td>
<td>REF 6059</td>
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<td>A3.5 LT</td>
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<td>BL LT</td>
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</table>

Technical Data
- Compressive strength 530 MPa analog ISO 9917
- Biaxial Flexural strength 333 MPa
- Modulus of elasticity 18.28 GPa
- Thermal expansion coefficient 16.0·10^{-6} K^{-1}
- Filler content 86% by weight
- Radiopacity 308 %AI
- Water absorption 13.6 μg/mm analog ISO 4049
- Water solubility < 0.1 μg/mm analog ISO 4049
- Vickers hardness (HV) 154.6
- Two-body-wear (specimen) 59.9 μm
- Two-body-wear (antagonist) 98.1 μm

Structur® CAD
CAD/CAM Composite for Long-term Temporary Crown & Bridges

Indications
Temporary bridges spanning up to two pontics
Temporary abutment crowns
Temporary crowns

Advantages
- Composite based for higher strength and esthetics
- Temporaries last for up to three years (1 year in CAN)
- High gloss, shade stability and natural fluorescence
- Excellent edge stability and fracture resistance
- Customizable and repairable with composite
- No need to use an MMA primer
- Economical manufacturing of temporaries

Presentation
<table>
<thead>
<tr>
<th>Shade</th>
<th>Disc Ø 98.4 mm, 20 mm</th>
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<tbody>
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<td>Shade</td>
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<td>REF 6077</td>
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<tr>
<td>A3</td>
<td>REF 6078</td>
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</tbody>
</table>
OtoFlash
Post-curing unit for light-curing resin materials

Advantages
• Short curing times as a result of two underside flash bulbs
• Reliable curing due to intensive light output in a wavelength range of 280–580 nm
• Available in two models: OtoFlash Classic and OtoFlash with Protective Gas Line (gas not provided, should be obtained locally)

Product overview
The Otoflash G171 is a flash-light polymerization device for the final curing of 3D printed appliances. It has two flash bulbs at the bottom that are operated at a frequency of 10 flashes per second, making it one of the fastest post-curing units on the market. When flashing, the flash bulbs generate highly intensive light radiation, which ranges from 300 to 700 nm. Because of this extremely concentrated light radiation, the printed parts come to their final hardness more thoroughly, and thus the physical values are enhanced. In addition, this concentrated light is responsible for reducing the residual monomer count, meeting biocompatibility demands for parts that will be used intraorally.

It is available with a protective nitrogen gas port, which when connected to a nitrogen source, will displace oxygen in the curing chamber, thereby reducing the exposure of the printed pieces to oxygen. This feature is to prevent the formation of an oxygen-inhibited layer, which can weaken the final result and quality of the printed part.

Nitrogen source should be obtained locally.

Technical Specifications
• Flash frequency: 10 flashes per second
• Dimensions of polymerization chamber: 120 x 120 x 50 mm / 4.72 x 4.72 x 1.97 in
• Rated voltage: 100, 115, 230 volt AC, adjustable by switch
• Power input: 250 watt
• Spectral distribution: 280–700 nm
• Maximum between 400 and 500 nm
• Digital timer: adjustable from 1 to 9,999 flashes
• Dimensions: 310 x 310 x 140 mm / 12.2 x 12.2 x 5.5 in
• Weight: 6 kg / 13.3 lbs
V-Print® model (beige)
Material for 3D printing models

Ideal for:
Precision models for any type of dental need, including but not limited to:
• Functional crown and bridge models
• Models with dies
• Diagnostic models
• Cast models for thermoforming aligners or other appliances
• Orthodontic models
• Implant models

Advantages
• No shaking required – V-Print Model is always immediately usable, with no sedimentation separation or need for time-consuming mixing
• Suitable for overnight print jobs – does not need to be continually mixed to avoid sedimentation
• Models can be ground precisely, without undesirable changes (e.g. as caused by heat influx)
• Non-scratch, very hard surface allows for trial fitting without deformation
• Suitable for thermoforming – no deformation caused by heat

