

# Orthodontic bonding solutions by 3M.

*Featuring...*

3M™ APC™ Adhesives

3M™ Transbond™ Adhesives

Primers and Specialty Adhesives





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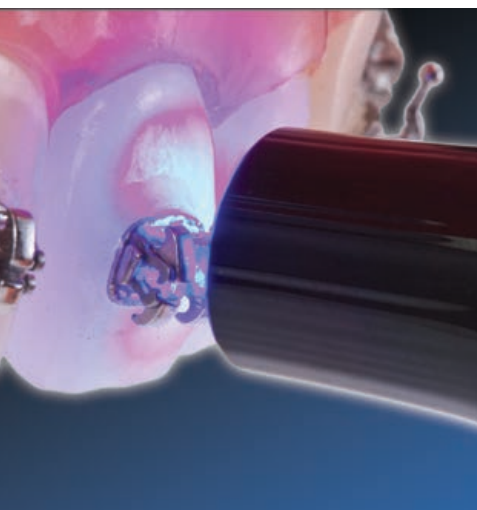
**Backed by more than 100 years of innovative adhesive technology and expertise, 3M is a trusted leader in bonding adhesives, setting the gold standard for orthodontic bonding techniques and systems.**

From innovative light curing systems and chemical cure adhesives to adhesive coated brackets and banding systems, our full line of adhesives and primers are easy to use and deliver reliable bond retention, performance and efficacy.



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# Orthodontic Adhesive Product Applications and Properties

3M brand orthodontic adhesives and primers offer uncompromising quality and reliable performance. To identify the product that will best meet your needs, utilize this reference chart to determine product applications and specific properties.

	APPLICATIONS						PROPERTIES					
	Primer	DBA Custom Resin Base	IDB Custom Resin Base	IDB Adhesive	Banding	Lingual Retainer	Light Cure	Chemical Cure	Dual Cure	Color Changing	Moisture Tolerant	Mixing Required
APC™ Flash-Free Adhesive Coated Appliance System		•	•				•					
APC™ PLUS Adhesive Coated Appliance System		•					•		•	•		
APC™ II Adhesive Coated Appliance System		•	•				•					
Transbond™ XT Light Cure Adhesive		•	•				•					
Transbond™ PLUS Color Change Adhesive		•					•		•	•		
Transbond™ Plus Self Etching Primer	•						•			•		
Transbond™ MIP Moisture Insensitive Primer	•						•			•		
Transbond™ XT Primer	•						•					
Transbond™ LR Adhesive for Lingual Retainers		•				•	•					
Transbond™ Plus Light Cure Band Adhesive					•		•					
Unitek™ Multi-Cure Glass Ionomer Band Cement					•			•		•	•	
Transbond™ Supreme LV Low Viscosity Light Cure Adhesive				•		•	•					
Sondhi™ Rapid-Set Indirect Bonding Adhesive				•				•				
Transbond™ IDB Pre-Mix Chemical Cure Adhesive				•				•				•
Concise™ Orthodontic Chemical Cure Adhesive		•	•					•				•
Unite™ Chemical Cure Bonding Adhesive		•	•					•				
RelyX™ Unicem 2 Resin Cement*				•					•	•		

\*Use with the Incognito Appliance System.

# APC Adhesive Coated Brackets



3M has set the standard in orthodontic bonding efficiency with the APC Adhesive Coated Appliance System, providing fast and reliable bonding and fewer steps than traditional bonding systems.

The APC System features individually sealed blisters for protection against contamination and assurance of single-use. It also offers a convenient inventory and dispensing system.

- 3M™ APC™ Flash-Free Adhesive
- 3M™ APC™ PLUS Adhesive
- 3M™ APC™ II Adhesive

## APC Flash-Free Adhesive

3M Innovation delivers a game-changer in orthodontic bonding – with APC Flash-Free Adhesive.

Using advanced adhesive technology, APC Flash-Free Adhesive lets you move directly from bracket placement to bracket cure without removing adhesive flash – no clean-up! For doctors, staff and patients, the additional convenience and time savings can be an enormous benefit.

