

Dental **PRODUCT
SHOPPER**

No Guesswork, Just Results

BISCO develops dental materials that are engineered to work seamlessly with each other and with products from other manufacturers, giving dentists predictable results, streamlined workflows, and greater confidence in every procedure.





Are Your Materials Really Compatible?

Dentists shouldn't have to wonder if their materials will work together. With BISCO, they always do, giving dentists flexibility, confidence, and better results for their patients.

At BISCO, compatibility isn't negotiable; it's built into every product from the start. The reason is simple: Dentists need materials they can rely on. They don't have time to question whether the dual-cure composite from one company will work with the bonding agent from another. With BISCO's science-backed solutions, they know it will.

"Compatibility starts at the drawing board of product development," said Dr. Rolando Nuñez, BISCO's Manager of Clinical Marketing. "You start off with a wish list that's provided to the research and development department, and from there their job is to create products that comply with most of that list. At BISCO, when it comes to adhesive development, compatibility is always at the top of the list."

A key part of that, Dr. Nuñez explained, is ensuring dual-cure materials maintain a proper pH to avoid polymerization inhibition. Products like All-Bond Universal, with its ultra-mild pH of 3.2, are designed to work every time—whether paired with BISCO materials or with products from other manufacturers. That gives clinicians not only flexibility, but peace of mind, reducing the stress that comes when materials don't cooperate.

Addressing a Costly Problem

When you use materials that aren't formulated to work together in a procedure, the result can be an incomplete cure. That, in turn, can lead to issues including microleakage, fractures, post-op sensitivity and, ultimately, dissatisfied patients, said Dr. Hugh Flax, who has long trusted BISCO products like All-Bond Universal.

Dr. Todd Snyder agreed, noting that in the worst case, a restoration might debond—costing the dentist time, money, and possibly patient trust.

BISCO eliminates these risks by providing a cohesive, science-driven system of materials engineered for compatibility. Products like All-Bond Universal and TheraBase

self-adhesive base/liner are formulated not only to work seamlessly with each other—such as in the universal adhesive technique with a layer of the adhesive between the liner and composite—but also with materials from other manufacturers. Dr. Flax and Dr. Snyder emphasized that no matter what they pair with All-Bond Universal, the chemistry aligns and performance is predictable.

"As far as I know, All-Bond Universal is the only bonding agent out there that can be used with anybody's dual-cure resin," Dr. Snyder said. "I'm not aware of any other company that goes through that level of research and product development."

COMPATIBILITY COUNTS

On his "Bonding and Beer" podcast, Dr. Rolando Nuñez explained why adhesive compatibility still matters. "The issue of adhesive compatibility has been around for more than 20 years," he said. "Even with development to overcome compatibility between adhesives and dual-cure materials, there are still many doubts among our peers."

Dr. Nuñez notes that pH plays a major role. "Low pH hinders polymerization for sure... anything below 2.7 to 2.9 could be not 100% compatible," he said, offering the following advice:

- Know your adhesive's pH and if it needs an activator.
- Ask manufacturers—don't assume same-brand products always work together.
- Choose a universally compatible adhesive for direct, indirect, and dual-cure procedures.

"If you have a truly compatible adhesive, you're good to go...one system for everything. If you have that, you're going to be fine." [Check out the episode here.](#)

A History of Adhesive Innovation

For more than four decades, BISCO has moved adhesive dentistry forward—developing materials that simplify procedures, enhance compatibility, and deliver reliable results. With products like All-Bond Universal and Duo-Link Universal, BISCO gives clinicians the confidence to achieve strong, predictable bonds across virtually any restorative workflow.

BISCO was founded on the science of bonding. In the 1980s, the company's founder, Dr. Byoung Suh, developed one of the most successful adhesives of its time, All-Bond 2. The product set a new standard in an era when dental adhesives were still emerging and few companies offered reliable options. Dentists were eager to embrace bonding as part of everyday practice, but they needed materials that were user-friendly, strong, and dependable.