Presentation
REF 6042 1,000 g bottle

V-Print® model fast
Material for 3D printing models

Ideal for:
Generative production of dental models, especially for the dental deep-drawing process (e.g. aligner or retainers)

Advantages
• Time-saving – for fast printing in high layer thickness without loss of quality
• Suitable for vacuum forming – temperature resistant as a basis for e.g. aligner or retainer splints
• High strength and material saving – the high strength allows material-efficient hollowing of the models

Presentation
REF 6125 1,000 g bottle

• High degree of precision for optimally fitting restorations
• Compatible with multiple printers from Asiga, Dental Wings, Rapid Shape, Straumann, and VOCO. For a complete list go to www.voco.dental/3dprintingpartners
## V-Print® SG

**Material for 3D printing transparent surgical guides**

<table>
<thead>
<tr>
<th>Indications</th>
<th>Advantages</th>
</tr>
</thead>
</table>
| Dental drilling templates | • Autoclavable at 250 °F/134 °C  
• Optimal flow properties  
• High precision for optimal fit  
• Excellent green-state stability, so not subject to distortion  
• High flexural stability  
• Biocompatible  
• Neutral flavor  
• FDA cleared class I medical device  
• Compatible with multiple printers from Asiga, Dental Wings, Rapid Shape, Straumann, and VOCO.  
For a complete list go to www.voco.dental/3dprintingpartners |

**Presentation**  
REF 6043 1,000 g bottle

## V-Print® splint

**Material for 3D printing of splints, night-guards and other diagnostic parts**

<table>
<thead>
<tr>
<th>Indications</th>
<th>Advantages</th>
</tr>
</thead>
</table>
| Production of:  
Therapeutic splints  
Patient-matched night guards/splints-  
Auxiliary parts and functional parts for diagnostics | • FDA 510k cleared  
• Biocompatibility and neutral flavor ensure high level of patient acceptance  
• 385 nm wavelength allows esthetically pleasing clear-transparent results  
• Rigid with high flexural strength for durable orthodontic objects  
• Easy to polish and stain resistant  
• Compatible with multiple printers from Asiga, Dental Wings, Rapid Shape, Straumann, and VOCO.  
For a complete list go to www.voco.dental/3dprintingpartners |

**Presentation**  
REF 6044 1,000 g bottle
## V-Print® Try-In

**Light-curing resin for the generative production of try-ins for prosthetics**

### Indications
- Try-ins for total and partial prosthetics
- Transfer and grinding templates
- Correction impressions and occlusal impressions

### Advantages
- Verification and possibility to assess the fit, occlusion, functionality, phonation and esthetics before the production of prosthetics
- Biocompatible
- FDA cleared class I medical device
- Compatible with multiple printers from Asiga, Dental Wings, Rapid Shape, Straumann, and VOCO.

*For a complete list go to www.voco.dental/3dprintingpartners*

### Presentation
- Reference: 6049
- Bottle size: 1,000 g

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## V-Print® cast

**Light-curing resin for the generative production of burn-out objects for casting and pressing processes**

### Ideal for:
Production of objects which can be burned out without leaving any residues for casting processes and press ceramics

### Advantages
- Reliable printing process – non-sedimenting over the entire printing duration
- Reproducible – simple duplication prior to casting
- Quick finishing process – precisely printed objects allow for high quality of reproduction
- High form and edge stability – reliable checking of occlusion and lateral movements
- Finishing at an early stage – instrument-friendly finishing of objects in light-cured state
- High compatibility – can be used with commercially available phosphate-bonded investment materials
- Restorations free of impurities – V-Print cast burns without residue
- FDA cleared class I medical device
- Compatible with multiple printers from Asiga, Dental Wings, Rapid Shape, Straumann, and VOCO.

*For a complete list go to www.voco.dental/3dprintingpartners*

### Presentation
- Reference: 6045
- Bottle size: 1,000 g
V-Print® tray

Light-curing resin for the generative manufacture of individual trays, base plates and occlusal registrations using CAD / CAM technology

**Indications**
- Individual impression and function trays
- Bases for bite templates and wax assemblies for full dentures
- Occlusal registrations

**Advantages**
- Timesaving – printable in high layer thicknesses (up to 200 µm)
- Distortion-free impressions – thanks to the great strength
- Universal - suitable for all types of impression material
- Rapid and efficient – object printing including the forming of functional peripheries, retention elements and gaps for implant impressions.
- Biocompatible
- FDA cleared class I medical device
- Compatible with multiple printers from Asiga, Dental Wings, Rapid Shape, Straumann, and VOCO.

