Transbond™ PLUS Color Change Adhesive
Lunch and Learn
Transbond™ PLUS Color Change Adhesive

Agenda

- What is Transbond™ PLUS Color Change Adhesive?
- Why Transbond PLUS Color Change Adhesive?
- Product Offering
- Technique Tips
- Application
- Frequently Asked Questions
What is Transbond™ PLUS Color Change Adhesive?

- Light cure, syringeable adhesive with an optimized adhesive feel and familiar performance
- Color changing
- Moisture tolerant
Why Transbond™ PLUS Color Change Adhesive?
Why Transbond™ PLUS Color Change Adhesive?

- Benefits of Light Curing Adhesives
  - Cure on demand
  - Extended time for properly positioning brackets
Why Transbond™ PLUS Color Change Adhesive?

- **Color Change**
  - *Adhesive offers better bracket positioning reference* *
  - *Pink color is visible*
  - *Pink adhesive is easy to see for better flash cleanup**

*Aesthetic Brackets*

**Better flash cleanup improves the debonding process as ceramic brackets can shatter if initial flash is not adequately removed.*
Why Transbond™ PLUS Color Change Adhesive?

- **Moisture Tolerance**
  - *Moisture tolerant adhesives offer improved bonding in moist environments* *
    - Better bond retention on molars
    - Better bond strength in patients with excessive salivation
  - By using moisture tolerant adhesives you can
    - Reduce chair time
    - Improve patient comfort

*When used with Transbond™ Plus Self Etching Primer or Transbond™ MIP Moisture Insensitive Primer*
Moisture Tolerance

Bond Strength

Victory Series™ UL Cent Brackets with Transbond™ Plus Self Etching Primer

- Transbond™ XT Adhesive
- Transbond™ PLUS Color Change Adhesive

Mean Bond Strength, lb./brkt

- Dry
- Moisture contaminated
- Saliva contaminated

Mean Bond Strength, MPa
The moisture tolerance of the Transbond™ PLUS Color Change Adhesive facilitates good bond strength under moisture and saliva contaminated bonding conditions, similar to dry bonding conditions.
Product Offering
Transbond™ PLUS Color Change Adhesive Product Offerings

- Syringe Kit
  - 2 Syringes
  - 40 Patients
  - 3-Year Shelf Life
  - Room Temperature storage
Transbond™ PLUS
Color Change Adhesive Product Offerings

- Capsule Kit
  - 25 Capsules in each kit
  - 25 Patients per kit

- Capsule Refills
  - 25 Capsules in refill
Available Primers for use with Transbond™ PLUS Color Change Adhesive

- Transbond™ Plus Self Etching Primer (SEP)
- Transbond™ MIP Moisture Insensitive Primer

Also compatible with other primers such as Ortho Solo™ from Ormco Corporation and Assure™ Universal Bonding Resin from Reliance Orthodontics.
Technique Tips
Transbond™ PLUS Color Change Adhesive

- **Transbond™ PLUS Color Change Adhesive is not recommended for:**
  - **Indirect Bonding**
  - **Orthodontists who choose not to clean adhesive flash**
    - Adhesive is hydrophilic
    - Uncleaned flash may stain - in patients with certain diets or poor oral hygiene
  - **Offices who paste all bondable brackets prior to patient prep**
    - Color will fade when exposed to ambient light
  - **Some brackets such as Mystique® Brackets from GAC are not recommended to be used with Transbond PLUS Color Change Adhesive**

Transbond is a trademark of 3M. Mystique is a trademark of Dentsply/GAC Corporation.
Seat Bracket from the gingival to the occlusal

“Technique of seating the bracket from the gingival to the occlusal seems advantageous as this expresses the excessive adhesive toward the occlusal.”
Technique Tips From Customer Evaluations

- Flash Cleanup
  - “When cleaning up Transbond™ PLUS under the protrusions of the Clarity™ SL Self-Ligating Bracket, a dental explorer works best to get underneath the protrusion.”
  - “Flash cleanup is critical because the hydrophilic nature may lead to increased staining with waterborne staining agents, compared to Transbond™ XT or APC™ II Adhesives which are hydrophobic.”
Capsule Application
1. To insert capsule into dispenser, open dispenser handle as wide as possible. Pull plunger toward opened handle. Place capsule tip into the barrel slot.
2. Seat the capsule in the barrel by pushing the capsule forward (away from the handle) as far as possible. Push plunger towards capsule. Close handle grip until plunger contacts capsule. Remove the cap from the capsule.
3. Dispense a small amount of Transbond™ PLUS Color Change Adhesive paste onto bracket base using a slow, steady pressure. When completed wipe capsule tip clean and replace cap.
4. To remove the used capsule, open the dispenser handle as wide as possible. Pull plunger away from capsule. Push the capsule toward the plunger. Turn dispenser upside down to drop capsule into hand.
Syringe Application
Adhesive Application from Syringes

- Note: Do not apply adhesive onto brackets until patient is ready to be bonded.