BISCO focused on meeting those needs without compromising on performance, Dr. Nuñez said. The success of All-Bond 2 was just the beginning. By listening to customer feedback and responding to evolving clinical demands, BISCO continued to innovate—culminating in All-Bond Universal, launched in 2012 as the first truly universal bonding agent compatible with virtually every material on the market.

"We develop dental bonding agents that are always one step ahead of the competitors," Dr. Nuñez said. "When it comes to compatibility, this is something we were able to resolve many decades ago. We know how to make materials that are compatible. That remains part of our essence."

The All-Bond Difference

One of the biggest advantages All-Bond Universal offers, Dr. Snyder said, is that it's a true one-bottle system. Many other universal bonding agents require a separate activator that adds another step to the procedure. All-Bond Universal also gives him the freedom to pair his adhesive with virtually any material he wants—a flexibility other "universal" products don't always offer.

Dr. Flax added, "When you're bonding ceramics, you need a material that will bond to the resins that will adhere to the teeth and that will penetrate into the



THE THERA FAMILY

Four products make up BISCO's Thera family of innovative products that not only offer compatibility, but also the added benefits of calcium release. They are:

TheraCal LC—a light-cured, resin-modified calcium silicate material used for direct and indirect pulp capping and as a protective liner

TheraCal PT—a biocompatible, dual-cured, resin-modified calcium silicate designed for pulpotomy treatment

TheraCem—a dual-cured, calcium- and fluoride-releasing, self-adhesive resin cement for luting crowns, bridges, inlays, onlays, and posts

TheraBase—a dual-cure, calcium- and fluoride-releasing, self-adhesive base/liner

porosities in the dentin. The best product I have found for that is All-Bond Universal."

While Dr. Flax appreciates the flexibility of All-Bond Universal's compatible formulation, he's also a fan of the material's viscosity.

"I can easily place All-Bond Universal on the tooth, gently dry and cure it, and I'm going to get a consistent

bond," he said. "That peace of mind makes both my patients and me very happy."

Building a Compatible Workflow

When it comes to compatible workflows, plugging in All-Bond Universal is seamless, no matter which technique you prefer, whether it's for direct or indirect restorations. Dentists can easily place the bonding agent without thinking twice about if it will fit with their cementation procedure or core build-up materials like Core-Flo DC, Dr. Nuñez said.

"We know dentists are using other companies' cements and core build-up materials with All-Bond Universal, and it's working," he said. "We're providing that peace of mind, making it extremely easy for dentists to go through procedures without having to think about whether the materials can work together."

Bond Strength Starts Here

BISCO's line of Thera products—including TheraCal LC, a light-cured, resin-modified calcium silicate material that is often used as a protective liner, and TheraBase, a dual-cure, calcium- and fluoride-releasing, self-adhesive base/liner—are formulated to work in combination with All-Bond Universal or any other bonding material.

THE TECHNIQUES

Beyond compatibility, All-Bond Universal gives clinicians flexibility when it comes to their technique. The one-bottle system can be used in total-, self-, and selective-etch modes. Here's an overview of the 3 techniques:

Total-etch: This technique requires the use of phosphoric acid on both the enamel and dentin. Phosphoric acid generates a very retentive surface on enamel, but removes the smear layer on dentin, opening the dental tubules. If the bonding agent can't seal the tubules properly, patients may experience post-op sensitivity.

Self-etch: Phosphoric acid isn't used to remove the smear layer with this technique. Instead, the adhesive alters the smear layer by making it more permeable, allowing monomers to reach some of the dentin without opening the tubules.

Selective-etch: Using this technique, clinicians selectively etch enamel, but not dentin, with phosphoric acid to create bond strength and seal, and then use a universal bonding agent like the one-bottle, ultra-mild pH All-Bond Universal.



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These products are key components of a compatible workflow for direct restorations like composite fillings.