For a complete list go to www.voco.dental/3dprintingpartners

**Presentation**
- REF 6047 1,000 g bottle
# TIPS, LAB, DISPENSERS, ETC.

## Cleaning Agent/Custom Trays
- Traypurol tabs 78
- Individo Lux 78
- Profibase 78

## Devices & Disposables
- Mixing Pallet, Pele Tim, Dispenser, Applicator, Activator 79
- Mixing Tips 80
- Intraoral tips 80
- Tims, Brushes, Polishing Disc, etc. 81
### Traypurol tabs
*Activated tabs for cleaning impression trays and instruments*

**Advantages**
- Quickly removes alginites and cements
- Completely dissolves in water without scrubbing
- Dosing is simple
- 2 tabs per quart of cleaning solution
- Biodegradable, pH-neutral
- Gentle to material, safe for all rust-proof metals (including aluminum) and plastics
- Solution is effective for up to 72 hours

**Presentation**
- REF 2355 Pack – 50 tabs

### Individo Lux
*Light-curing custom tray material in two contoured forms for maxillae or mandibles*

**Advantages**
- Very stable and non-sticky trays
- Peppermint flavor and pleasant smell
- Short curing time under halogen light devices or UVA-light
- Available in blue or transparent shade

**Presentation**
- Blue opaque
  - REF 2402 Pack maxillae
  - REF 2403 Pack mandibles
  - Blue transparent
  - REF 2408 Pack maxillae
  - REF 2409 Pack mandibles

### Profibase
*Light-curing pink-transparent base plates for easy and economical production of wax models*

**Advantages**
- Stable and pressure-proof
- Tissue-like shade increases acceptance by dentists and patients
- Peppermint flavor and pleasant smell
- Short curing time under halogen light devices or UVA-light

**Presentation**
- REF 2111 Set maxillae, 25 mandibles
- REF 2112 Pack maxillae
- REF 2113 Pack mandibles
Mixing Pallet

Pele Tim

Dispenser

**Mixing Pallet**

- **Pele Tim:** Available shapes and sizes

**Pele Tim**

**Presentation**

- **REF 2315 Mixing Pallets – 20 pack**

**Dispenser**

**Presentation**

- **REF 2158 type 2 for Structur 3, Structur Premium, Structur 2 SC, Provicol C, Ufi Gel SC, Registrado X-tra, V-Posil (1:1/2:1)**
- **REF 2259 type 3 for Rebilda DC (DS25 1:1)**

**AC Applicator**

**Presentation**

- **REF 2331 1 AC Applicator Type 1**
- **REF 2334 1 AC Applicator Type 2**

**AC Applicator**

**Type 1:** Forceps-type applicator to directly apply the contents of VOCO application capsules (AC) into the cavity

**Type 2:** Ergonomically designed applicator to dispense the contents of the VOCO application capsules (AC) directly into the cavity

**AC Activator**

**Presentation**

- **REF 9300 1 AC Activator**

**AC Activator**

Device to activate VOCO application capsules (AC)

**Caps Gun**

**Presentation**

- **REF 9143 VisCalor Dispenser – Preheating device**

**Caps Gun**

Low force composite dispenser

- **VisCalor Dispenser:** Preheating dispenser for VisCalor/VisCalor bulk, and all other VOCO composites packaged in a capsule
Mixing Tips

- REF 2185 mixing tip type 6 for Structur 3, Structur Premium, Structur 2 SC, Provicol C – 50 pack
- REF 2191 mixing tip type 11 for Rebilda DC QM syringes, Bifix QM, Fit Test C&B with Quick Up method, Grandio® Core Dual Cure – 50 pack
- REF 2195 mixing tip type 15 with intraoral tips type 1 for Bifix SE – 50 pack
- REF 2202 mixing tip type 20 (Die Silicone) – 50 pack
- REF 2203 mixing tip type 30 for V-Posil Heavy Soft Fast, Mono Fast and Putty Fast 380 ml Cartridge – 50 pack

