Adhese® Universal
The universal adhesive

Click & Bond

Efficient Esthetics
Universal adhesion with advanced delivery

Adhese® Universal is a single-component, light-cured adhesive for direct and indirect bonding procedures and all etching protocols. It is the only universal bonding agent available in the innovative VivaPen®.

Universally suitable for direct and indirect bonding procedures and all etching protocols

Efficient VivaPen® delivery form provides almost 3 times more applications per ml compared to conventional bottles

Minimal risk of postoperative sensitivity due to the integrated desensitizing effect

Curing of Class I and II restorations in permanent posterior teeth in only 3 seconds from the occlusal aspect with 3s PowerCure

High bond strength (> 25 MPa) on wet and dry dentin

Fast and convenient
Universal application for direct and indirect restorations

Esthetics are impossible without a suitable adhesive

It’s the first working steps that have the most decisive impact on the final esthetic outcome.

Due to its simple application protocol, Adhese Universal ensures reliable results. The adhesive can be applied in ultra-thin layers. Therefore, it gives you complete freedom in creating restorations that meet the needs of the individual clinical situation.

Adhese Universal provides a solid foundation for long-term clinical success – in addition to producing excellent esthetic results.

Class IV filling made of Tetric EvoCeram® in combination with Adhese Universal
Dr. A. Peschke, Ivoclar Vivadent AG, Schaan, Liechtenstein, 2013

Ceramic inlay made of IPS e.max® – adhesively cemented with Variolink Esthetic and Adhese Universal
Dr. S. Huth, Ivoclar Vivadent AG, Schaan, Liechtenstein, 2014

Outstanding esthetic results

Functional properties of bulk-fill composite restorations after 3 years

Overview of the functional properties of all restorations with Adhese Universal and Tetric EvoCeram Bulk Fill: FDI rating 1 “Excellent/Very Good” and FDI rating 2 “Good”

Source: Poster IADR #0283
Peschke et al.: Clinical behaviour of bulk-fill composite restorations after 36 months, Continental European Division of the International Association for Dental Research, 21 - 23 September 2017
1 Isolate
Effective isolation with OptraGate®, cotton rolls and saliva ejector

2 Bond
Direct intraoral application of Adhese® Universal with the efficient VivaPen®

3 Restore
Direct
Tetric® – The solution for all cavities

Indirect
Esthetic restorations made of IPS e.max®, optimally cemented with Variolink Esthetic®

4 Cure
Reliable and fast curing with the Bluephase® curing units

Efficient Esthetics
Products that are optimally coordinated for direct restorative procedures enhance the efficiency with which high-quality esthetic restorations can be achieved.
High bond strength on wet and dry dentin

There is no need to worry about the moisture levels on the tooth surface: Variations in surface moisture do not necessarily impact the bond strength. Adhese Universal allows you to achieve reliable high bond strength on enamel and dentin – independent of the etching protocol employed.

Shear bond strength on dentin after different surface treatments – Total-etch technique

<table>
<thead>
<tr>
<th>Material</th>
<th>Wet (no air-drying)</th>
<th>Dry (5 sec. air-drying)</th>
<th>Dried (10 sec. air-drying)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhese® Universal</td>
<td>40</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Adhese® Universal Bond*</td>
<td>40</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>All-Bond Universal**</td>
<td>40</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Futurabond® U*</td>
<td>40</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Prime &amp; Bond elect**</td>
<td>40</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Optibond™ Solo Plus*</td>
<td>40</td>
<td>30</td>
<td>20</td>
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Consistent high bond strength

<table>
<thead>
<tr>
<th>Material</th>
<th>MPa after 24h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhese® Universal</td>
<td>50</td>
</tr>
<tr>
<td>Adhese® Universal Bond*</td>
<td>50</td>
</tr>
<tr>
<td>All-Bond Universal**</td>
<td>50</td>
</tr>
<tr>
<td>Futurabond® U*</td>
<td>50</td>
</tr>
<tr>
<td>Prime &amp; Bond elect**</td>
<td>50</td>
</tr>
<tr>
<td>Optibond™ Solo Plus*</td>
<td>50</td>
</tr>
</tbody>
</table>

Direct bonding*  
Shear bond strength when using the self-etch technique (SE) and the total-etch technique (TE)

Indirect bonding – Selective-enamel-etch technique*  
Shear bond strength with Variolink® Esthetic after dual-curing and 10,000 thermocycles (TC)

"The in-vitro test results of Adhese Universal demonstrate comparable results to multi-component Gold Standard systems. After long-term testing, universal adhesives have the potential to become the future Gold Standard in dentistry."
Minimal risk of postoperative sensitivity

Hypersensitivity can be one of the most challenging concerns for dentists in clinical practice. The integrated desensitizing effect of Adhese Universal minimizes the risk of postoperative sensitivity without the application of a separate desensitizing agent.

