

**UNIVERSAL ADHESIVE** 





DEFENCE AGAINST CLINICAL VARIABILITY

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Zipbond Universal is a single component fluoride releasing universal adhesive, compatible with self etch, selective etch and total etch techniques. In the presence of varied tooth structure and an abundance of restorative choices, Zipbond Universal achieves reproducible and reliable bond strengths.

#### CONSISTENT BOND STRENGTHS

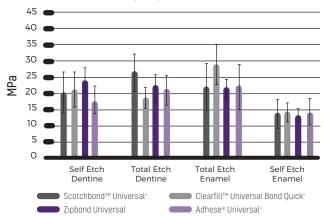
Zipbond Universal achieves successful bond strengths across dentine and enamel using self etch and total etch techniques.

Total etch is considered the best option for enamel only preparations<sup>2</sup>. Zipbond Universal has minimal fluctuation in bond strength using the total etch technique on enamel, demonstrating the ability to achieve predictable results in each use.

The heterogenous nature of dentine and variability in mineral and water content adds complexity to dentine bonding<sup>1</sup>. The carefully selected chemistry of Zipbond Universal overcomes the challenges associated with dentine bonding to provide strong and reproducible bond strengths in self etch and total tech techniques.

Select Zipbond Universal for consistent adhesion, predictable clinical outcomes and confidence in the interface between your patients tooth and restoration.

#### SHEAR BOND STRENGTH (MPa)\*



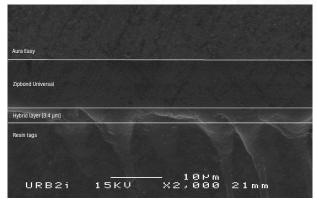
#### WET AND DRY DENTINE BONDING

Variation in surface moisture of dentine can affect bond strength<sup>2</sup>. Zipbond Universal achieves similar bond strengths when applied to wet and dry dentine, reducing technique sensitivity.

Even in situations where dentine has been over-dried, Zipbond Universal will still form a hybrid layer, further mitigating technique sensitivity.



#### DEHYDRATED (OVER DRIED) DENTINE WITH ETCHING~



~Independently tested by Unité de Recherches Biomatériaux Innovants et Interfaces (URB2i-EA 4462 Paris Descartes). Chairman: Dr Jean-Pierre ATTAL

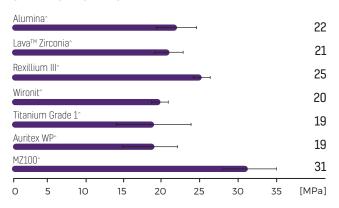
# MDP MONOMER



## PREDICTABLE BOND STRENGTHS TO INDIRECT SUBSTRATES

Zipbond Universal achieves high bond strengths to composite, ceramic, porcelain and metal substrates. Bond strength across indirect substrates is comparable, highlighting reliable adhesion for these restorative situations. Use Zipbond Universal, together with your preferred indirect restorative material, with confidence.

#### SHEAR BOND STRENGTH\*



## PROPRIETARY COMBINATION OF ADHESIVE MONOMERS

Zipbond Universal contains two adhesive monomers that work in harmony to deliver a durable and robust bond. A proprietary combination of monomers, including the MDP monomer, makes adhesion effective on enamel, dentine and a range of indirect substrates.

The adhesive monomers contain hydrophilic and hydrophobic groups. Hydrophilic monomers quickly infiltrate into enamel and dentine tubules. Effective wettability is achieved as the adhesive spreads homogenously over the tooth surface, offering a complete seal of dentine tubules.



Upon curing, the hydrophobic monomers reduce the permeability of water to create a sound interface and strong interaction between tooth and substrate.

### HIGHLY AESTHETIC

#### **EXCEPTIONAL CONTROL**

Controlled handling, optimal film thickness and increased bond strength is achieved by the incorporation of nanofillers. Zipbond Universal is easy to apply in a homogenous thin layer. Indirect restorations can be seated with precision to deliver an unobstructed seal against the tooth.