- Eliminates the flash removal step
- Saves bonding time for doctor, staff and patient
- Less than 2% bracket bond failure rate
- Protects enamel under the adhesive
- Makes debonding and adhesive remnant clean-up easier
- Improves patient bonding/ debonding experience

*“APC Flash-Free Adhesive Coated Brackets are very easy to work with. Not having to clean up flash is a real time saver during the bonding process. Plus, I have the peace of mind knowing that no flash was left behind.”*

– Dr. Scott Harper, USA



# APC PLUS Adhesive – Color Changing

The APC PLUS Adhesive Coated Appliance System requires fewer steps to completion, meaning faster results, greater efficiencies, fewer opportunities for error, and an enhanced patient experience.

The adhesive starts in the pink – helping the visual reference of the bracket and the clean-up of flash – then fades to clear when exposed to curing light.



- Moisture tolerant
- Color changing for easier flash clean-up and better bracket reference
- Uniform adhesive coating on each bracket



*“We really love the APC Adhesive Coated Appliance System in all three of our offices. I feel it has certainly improved efficiency by providing a predictable, repeatable bonding procedure. Clean-up is simple and quick, and it has been great in integrating new chairside staff.”*

– Dr. Joel D. Cooper, Brentwood, TN

# APC II Adhesive

The APC II Adhesive Coated Appliance System immediately increases office efficiency by eliminating messy adhesive mixing and bracket application – no wasted time getting to chairside.



- No mixing, no application, no opportunity to contaminate the base
- Fewer steps. Fewer bonding variables. Increased productivity
- Available with many 3M appliances

## Bonding Steps – Adhesive Systems

### APC™ Flash-Free Adhesive System – 5 Steps



### APC™ II / PLUS Adhesive Systems – 6 Steps



### Traditional Light Cure Bonding Systems – 11 Steps



\*Using Transbond™ Plus Self Etching Primer



# The Transbond Adhesive Family



At the heart of successful orthodontics is a strong, unquestionable bond between enamel and brackets, and orthodontists and their bonding products. After more than 30 years of innovation and proven performance in nearly 100 countries, 3M Transbond adhesives have become a preferred choice among orthodontists around the world.

- Light Cure Adhesives
- Primers

## Light Cure Adhesives

Our full line of innovative light cure adhesives feature advanced adhesive technology for additional working time and accurate bracket placement.



# 3M™ Transbond™ XT Light Cure Adhesive

Orthodontists rely on this light cure adhesive to deliver fast, reliable bond strength and accurate results.

- Bond ceramic and metal brackets
- Extended working time for precise bracket placement

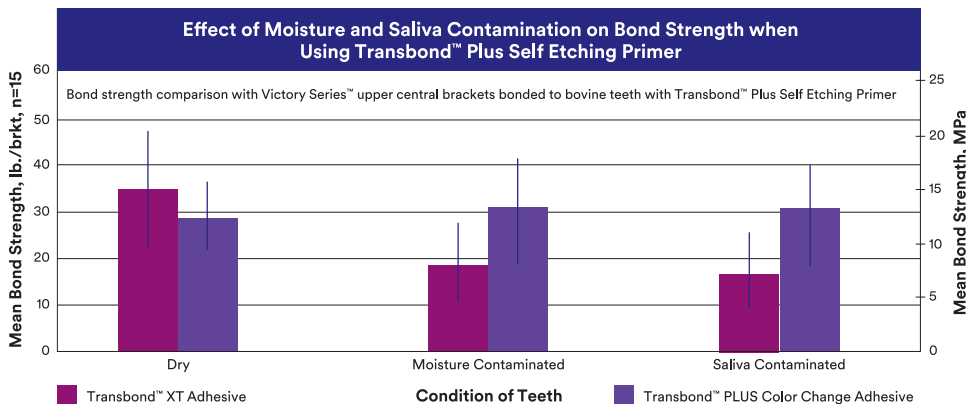
- Excellent handling properties for easy flash clean-up
- Available in syringes and capsules



# 3M™ Transbond™ PLUS Color Change Adhesive

Your patients trust you with their smiles. Our unique, hydrophilic color-changing adhesive can help you deliver virtually perfect results. Use in combination with Transbond Plus Self-Etching Primer for a moisture tolerant system.