"If you place TheraBase on the dentin, you can place All-Bond

Universal on top, and you know that will work because it will bond to the remaining tooth structure and the Thera material," Dr. Nuñez said. "So, you have that interesting interaction between the two materials. You

BISCO'S CORE BUILD UP MATERIALS

BISCO offers two dual-cure, radiopaque core build-up products: Core-Flo DC and Core-Flo DC Lite. Core Flo DC, the original, is thicker in viscosity and more stackable. It doesn't slump when placed, giving clinicians more control over the material. Core-Flo DC Lite offers dentists a more flowable version with a self-leveling viscosity that allows for excellent adaptation, resulting in gap-free margins.



ALL-BOND UNIVERSAL

The truly universal adhesive offers many benefits, including:

- Ultra-mild pH allows for universal compatibility with dual-cured and self-cured materials
- A hydrophobic, resin-friendly formula for improved bond durability
- A low film thickness that allows the adhesive to easily flow into etched surfaces while also leading to chemical and mechanical sealing
- Fewer bonding steps, with everything included in one bottle—no separate activator required
- The MDP monomer for stronger bonds
- Ease of use with any etching technique
- Virtually no post-op sensitivity
- No refrigeration required



can complete the bonding procedure on top of TheraBase without having to think about if the adhesive is going to be able to work."

For indirect restorations, All-Bond Universal can be applied to the preparation, and when possible the remaining enamel can be etched with phosphoric acid, Dr. Nuñez said. The adhesive reliably bonds to the remaining tooth structure every time; then the restoration can be seated with a dual-cure resin cement such as BISCO's Duo-Link Universal.

"This creates a fantastic bond between All-Bond Universal and the tooth structure, as well as between All-Bond and Duo-Link Universal," he said. "Duo-Link Universal is bonded to the restoration, and because you etched with phosphoric acid, you have a very strong bond that will have a very positive impact on that restoration's clinical performance."

Materials Backed by Science and Research

Dr. Snyder, who has worked with BISCO products including All-Bond Universal, Duo-Link Universal, and Core-Flo DC for years, knows these products will perform flawlessly every time, regardless of what materials they're paired with.

"You don't have to think or buy additional products or understand chemistry," Dr. Snyder said. "I have enough on



"I have enough on my plate—I don't want to have to worry about if something is compatible and if there's the potential for failure."

—Todd Snyder, DDS, FAACD, FIADFE, FASDA, ABAD

my plate—I don't want to have to worry about if something is compatible and if there's the potential for failure. It eliminates problems and the frustrations that come with re-dos, which upset patients and cost both time and money."

Dr. Snyder has had great success with BISCO products and appreciates the research and development that goes into each new material—especially the focus on compatibility. He also values that BISCO remains focused on what it does best: developing materials for adhesive dentistry.

The BISCO team understands that

compatibility matters. They were the first to develop a one-bottle universal adhesive, All-Bond Universal, usable with total-, self-, and selective-etch techniques, and for both direct and indirect restorations. Today, the adhesive remains the gold standard, and BISCO continues to be a leader in dental adhesives.

"BISCO has literally been my right hand and best asset since I started bonding teeth back in the late '80s," Dr. Flax said. "Their passion for details, research, and instructing dentists have made them a reliable company for the dental industry."

DUO-LINK UNIVERSAL

Duo-Link Universal is a dual-cured resin cement designed for indirect restorations. It's compatible with all dental materials, but works best when paired with BISCO's All-Bond Universal or Universal Primer, Z-Prime Plus, and Porcelain Primer.



ADDITIONAL RESOURCES

Dental composites are essential to modern restorative dentistry, but the demands placed on them are evolving.

From everyday fillings to veneer cementation, dentists expect more - not just strength and esthetics, but efficiency, predictability, and workflow-friendly

BISCO's newest composite, Quantum™, was designed with these needs in mind offering innovations that improve handling, efficiency, and results.

Here are three composite trends worth paying attention to:

1. The Rise of the "Universal Composite"

You've probably noticed more products being marketed as universal dental composites. If a material is strong enough for posterior restorations and polishable enough for anterior esthetics, it is considered universal.