Intraoral Tips

- REF 2146 pack type 41 for Ionoseal, Grandio/BO Flow, Admira Fusion Flow, Calcimol LC, etc. – 100 pack
- REF 2144 pack type 44 for Amaris Flow, Admira Flow, GrandioSO Light Flow, Quick Up LC – 100 pack
- REF 2140 pack type 2 for Registrado X-tra, Registrado Clear and Registrado Scan – 50 pack
- REF 2132 pack type 48 for Vococid – 50 pack
- REF 2133 pack type 6 for V-Posil Mono Fast – 50 pack
- REF 2136 pack type 7 for V-Posil Light Fast and X-Light Fast – 50 pack
- REF 2192 mixing tip type 12 for Rebilda DC in cartridge – 50 pack
- REF 2196 mixing tip type 16 for V-Posil Heavy Soft Fast, V-Posil Mono Fast, and Registrado X-tra/Clear/Scan for intraoral tips type 2 – 50 pack OR type 3 – 50pk
- REF 2187 mixing tips 8 for Ufi Gel SC, Ufi Gel hard C – 50 pack
- REF 2188 mixing tips type 9 for Fit Test C & B, Bifix Temp – 50 pack
- REF 2189 mixing tip type 10 for Provicol QM, Structur 3 (in the QuickMix syringe), Structur 2 (in the QuickMix syringe), Meron Plus QM, Provicol QM / QM Plus / QM Aesthetic, Quick Up – 50 pack
- REF 2194 mixing tips type 14 for Bifix SE – 50 pack
- REF 2199 mixing tip type 19 (bendable) for Rebilda DC
- REF 2193 mixing type 19 for V-Posil Heavy Soft Fast, V-Posil Mono Fast and Putty Fast 380 ml Cartridge – 50 pack
- REF 2131 pack type 47 for Calcicur – 30 pack
- REF 2141 pack type 3 for Rebilda DC in cartridge, V-Posil Light Fast and X-Light Fast – 50 pack
- REF 2142 pack type 4 for Rebilda DC QM syringes, Bifix QM, Grandio Core Dual Cure – 50 pack
- REF 2140 pack type 2 for Registrado X-tra, Registrado Clear and Registrado Scan – 50 pack
- REF 2143 pack type 4 for Amaris Gingiva, GrandioSO Light Flow, Grandio Seal – 100 pack
- REF 2148 pack type 46 for GrandioSO Heavy Flow, x-tra base, Admira Fusion x-base, Clip Flow – 100 pack
- REF 2139 pack type 1 for Rebilda DC QM syr., Bifix SE, Bifix QM, Fit Test C & B, direct root canal application – 50 pack
- REF 2133 pack type 6 for V-Posil Mono Fast – 50 pack
- REF 2310 pack type 42 for Vococid – 30 Pack
### Endo Tim

**REF 2246** Brushes for applying bonding agents and varnishes into the root canal – pack 50 Endo Tim to be used in the root canal – 50 pack

### Micro Tim

**REF 2249** Application brushes for Admira Protect – 100 pack

### Single Tim

**REF 2247** Application brushes for Futurabond NR/DC/M/M+/U SingleDose and Ceramic Bond – 100 pack

### Easy Brush

**REF 2245** Application brushes for Proflurid L, Proflurid Varnish and Easy Glaze – 50 pack

### Brush Holder

**REF 2338** Disposable brush holder for Micro Tim for Admira Protect – 5 pack

### Polishing Discs

**REF 2049** trimming discs – 10 pack for Ufi Gel SC without mandrel

### VisCalor® Dispenser Replacement Sleeves

**REF 9145** Protective sleeves for Viscalor Dispenser – 100 pack

### VisCalor® Dispenser Changeable Top

**REF 9144** Changeable tops – 2 pcs