- Moisture tolerant
- Color changing for easier flash clean-up and better bracket reference
- Versatile: bonds ceramic and metal brackets
- Available in syringes and capsules



Source: 3M internal data.

# 3M™ Transbond™ Plus Self Etching Primer

3M's one-step primer features unique chemistry and an exclusive delivery system that allows you to etch and prime in one simple and cost-effective step.

- Moisture tolerant
- Contributes to good bond strength
- Optimal mixing with the Easy Roller
- Unit dose dispensing



# 3M™ Transbond™ MIP Moisture Insensitive Primer

Transbond MIP Moisture Insensitive Primer is a hydrophilic or “moisture friendly” primer that allows you to bond in a moist environment without compromising bond strength.

- Moisture tolerant
- Increases office efficiency



# 3M™ Transbond™ XT Primer

When you need a wetting agent that performs reliably, Transbond XT Primer is the preferred choice.

- Requires only a thin, uniform film on each tooth
- Serves as a wetting agent





# Specialty Adhesives



3M specialty adhesives offer superior performance for lingual retainers, bands, and Indirect Bonding.

- **Lingual Retainers**
- **Banding**
- **Indirect Bonding**
- **Lingual Indirect Bonding**
- **Chemical Cure**

# Lingual Retainers

It provides optimized viscosity and handling characteristics for shaping and finishing adhesives around lingual retainer wires with maximum patient comfort.

## 3M™ Transbond™ LR Light Cure Adhesive for Lingual Retainers

Designed specifically for bonding lingual retainers, Transbond LR Adhesive features a softer consistency than Transbond XT Adhesive for easy application and greater control.

- Light cure
- Pre-loaded capsules – no waste of materials
- Excellent handling properties



# Banding

3M's innovative banding solutions provide ease of use and reliable band retention.

## 3M™ Transbond™ Plus Light Cure Band Adhesive

Transbond Plus Light Cure Band Adhesive is a single paste, no-mix adhesive with a rapid set time, to reduce the risk of moisture contamination.

- No mix reduces adhesive waste
- Excellent band retention
- Blue color for easy clean-up



## 3M™ Unitek™ Multi-Cure Glass Ionomer Orthodontic Band Cement

Unitek Multi-Cure Glass Ionomer Band Cement adheres to regular, etched or enhanced orthodontic bands. This material fills the voids between the anatomy of the tooth surface and the band, minimizing washout during the lifetime of the band.

- Moisture and saliva tolerant
- Fills voids between tooth surface and bands



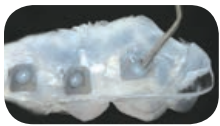
Characteristic Comparison		Transbond™ Plus Light Cure Band Adhesive	Unitek™ Multi-Cure Glass Ionomer Band Cement
Banding Environment	Dry	Yes	Yes
	Moist – Water	No	Yes
	Moist – Saliva	No	Yes
Curing	Light Cure	Yes	Yes
	Chemical Cure	No	Yes
Adhesion	Mechanical Adhesion	Yes	Yes
	Chemical Adhesion	No	Yes
Delivery	Powder/Liquid	No	Yes
	Single Paste	Yes	No

# Indirect Bonding

With its accurate, no-waste delivery system, 3M indirect bonding systems offer you excellent control over bracket placement and a high level of precision and strength.

## 3M™ Transbond™ Supreme™ LV Low Viscosity Light Cure Adhesive

Transbond Supreme LV Low Viscosity Light Cure Adhesive is a flowable, light cure adhesive designed specifically for indirect bonding.



- Stays in place without slumping or running prior to light curing
- Convenient metal syringe tips increase accuracy and reduce waste
- Excellent strength, flow and wear properties

*“We have tried many different flowable composites for an indirect bonding procedure. The viscosity of Transbond Supreme LV Low Viscosity Light Cure Adhesive makes it the best and easiest to use.”*

– Dr. Patrice Pellerin, Lachine, QC



## 3M™ Sondhi™ Rapid-Set Indirect Bonding Adhesive

The Sondhi Rapid-Set Indirect Bonding Adhesive is revolutionary from every angle. Lightly filled resins cure chemically in half the time of other indirect adhesives, while achieving two-thirds of its bond strength within the first five minutes.