5%
nanofillers
8µm
film thickness

#### HIGHLY AESTHETIC

The adhesive is visible upon placement and virtually invisible on dentine after it is cured. It is ideal for use in aesthetic zones with bleach and translucent restorative materials

#### PLEASANT AROMA

Zipbond Universal is mild in its aroma to support your patients comfort during restorative procedures.

#### FLUORIDE RELEASING

The primary factor in the premature failure of moderate to large composite restorations is secondary decay at the margins of the restorations'<sup>3</sup>. Zipbond Universal is fluoride releasing to protect the tooth-restorative interface against demineralisation. An effective marginal seal that fights recurrent decay results in a longer lasting restoration.

#### **KEY FEATURES**

Consistent bond strengths to dentine and enamel

Wet and dry dentine bonding

Proprietary combination of adhesive monomers

Predictable bond strengths to indirect substrates

**Effective hybridisation** 

**Exceptional control** 

Highly aesthetic

Pleasant aroma

Fluoride releasing

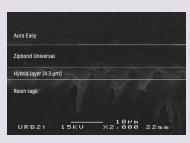
Easy to follow application

Convenient delivery

#### **EFFECTIVE HYBRIDISATION**

The hybrid layer is the main bonding mechanism of adhesive agents¹. The adhesive monomers in Zipbond Universal diffuse effectively and evenly into the tooth surface and hybridisation is continuous across the prepared cavity. Dentine tubules are completely sealed in both self etch and total etch techniques, minimising the risk of post-operative sensitivity for the patient.

#### DENTINE WITH ETCHING -TOTAL ETCH TECHNIQUE



### DENTINE WITHOUT ETCHING - SELF ETCH TECHNIQUE<sup>~</sup>



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### EASY TO FOLLOW APPLICATION

THE ADHESIVE DOES NOT NEED REFRIGERATION, FACILITATING EASE OF USE AND SPEED DURING THE DAY TO DAY OPERATION OF YOUR DENTAL CLINIC.



Scrub Zipbond Universal into the cavity for 10"



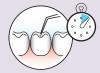
Leave idle for 10"



Dry with air until the surface is glossy and there is no movement of the bond



Light cure 10"









#### CONVENIENT DELIVERY

Zipbond Universal is available in a bottle and single use unit doses. In the bottle delivery, drop size is ideal and the adhesive extrudes easily with no mess. The unit dose delivery is unique and proprietary to SDI.



#### INDICATIONS FOR USE

#### **Direct Applications**

Light cured composite restorations

Light cured compomers

Cavity sealing prior to placement of indirect restorations

Composite repair of porcelain and hybrid ceramic restorations

Sealing exposed root surfaces which are causing hypersensitivity

Core build ups using light cure/dual cure composites

Protective varnish for glass ionomer (GI) filling

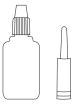
#### **Indirect Applications**

Cementation indirect restorations

>>> The primary factor in the premature failure of moderate to large composite restorations is secondary decay at the margins of the restorations<sup>3</sup>

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## ORDER DETAILS



#### KITS

Zipbond Universal 5mL Bottle Kit	8100500
Zipbond Universal Single Dose Kit	8100501
Zipbond Universal Bottle Refill	8100502

- \* SDI internal data
- ^ Scotchbond™ Universal, Clearfill™ Universal Bond Quick, Adhese® Universal, Alumina, Laval™ Zirconia, Rexillium III, Wironit, Titanium Grade 1 and MZ100 are not registered trademarks of SDI Limited.
- 1 Eshrak Sofan et al (2017), 'Classification review of dental adhesive systems: From the IV generation to the universal type', Annali Di Stomatologia.
- 2 Howard E Strassler et al (2018), 'Bonding Materials Reimagining Dental Bonding: predictable restorations for patients.
- 3 Paulette Spencer et al (2010), 'Adhesive/Dentin Inferface: The Weak Link in the Composite Restoration', NCBI.



