Over the past 15 years many advances have been made in materials for the restorative and orthodontic profession. In the late 1980s Enhance adhesion booster was developed for the Orthodontic market, primarily for orthodontists in areas of the US where fluorosed enamel was so prevalent that they were unable to successfully acid etch and bond brackets to teeth. Consequently they were forced to band the majority of their patients. The original Enhance was a 2 part mix material that was applied to the etched enamel, lightly dried then a bonding resin (liquid) either chemical or light cure was applied, before the bracket with paste. Enhance would bond to any enamel surface wet or dry, normal or atypical (fluorosed, mottled, deciduous) as well as metal, composite and porcelain restorations. In 1995, Enhance LC was introduced as a single liquid version of Enhance A&B. The Enhance LC has all the same properties as the two part Enhance but can only be used with light cure systems. The profession asked if the Enhance chemicals and bonding resin could be incorporated into one bottle, eliminating mixing and saving a step and the result was the introduction of Assure Universal Bonding resin. The Assure is a single liquid that will increase adhesion to wet or dry, normal or atypical enamel, composite and metal restorations without additional primers. It will improve adhesion to porcelain surfaces that have been conditioned with Porc Etch and porcelain conditioner (silane). Assure can be used under any chemical or light cure system regardless of manufacturer. We have received questions as to whether Enhance and Assure can be used together and the answer is yes, but there is no advantage to use both.

As previously mentioned Assure will make whatever is placed on top of it adhere better to any surface it is applied to (atypical enamel, composite, metal, porcelain). Pro Seal is an enamel protective sealant. A sealant is a material that is applied to a tooth surface and when cured will last on the exposed enamel for an extended period of time. Pro Seal is a revolutionary sealant that unlike any other sealant, completely sets without porosity in the cured resin matrix. The patented technology in Pro Seal makes this possible. As a result, acid, bacteria, carbonated soft drinks, sport drinks, etc. cannot penetrate the sealant and break it down. It was thought that adding filler to a sealant would improve its staying power on the enamel surface. It did to a degree, but not until the development and introduction of Pro Seal did a sealant have the ability to protect the enamel for the length of treatment. There are currently 10 University studies and more on the way that support the claim that Pro Seal is the most effective sealant for reducing decalcification......and if applied to a properly conditioned surface and cured completely does not need reapplication during treatment. Let’s say the clinician wants to apply Pro Seal to a tooth that is atypical (fluorosed, mottled, a prismatic, etc). In this case if the enamel is simply etched and the sealant applied, it probably will not adhere well. However, if after etching the atypical enamel surface, a coat of Assure is applied and dried, then the Pro Seal applied, the Assure will make the Pro Seal bond well to that surface.

Simply dab a small amount of Assure on the cured Pro Seal, lightly dry and place bracket with paste.
Reliance Orthodontic Products, Inc.
The Bonding Bulletin

CAN A SELF ETCHING PRIMER BE USED INSTEAD OF ETCHING WITH PHOSPHORIC ACID BEFORE APPLYING PRO SEAL?

Yes, but remember the enamel must be scrubbed a full 5 seconds in all areas you want protection and the resulting excess solvent must be dried off the surface before applying the Pro Seal.

HOW SHOULD THE CLINICIAN APPLY PRO SEAL?

You have two options. One would be to coat the whole facial surface, light cure and place bracket on top of the Pro Seal. An alternative method would be to bond the patient in normal fashion. At the first visit back after the initial strap up if the patient’s hygiene is poor, etch around the bracket base and apply the Pro Seal. Depending on the condition of the enamel a coat of Assure may have to be applied before placing the Pro Seal.

DO I NEED A SPECIAL LIGHT TO CURE PRO SEAL?

No! The original Pro Seal must be cured with a halogen light (corded light) or the Vivadent™ Blue Phase 20i (LED Cordless). The LED Pro Seal can be cured with any light... halogen, arc or LED, corded or cordless.

WHAT CAN CAUSE LED PRO SEAL TO APPEAR YELLOW?

If the Pro Seal is applied in too thick of a layer, not cured long enough or close enough with a proper intensity light, it can cause the Pro Seal to be tinged yellow. To avoid over applying Pro Seal, paint a thin layer on each tooth, with the first stroke from the center of the crown towards the incisal edge of the tooth. The second stroke should be from the gingival margin to the incisal edge without redipping the brush. To optimally thin out the Pro Seal at this point, stroke over it at least 1 more time. A blast of contaminant free air directed away from the gingiva will also thin out the Pro Seal so it will not appear to have a yellowish hue.

!! NEW PRODUCT UPDATE !!

A² Aligner Attachment Kit is intended for use in the creation of molds for thermoplastic aligners. The A² kit contains 5 Oval Attachment Forms that can be used for the retention of thermoplastic aligners and for horizontal or vertical placement on the tooth depending on the height of the crown. The Rectangular Attachment forms can be used for individual tooth movement and for extrusion of teeth. The Assure® Universal Bonding Resin included in the A² kit, will bond to all intraoral surfaces without additional primers. L.C.R.™ Light Cure Paste, also included in the A² kit, cures smooth as glass for patient comfort. It has a very high Barcol Hardness for long term durability.

Rescue All Surface Bonding Kit is a specially designed kit to provide you with the answer to every bonding surface that you face in your office today. Rescue will increase adhesion to all normal and atypical enamel situations including hypocalcified, fluorosed, deciduous enamel, dentin, amalgam, gold, stainless steel, plastic and composite restorations. Rescue, the answer to all bonding surfaces in one kit!

Call 1-800-323-4348 with bonding questions and to place orders or visit our web-site at www.relianceorthodontics.com

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