- Less bracket repositioning
- More control and accurate bracket placement second molar to second molar
- No mixing of Resin A & B required



# Lingual Indirect Bonding

## 3M™ RelyX™ Unicem 2 Automix Self-Adhesive Resin Cement

RelyX Unicem 2 Self-Adhesive Resin Cement is an industry-proven dual-cure adhesive with handling and performance characteristics well-suited for indirect bonding. It is available in an Automix delivery system that conveniently and accurately mixes and dispenses the

paste for application on the lingual indirect bonding trays, as well as direct dispensing onto lingual bracket bases for rebonding.

- Dual-Cure Adhesive
- Recommended for the 3M™ Incognito™ Appliance System



## 3M™ Transbond™ IDB Pre-Mix Chemical Cure Adhesive

Transbond IDB Pre-Mix Chemical Cure Indirect Bonding Adhesive offers compatibility with lingual or labial indirect bonding systems.

- Good bond strength for reliable indirect bonding
- Permits wire insertion upon tray removal and clean-up (within three minutes)

- Can be used with custom-base adhesives such as Transbond XT Light Cure Adhesive
- Ample work time and quick set time
- Mix Resin A & B before application



# Chemical Cure

For more than 30 years, 3M Chemical Cure Adhesives have been an industry leader in performance and reliability, delivering excellent bond strength and low failure rate.

## 3M™ Concise™ Orthodontic Chemical Cure Adhesive

With its proven bond reliability, Concise Orthodontic Chemical Cure Adhesive has been a leader in performance for more than three decades.

- Two-part resin and paste system
- Low failure rate
- Cures chemically
- Reliable bond strength



## 3M™ Unite™ Bonding Adhesive

The industry-proven choice for a strong, reliable bond, ease of handling and rapid placement is Unite Bonding Adhesive. Formulated for strength, Unite adhesive allows ample working time yet sets quickly, allowing the archwire to be inserted in as little as four minutes after bracket placement.

- No-mix adhesive for direct bonding
- Available in easy-to-use syringes
- Works with metal and ceramic brackets
- Cures chemically



# Ortholux Luminous Curing Light

The Ortholux Luminous Curing Light redefines efficiency and performance in orthodontic curing with a versatile, ergonomic design and the latest in high-power LED technology, utilizing an optimized fiber optic light guide to achieve outputs of 1600 mW/cm<sup>2</sup>.

- One piece, stainless steel, pen-shaped, cordless handpiece
- 3-second curing for ceramic brackets and 6-second cure for metal brackets
- Built-in light meter
- Rechargeable Lithium Ion battery
- Consistent light intensity throughout charge



Adhesive	Appliance	Ortholux™ Luminous Curing Light
APC™ Flash-Free Adhesive Coated Brackets	Metal brackets	6 seconds mesial × 6 seconds distal
	Ceramic brackets	3 seconds through the bracket
	Buccal tubes (direct bond)	6 seconds mesial × 6 seconds occlusal
APC™ II Adhesive Coated Brackets, APC™ PLUS Adhesive Coated Brackets, Transbond™ PLUS Color Change Adhesive, Transbond™ XT Adhesive	Metal brackets	3 seconds mesial × 3 seconds distal
	Ceramic brackets	3 seconds through the bracket
	Buccal tubes (direct bond)	6 seconds mesial × 6 seconds occlusal
Transbond™ XT Adhesive	Aligner attachments	6 seconds through the template
Transbond™ LR Adhesive	Lingual retainers	3 seconds mesial × 3 seconds distal
Transbond™ Plus Band Adhesive	Molar bands	12 seconds (3 seconds per cusp)
Unitek™ Multi-Cure Glass Ionomer Band Cement		
Transbond™ Supreme LV Low Viscosity Light Cure Adhesive	Indirect trays (metal brackets)	6 seconds mesial × 6 seconds distal through the trays
	Indirect trays (ceramic brackets)	6 seconds through the bracket and trays
	Aligner attachments	6 seconds through the template

\*These curing times assume proper angle and distance of the curing light to the teeth.



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