Unitek™ Bonding System

Transbond™ Supreme LV
Low Viscosity Light Cure Adhesive
Lunch and Learn

The Leader in Adhesive Innovation and Excellence
Transbond™ Supreme LV
Low Viscosity Light Cure Adhesive

Agenda

- What is Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?
- Why Transbond Supreme LV Adhesive?
- Product Offering
- Product Considerations
- Instructions for Use
- Frequently Asked Questions
What is Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?

- Light cure adhesive
- Flowable consistency (Low Viscosity)
- Nanofilled
- Orthodontic direct or indirect applications
- Easy delivery and application
- Low bond failure rate
Why Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?
Why Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?

- Benefits of Light Curing Adhesives
  - Cure on Demand
  - Extended time for tray placement
Why Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?

- Flowable Consistency
  - Soft when extruding from syringe but no run-on or waste before light-curing
  - Easy coverage of custom resin base
Why Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?

- Nanofilled
  - The Nanofillers give Transbond™ Supreme LV Low Viscosity Light Cure Adhesive good bond strength, flow, and wear properties
  - Reliable performance
Why Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?

- Indirect bonding or other direct applications*
  - Less inventory of various adhesives
- Multi-functional adhesive

* Lingual retainers, buttons, orthodontic tray attachments, bite-blocks, etc.
Why Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?

- Easy delivery*
  - Accuracy and low waste
- Efficient and accurate delivery

* Adhesive kit contains small gauge metal dispensing tips to allow dispensing of small quantities
Why Transbond™ Supreme LV
Low Viscosity Light Cure Adhesive?

- Low bond failure rate
  - Less than 1%* bond failure rate at tray removal**
  - Less than 2%* bond failure rate one week after bonding**

*Light cure indirect bonding
**Data collected during in-vivo customer evaluation. Available upon request.
Bond Strength

- Bond Strength Comparable to Transbond™ XT Light Cure Adhesive and Sondhi™ Rapid-Set Indirect Bonding Adhesive

Source: 3M Unitek labs. Tested with upper central Victory Series™ Brackets.
Product Offering
Unitek™ Bonding System

Transbond™ Supreme LV
Low Viscosity Light Cure Adhesive

- Syringe Kit (REF 712-046)
  - 2-2g Syringes
  - 1 package of 20 metal dispensing tips (REF 712-045)

- Approximately 20 full upper & lower cases/kit
- 3-Year Shelf Life from date of manufacture

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Available Primers for use with Transbond™ Supreme LV
Low Viscosity Light Cure Adhesive

- Transbond™ Plus Self Etching Primer

- Transbond™ MIP Moisture Insensitive Primer (MIP)

- Transbond™ XT Primer
Product Considerations
Transbond™ Supreme LV Low Viscosity Light Cure Adhesive

- Transbond™ Supreme LV Low Viscosity Light Cure Adhesive is not recommended for direct bonding of orthodontic brackets:
  - The soft consistency may cause bracket skating or drift before cure

- Transbond™ Supreme LV Low Viscosity Adhesive may be suitable for other orthodontic applications requiring a flowable adhesive, i.e. lingual retainers, buttons, or bite-blocks
Instructions for Use
Indirect Tray Preparation

- Follow your current laboratory procedure for preparing a stone model, positioning and bonding brackets onto the model, forming a custom resin base and preparing an indirect bonding transfer tray.
Adhesive Application and Bonding

- After the teeth have been cleaned, isolated, etched and primed proceed with bonding.

- Apply a small bead of Transbond™ Supreme LV Low Viscosity Light Cure Adhesive directly from the syringe via the applicator tip to the center of each custom resin base in the transfer tray. Spread the adhesive over the base using the dispensing tip.

**Note:** Use just enough adhesive to cover the base as thin as possible to minimize adhesive flash.
Adhesive Application and Bonding

- Seat the tray and while holding firmly in place, cure the mesial and distal sides of each bracket for 6 seconds with an Ortholux™ Luminous Curing Light.

- The tip of the light guide should touch the tray and be at a 90 degree angle to the tooth surface.

Note: If additional curing time is desired remove the hard tray then proceed with additional curing on the soft tray.
The tray can be removed immediately following light exposure. Remove the tray using a scaler to peel it from the lingual to buccal. Use extreme care when removing the tray from around the bracket wings and hooks.

Scale the excess resin from around the brackets and from the interproximal contacts. Use dental floss to check that all contacts are open.

Archwires can be immediately tied in.
Frequently Asked Questions
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- Is Transbond™ Supreme LV Low Viscosity Light Cure Adhesive moisture tolerant?
  - No, the adhesive is not moisture tolerant

- Does Transbond™ Supreme LV Low Viscosity Adhesive release fluoride?
  - This adhesive does not release fluoride.
What adhesives must be used to create the custom resin bases for indirect bonding with Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?

The custom resin bases necessary for indirect bonding can be created from most available orthodontic bonding adhesives. 3M Unitek recommends the use of Transbond™ XT Light Cure Adhesive or the APC™ II Adhesive Coated Appliance System.
Frequently Asked Questions

- **Can Transbond™ Supreme LV Low Viscosity Light Cure Adhesive be used to direct bond brackets?**
  - *While the strength of Transbond™ Supreme LV Low Viscosity Adhesive is adequate for direct bonding, most clinicians will find that the flowable nature of the adhesive is not optimized for flash clean up required of direct bonding.*

- **Can Transbond™ Supreme LV Low Viscosity Adhesive be used to bond lingual retainers?**
  - *Clinicians may find the flow and polishing properties of Transbond™ Supreme LV Low Viscosity Adhesive to their liking for bonding lingual retainers or other orthodontic applications where a flowable adhesive is indicated.*
Frequently Asked Questions

- **How can I cure the Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?**
  - The adhesive can be cured with any high intensity orthodontic curing light that emits light in the 400 to 500 nm range. When curing the adhesive over an IDB tray the curing tip must be held flush against the tray.

- **What is the curing time for Transbond™ Supreme LV Adhesive when cured through the clear or translucent Indirect bonding tray?**
  - The recommended curing technique for Transbond™ Supreme LV Adhesive is 6 seconds from the mesial and distal sides of each bracket through the clear or translucent tray using an Ortholux™ Luminous Curing Light.
Frequently Asked Questions

- Should a primer such as Transbond™ MIP Moisture Insensitive Primer be applied to the custom resin base before applying Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?

  The flow properties of Transbond Supreme™ LV Low Viscosity Adhesive have been optimized so that no additional primer is required for the adhesive to wet out sufficiently on the custom resin base.
Frequently Asked Questions

- Can Transbond™ Supreme LV Low Viscosity Light Cure Adhesive be used to indirectly bond metal and ceramic brackets?
  - Yes. Because the adhesive bonds directly to the custom resin base and not the bracket bonding base, it can be used with all orthodontic brackets.

- What kind of fillers does Transbond™ Supreme LV Low Viscosity Adhesive contain?
  - The adhesive contains a combination of silica and zirconia nanofillers at a variety of particle sizes, from 5 to 75 nm.
What is the shelf life of Transbond™ Supreme LV Low Viscosity Light Cure Adhesive?

- The shelf life is 24 months from the date of manufacture and is designated as YYYY-MM on the package after the EXP icon. The customer is guaranteed a minimum of 12 months of shelf life upon receipt of the product.

Can the dispensing tips be used on more than one patient?

- No. The dispensing tips are disposable and are meant to be used on only one patient setup. Additional tips can be reordered as REF 712-045.