

# The studies have it: the dental adhesive you can trust.



With third-party studies appearing in more than 300 publications, 3M™ Single Bond Universal Adhesive has been tested more than any other universal dental adhesive on the market. We've compiled 17 of these studies in a Scientific Study Booklet that answer questions like:

- How does it compare to a proven classical adhesive system?
- How likely are your patients to experience post-op sensitivity?
- What etching mode is most beneficial for primary teeth?

To read the summarized studies, go to [www.3M.com](http://www.3M.com) and download your FREE copy of the Scientific Study Booklet.



## You'll also get tips for improving bond performance:



Is there a more effective way to bond to enamel?



What happens when corners are cut on application time?



Can active application improve bond strength?



Is there a tip for improving bond strength to glass or ceramic materials?



How simple is it to use for a Class I restoration?

Here's a preview of the type of studies in the booklet.

### Technique-independent clinical performance after 3 years

**Authors** Loguercio AD, de Paula EA, Hass V, Luque-Martinez I, Reis A, Perdigão J  
**Title** A new universal simplified adhesive: 36-Month randomized double-blind clinical trial  
**Published in** J Dent. 2015; Sep;43(9):1010-1016/10.1016/j.jdent.2015.07.005

### High reliability independent of the adhesive application mode

**Authors** Vogl V, Hiller KA, Buchalla W, Federlin M, Schmalz G  
**Title** Controlled, prospective, randomized, clinical split-mouth evaluation of partial ceramic crowns luted with a new, universal adhesive system/resin cement; results after 12 months  
**Published in** Clin Oral Implants Res. 2017; 18(1):10-17/10.1111/cior.12400

### Reliable performance in a practice-based evaluation

**Authors** Burke FJT, Crisp RJ, Cowan AJ, Raybould L, Redfearn P, Sanders Thompson O, Ravaghi V  
**Title** A Randomised Controlled Trial of a Universal Bonding Agent for 3 Years: Self Etch vs Total Etch  
**Published in** Eur J Prosthodont Restor Dent. 2017 Dec 1;25(4):220-227.

#### Description

How does 3M™ Single Bond Universal Adhesive perform in a busy practice? This is what members of the Product Research and Evaluation by Practice panel investigated in their clinical evaluation. The universal adhesive was used by dental practitioners in their practices either with the self-etch or the total-etch (split mouth design) for the placement of 64 composite restorations in cavities. Clinical evaluation using modified Public criteria was carried out over three years.

#### Results

At the three-year recall, 45 restorations were available for the mouth design, the number of restorations per application mode (pairs). All restorations obtained acceptable (A or B) scores in pairs. All restorations developed secondary caries or post-operative restorations equally well independent of the selected application mode.

#### Take-home message

The results of this study suggest that even without etch primer, 3M Single Bond Universal Adhesive will deliver satisfactory results when used for a period of three years.

### Self-etch mode beneficial in primary teeth

**Authors** Lenzi TL, Pires CW, Soares FZM, Raggio DP, Ardenghi TM, de Oliveira Rocha R.  
**Title** Performance of Universal Adhesive in Primary Molars After Selective Removal of Carious Tissue: An 18-Month Randomized Clinical Trial.  
**Published in** Pediatr Dent. 2017 Sep 15;39(5):371-376.

#### Description

Is a specific application mode—self-etch or total-etch—of 3M™ Single Bond Universal Adhesive preferable for use in primary teeth after selective caries removal? This question was addressed in a study with 44 children aged between 5 and 10. In this group, 90 primary molars with carious lesions were restored with composite after application of the universal adhesive in the self-etch or total-etch mode. Clinical assessment using U.S. Public Health Service criteria followed after one, six, 12 and 18 months.

#### Results

Both application modes produced similar results at the 18-month recall. The examiners reported a tendency for better clinical performance of those restorations placed using the self-etch mode of the adhesive.

#### Take-home message

Given that the outcome is comparable independent of the selected application mode, dental practitioners using Single Bond Universal Adhesive in primary teeth should prefer the self-etch approach. This technique involved fewer steps and is therefore less prone to errors and more time-efficient.

### Incidence of post-operative sensitivity

**Authors** Guggenberger R, Cerny B, Thalacker C, Wiggins K, Soares AB  
**Title** Postoperative sensitivity with a new universal adhesive. ADR General Session; June 20, 2012; Iguaçu Falls, Brazil. Abstract # 186.  
**Published in** J Dent Res. 2012; 91(12):1200-1204/10.1177/0022049412460000

of 3M™ Single Bond Universal Adhesive, a non-interventional study to obtain information about the occurrence of initial post-operative sensitivity (self-etch, selective-enamel-etch and total-etch). 120 teeth were used the product in their preferred technique. The number of teeth with post-operative sensitivity was reported.

Cases	Number of POS Cases	Percentage of POS Cases (%)
14 <sup>a</sup>	2 <sup>b</sup>	0.4 <sup>b</sup>
2 <sup>b</sup>	0 <sup>b</sup>	0.0 <sup>b</sup>
0 <sup>b</sup>	0 <sup>b</sup>	0.0 <sup>b</sup>

<sup>a</sup>statistically significant differences.

...sensitivity, the use of Single Bond Universal Adhesive in combination with total-etch adhesives leads to post-operative sensitivity achieved with the universal technique used.

Read more third-party studies like this by going to [www.3M.com](http://www.3M.com) and downloading your FREE copy of the Scientific Study Booklet.

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