Adhese Universal provides uniform mechanical blockage and sealing of the dentin tubuli under wet and dry conditions. As a result, a homogeneous adhesive layer with defined resin tags is formed, which effectively seals the dentin.

The movement of dentinal fluid within the tubules as well as postoperative sensitivity associated with that movement are minimized.

Find out how it works...
Adhese Universal balances an optimized mix of hydrophilic and hydrophobic monomers with a low acidic concentration and mild etching effect into one formulation.

Click here for the video: www.ivoclarvivadent.com/FunctionAdheseUniversal-en
Efficient dispensing with the VivaPen®

Simple “Click” activation dispenses the exact amount of material needed for each procedure. Dispensing of adhesive material into a mixing well is no longer required, which results in a significant reduction in material waste.

An independent third party evaluation confirmed the efficiency and cost-effectiveness of the VivaPen in comparison with conventional bottle delivery forms.

Almost 3 times more single-tooth applications per ml compared to conventional bottles

Two millilitres of adhesive in the VivaPen are sufficient for approximately 190 single-tooth applications.

VivaPen® Conventional bottles

* Not registered trademarks of Ivoclar Vivadent AG.
Source: Berndt & Partner, VivaPen Benchmarking Study, August 2013
Fast and convenient: Direct intraoral application

The ergonomic, pen-like design of the VivaPen, in combination with the replaceable brush cannulas, ensures quick, controlled and convenient application directly in the mouth of the patient.¹
One adhesive for universal application

Adhese Universal is suitable for direct and indirect restorations.*

- **Mild acidic properties** allow compatibility with light-, self- and dual-cure filling materials as well as light- and dual-cure luting cements
- **No activator** is required with dual-cure composites and luting cements
- **Very low film thickness (approx. 10 μm)** after light-curing – will not impede the fitting accuracy of indirect restorations.

**Direct restorations**
- Direct composite resin fillings
- Direct core build-ups
- Intraoral repair of fractured composite resin fillings

**Indirect restorations**
- Adhesive cementation of indirect restorations
- Suitable as a primer for restorations made of Tetric CAD composite blocks

Adhese Universal is compatible with all etching protocols. Optimum results can be achieved in a wide range of clinical situations.

**Self-etch technique**
- Saves time and reduces the risk of postoperative sensitivity
  Dr R. Watzke, Ivoclar Vivadent AG, Schaan, 2014

**Selective enamel etching**
- Enhances adhesion to enamel, provides improved marginal seal and reduces post-op interventions
  Dr A. Peschke, Ivoclar Vivadent AG, Schaan, 2014

**Total-etch (etch & rinse) technique**
- Enhances adhesion to enamel, provides improved marginal seal
  Dr A. Peschke, Ivoclar Vivadent AG, Schaan, 2013
Experience the difference with 3s PowerCure

When direct Class I and II restorations are placed in permanent posterior teeth, 3-second exposures from the occlusal aspect are sufficient for all curing steps with the Bluephase PowerCure in the 3sCure mode. Simply expose Adhese Universal, Tetric PowerFill and Tetric PowerFlow to the light-intensity of 3,000 mW/cm² produced by the curing light. You will notice right away that the curing time you require is considerably reduced. At the same time, you will continue to achieve the customary high-quality aesthetic results.

Reliable curing of Adhese Universal in only 3 seconds with the Bluephase PowerCure in 3sCure mode

Delivery forms

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>664504WW</td>
<td>System Kit VivaPen (1 x 2 ml)</td>
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<tr>
<td></td>
<td>100 VivaPen snap-on cannulas, 20 VivaPen sleeves</td>
</tr>
<tr>
<td>663717WW</td>
<td>Starter Kit VivaPen (1 x 0.5 ml)</td>
</tr>
<tr>
<td></td>
<td>10 VivaPen snap-on cannulas, 20 VivaPen sleeves</td>
</tr>
<tr>
<td>665156WW</td>
<td>Refill VivaPen (1 x 2 ml)</td>
</tr>
<tr>
<td>664505WW</td>
<td>Refill VivaPen (3 x 2 ml)</td>
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<tr>
<td>627161</td>
<td>Refill VivaPen snap-on cannulas (300 pcs.)</td>
</tr>
<tr>
<td>627178</td>
<td>Refill VivaPen snap-on cannulas (100 pcs.)</td>
</tr>
<tr>
<td>627492</td>
<td>Refill VivaPen protective sleeves (300 pcs.)</td>
</tr>
<tr>
<td>663720WW</td>
<td>Refill bottle (1 x 5 g)</td>
</tr>
<tr>
<td>663721WW</td>
<td>Refill bottle (2 x 5 g)</td>
</tr>
<tr>
<td>695128</td>
<td>Refill Vivadent applicators, black (50 pcs.)</td>
</tr>
</tbody>
</table>

* A protective sleeve must be used in intraoral procedures.