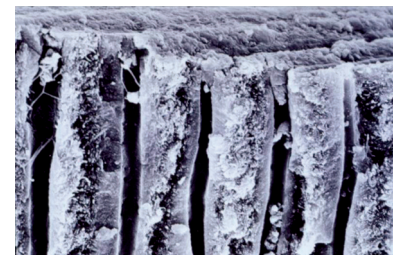


**G5™**All-Purpose  
Desensitizer

## The Predictable Solution for Effective Desensitization

**G5™** is an aqueous, 5% glutaraldehyde-based desensitizer with 35% HEMA (a pre-primer resin) designed for use with 4<sup>th</sup> and 5<sup>th</sup> generation (total-etch) adhesives. G5 works by coagulating the plasma proteins contained within the dentinal tubule fluid. This coagulation forms an initial “plug” (which can be seen to a depth of 200 microns<sup>1</sup>), eliminating the movement of fluid within the tubules—the root cause of dentinal sensitivity. In clinical studies, glutaraldehyde has consistently been shown to significantly decrease sensitivity<sup>2</sup> on hypersensitive teeth without affecting bond strength between treated surfaces and controls<sup>3</sup>. Glutaraldehyde has shown little or no effect on retention on crowns luted with zinc phosphate, glass ionomer, and resin-modified glass ionomer cements<sup>4</sup>, and is one of few desensitizers that will not adversely affect bond strengths of resin cement to dentin<sup>5</sup>. Glutaraldehyde has an antibacterial effect, protecting the tooth/restoration surfaces from bacterial growth and may prevent secondary caries in cases where microleakage has occurred.



G5's glutaraldehyde-based formulation has been proven to help obturate dentin tubules by coagulating plasma proteins.

### Bond Longevity

MMPs, matrix metalloproteinases, are enzymes found in collagen that become active after acid etching. These enzymes gradually degrade the collagen fibers at the dentin/adhesive interface causing diminishing bond strengths. Fortunately, studies have shown glutaraldehyde acts to inhibit the activity of the MMPs, resulting in long-term bond strengths. Through inhibiting the negative effects of MMP's, G5 will help protect your adhesive bond.

1. Shupach P, Lutz, Finger WJ. Closing of dentinal tubules by Gluma desensitizer. Eur J Oral Sci. 1997; 105:414-421.
2. Dall'Orologio GD, Maferri S. Desensitizing effects of Gluma on hypersensitive teeth. Am J Dent 1993; 6:283-286.
3. Reinhardt JW, Stephens NH, Fortin, D. Effect of Gluma desensitization on dentin bond strength. Am J Dent 1995; 4:170-172.
4. EJ Swift Jr., AH Loyd, DA Fenton. The effect of resin desensitizing agents on crown retention. JADA Vol.128, Issue 2; 195-200.
5. Cobb, DS, Reinhardt, JW, Vargas, MA. Effect of HEMA-containing dentin desensitizers on shear bond strength of a resin cement. Am J Dent. 1997; 2:62-65.

## CLINICAL PROTOCOL

### Desensitization Protocol for Crowns Using G5

1. Achieving optimal isolation prior to any cementation procedure is essential.
2. Prior to crown cementation, remove the temporary crown and clean the preparation of residual cement and debris. Air dry.
3. Using a microbrush, apply G5 sparingly using a scrubbing action on all surfaces of the tooth preparation for 30 seconds. (FIG. 1) Avoid contact of G5 with soft tissue.
4. After application, rinse the residual G5 from the tooth with a gentle stream of water for 5 seconds. (FIG. 2)
5. If using GI, RMGI, Zinc Phosphate or other non-bonding cements, air dry and proceed with cementation according to manufacturer's instructions.
6. If using a conventional adhesive resin cement, air dry or leave moist according to manufacturer's instructions.

*Dentistry and photography courtesy of Harald O. Heymann, DDS, MEd.*

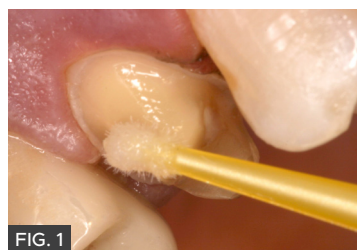


FIG. 1

Apply G5 sparingly to avoid soft tissue contact. Scrub on the preparation for 30 seconds.



FIG. 2

When rinsing, use a gentle stream of water to avoid soft tissue contact.



**G5 ALL-PURPOSE DESENSITIZER**  
5mL Bottle (226105)  
10mL Bottle (226110)

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