- With the syringe apply a small amount of Transbond™ PLUS Color Change Adhesive paste onto bracket base. Use sparingly. When completed wipe syringe tip clean and replace cap.
Adhesive Application from Syringes

- **Placement and Curing**

1. *Immediately after applying adhesive, lightly place bracket onto tooth surface.*
2. *Adjust bracket to final position, press firmly to seat bracket.*
3. *Gently remove excess adhesive around appliance base.*
   - The pink color aids in flash removal.

Note: If final positioning will be delayed, cover patient’s mouth with a dark colored mask or other article to avoid premature curing and fading of the pink color by ambient light.
4. Hold the curing light stationary at a distance of 2-3 mm above interproximal contact for metal appliances and perpendicular to ceramic appliance surface.

5. Archwires can be placed immediately after bonding of last bracket.

Refer to charts 1 to determine the curing conditions for optimal bond strength. If your curing light does not appear on this chart, please refer to your light manufacturer’s instructions for curing conditions.
A technique tip for faster light curing of metal brackets is to position the curing light guide interproximal to two brackets. In order for the bracket to fully cure, however, both sides of the bracket must be cured.
## Light Curing Guide

<table>
<thead>
<tr>
<th>Appliance with Transbond™ PLUS Color Change Adhesive</th>
<th>Ortholux™ Luminous Curing Light (High Intensity 1600 mW/cm²) (LED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Brackets</td>
<td>3 seconds mesial + 3 seconds distal</td>
</tr>
<tr>
<td>Ceramic Brackets</td>
<td>3 seconds through the bracket</td>
</tr>
<tr>
<td>Bondable Buccal Tubes</td>
<td>6 seconds mesial + 6 seconds occlusal</td>
</tr>
</tbody>
</table>

- **Note:** Do not apply adhesive onto brackets until patient is ready to be bonded.
Precaution:

Please follow manufacturer’s directions for the handling, proper use and eye protection recommendations when using a curing light.
Frequently Asked Questions
Frequently Asked Questions

- Is the color of the adhesive a curing indicator?
  
  No. The color change does not indicate curing of the adhesive. Under ambient light, the pink color fades away several minutes before the adhesive cures.
Frequently Asked Questions

- Is the consistency of Transbond™ PLUS Adhesive comparable to Transbond™ XT Adhesive?

  - *Transbond™ PLUS adhesive has been designed to be similar to Transbond™ XT adhesive in consistency. You might find, however, that adhesive flash may feel tackier.*
Frequently Asked Questions

- After seating brackets coated with Transbond™ PLUS Adhesive, is there a way to slow the fading of the pink color?
  - Yes. Covering the patient’s mouth with a dark cover will retard the fading of the pink color.
Frequently Asked Questions

- Can the colored Transbond™ PLUS Adhesive stain the teeth?
  - No. Transbond™ PLUS adhesive color fades with light exposure and will not stain teeth. The color will not return during treatment.
Frequently Asked Questions

- Is the bond strength of Transbond™ PLUS Adhesive comparable to Transbond™ XT Adhesive?
  
  Yes. Under similar test conditions Transbond™ PLUS and Transbond™ XT adhesives have comparable bond strengths.
Frequently Asked Questions

- Is Transbond™ PLUS Adhesive compatible with Transbond™ XT, Transbond™ MIP and Transbond™ Plus Self Etching Primers?
  
  Yes. Transbond™ PLUS adhesive has been tested and is compatible with these primers.
Frequently Asked Questions

- Can Transbond™ PLUS Adhesive be used with metal and ceramic brackets?
  
  - Yes. Transbond™ PLUS adhesive can be used with both types of brackets.
Frequently Asked Questions

- What are the recommended storage conditions for Transbond™ PLUS Adhesive?
  - It should be stored between 2°-27°C (35° - 80°F). The adhesive should be used at room temperature.