

# MPa™ Max

## Maximum Performance Adhesive

MPa™ Max is a Total-Etch Adhesive System that Provides:



### Maximum Bond Strength

In a recent independent research study, **MPa Max** 5<sup>th</sup> generation total-etch adhesive produced the highest bond strength to dentin, enamel, zirconia and lithium disilicate. Regardless of the bonding situation you face, **MPa Max** will give you confidence for consistency and longevity.

### Maximum Ease of Use

**MPa Max** is designed for consistency and utilizes a single application on each adhesive wall. You'll notice **MPa Max** is thicker than other adhesives, which allows you to easily coat each adhesive wall, ensuring the dentin and enamel are properly sealed. Unlike other adhesives that are easily over-thinned during the solvent evaporation step, **MPa Max** is best thinned with half air pressure until the adhesive stops moving which indicates the ethanol solvent is properly evaporated while ensuring the adhesive remains behind. This feature is a primary reason that we have never received a complaint about post-operative sensitivity from **MPa** users over the last 5 years.

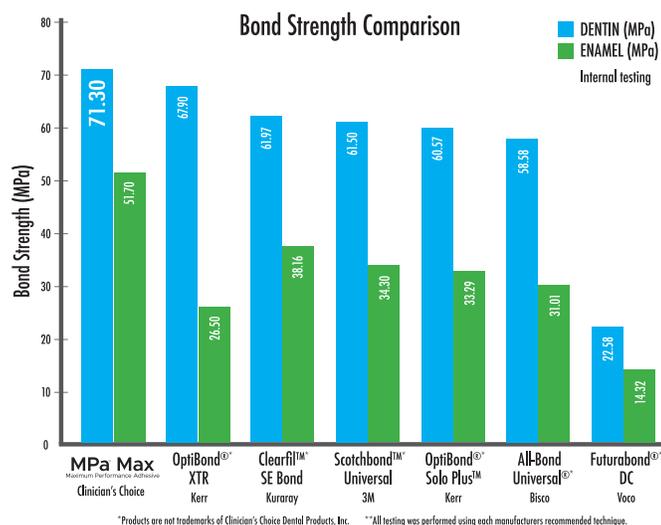
### Maximum Prevention of Post-Operative Sensitivity

Post-operative sensitivity is consistently prevented in two ways with **MPa Max**. As stated above, **MPa Max** consistently coats and seals dentin tubules which prevents intratubular fluid flow – the cause of post-operative pain. The **MPa Max** Kit also contains **G5**, a glutaraldehyde-based desensitizer that has a long clinical track record for preventing post-operative sensitivity. **G5** is placed after etching and before **MPa Max** adhesive placement. **G5** works by coagulating the intratubular fluid, helping to seal the dentin and prevent stimulation of the odontoblast processes. Combined, **G5** and **MPa Max**, eliminate the chance of sensitivity.

### Maximum Adhesive Longevity

Recent research proves that most dentin bonding agents lose significant bond strength within the first 6 months, and by up to 50% (Pashley research\*). When acid is used to etch dentin, the mineral content of the dentin is dissolved leaving organic collagen behind as well as exposed MMP (Metalloproteinases) enzymes. After the dentin adhesive is placed and restoration completed, these MMPs slowly dissolve the collagen at the adhesive interface, resulting in significant degradation of the adhesive bond. Virtually all self- and total-etch adhesives are susceptible to this bond degradation. However, further research reveals that MMP activation can be inhibited with Chlorhexidine or CHX. **MPa Max** is one of the few adhesives that contains 0.2% CHX to help prevent adhesive bond degradation caused by MMPs. **MPa Max** will provide you with confidence that your adhesive restorations will last for many years.

\* D.H. Pashley, et al. J Dent Res. 2007 January; 86 (1): 90-94 Chlorhexidine Preserves Dentin Bond in Vitro.



#### MPA MAX STARTER KIT

Contains: 1 x 5mL bottle MPa Max Maximum Performance Adhesive,  
1 x 5mL bottle G5 All-Purpose Desensitizer,  
1 x 5mL syringe Max Etch 35% Phosphoric Acid,  
Accessories, Instructions/SDS

#### MPA MAX 5mL REFILL BOTTLE

#### MAX-ETCH 35% PHOSPHORIC ACID

5mL Syringe  
30mL Syringe

#### G5 ALL-PURPOSE DESENSITIZER

5mL Bottle  
10mL Bottle

Dentistry and photography courtesy of Dr. Robert Margeas.



1. After caries removal and placement of the matrix band and wedge, thoroughly clean and dry the preparation.



2. Liberally apply Max-Etch H<sub>3</sub>PO<sub>4</sub> to the preparation and etch for 20 seconds.



3. Rinse the Max-Etch for a minimum of 5 seconds then scrub G5 All-Purpose Desensitizer onto the preparation for 10 seconds, blotting any excess. Leave the surface visibly moist.



4. Apply MPA Max adhesive (ensuring each adhesive wall is coated) and gently scrub for 10 seconds. Thin and air dry using ¼ to ½ air pressure to evaporate the solvent, for 10 seconds. The preparation should appear shiny with no pooling.



5. Light-cure for 10 seconds using a standard light with an output >600 mW/cm<sup>2</sup> or 20 seconds if the output is <600 mW/cm<sup>2</sup>.



6. Proceed with placement and light-curing of the composite. A bulk-fill composite was used in this case.



7. Use an A.S.A.P. Pre-Polisher to remove surface scratches.



8. Apply light pressure using the A.S.A.P. Final High Shine Polisher to quickly bring an esthetic luster to the restoration. 20 seconds should do it!



9. The final restoration: A combination of life-like esthetics and a strong, enduring dentin/enamel bond.