

DIA-X BOND™

Universal

*X-traordinary Strength,
Remarkably Simple.*

INDICATIONS FOR USE:

- 🦷 All direct restorations:
Resin-based composite, resin-modified glass ionomers,
core build-up, resin cement, etc.
- 🦷 All indirect restorations:
metal, zirconia, glass ceramics, alumina, etc.
- 🦷 Desensitization/Sealing of Tooth
- 🦷 Intraoral Repair
(chipped porcelain, additions to direct restorations, etc.)



DIA-X BOND™ Universal

Advantages of Universal Bond vs 7th Generation Bond

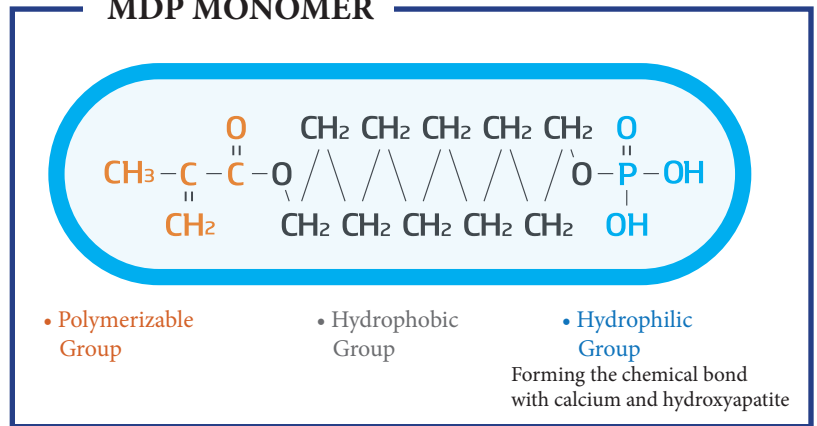


Universal Bond	7th Generation Bond
Versatile: total-, self-, or selective-etching	Self-etching
Stable and hydrophilic	Needs to be thoroughly shaken before use
Self-etching without additional etching material has better adhesion than 5th generation bonding (2-step process)	Weak bond to enamel
Indirect restorations, direct restorations (zirconia/metals, 10-MDP as the primary adhesive functional monomer)	Direct restorations only (enamel/zirconia, ceramics, etc.)
Virtually no post-op sensitivity	Reduced chance of post-op sensitivity
Long shelf life (2 years)	Short shelf life

10-MDP Monomer Features

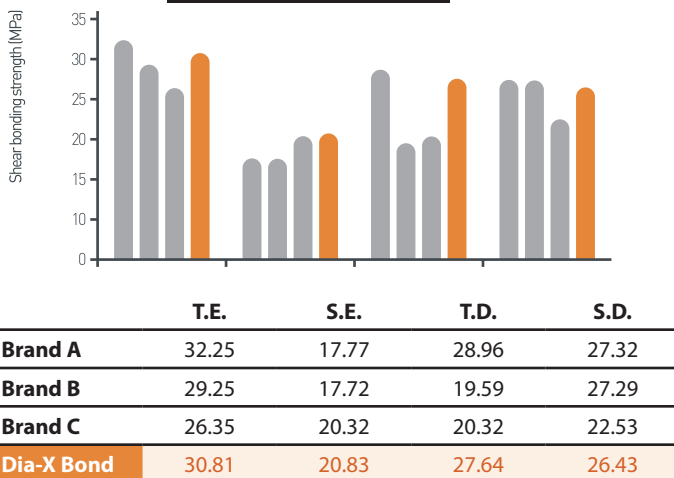
- The 10-MDP monomer component shows excellent bonding strength to metals such as zirconia and alumina
- Excellent overall bonding strength to teeth (dentin, enamel), indirect restorations (metal, zirconia, alumina), and direct restorations (composite resin)
- Excellent chemical bonding with tooth components due to the structure of the hydrophilic group of 10-MDP
- It has low solubility in water and forms excellent chemical bonding with the tooth surface
- 10-MDP monomer has excellent solubility stability compared to other monomers, as it is the most hydrophobic of the adhesive functional monomers

MDP MONOMER

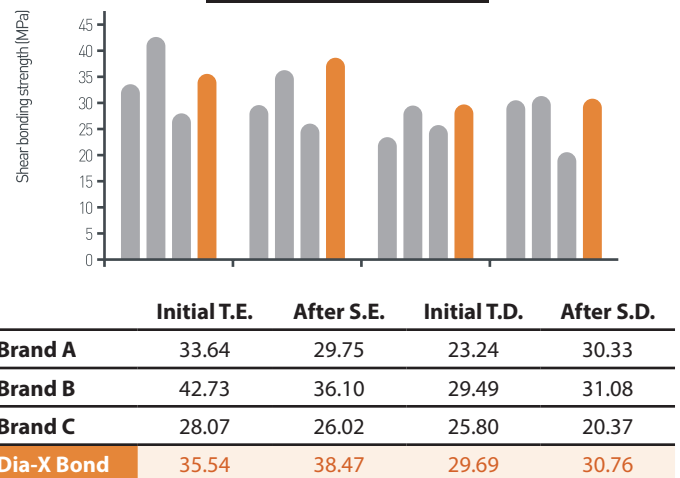


Direct Restoration Immersion Tests

24H Immersion Test



6mos Immersion Test



Conditions:

- Composite resin: DiaFil
- 37% Etching Gel: DiaEtch
- Light curing with D-Lux+ (high mode 10 secs)

Conditions:

- Number of specimens: 15 ea
- Light curing with D-Lux+ (high mode 10 secs)
- 6 months / 37°C / 1mm/min shear adhesion measurement

Abbreviation: T.E. (Total Etching Enamel) / S.E. (Self Etching Enamel) / T.D. (Total Etching Dentin) / S.D. (Self Etching Dentin)

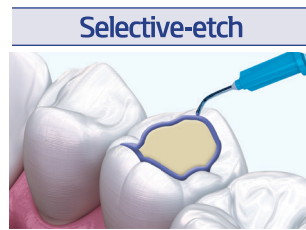
DIA-X BOND™

Universal

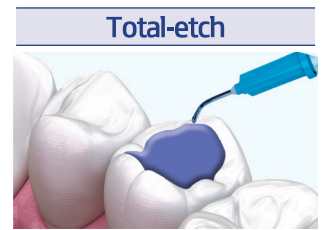
VERSATILITY:
All Etching Techniques



No phosphoric acid



Phosphoric acid on enamel



Phosphoric acid on enamel and dentin

Step-by-Step Instructions

• Direct Restoration



Step 01
Prepare & isolate tooth

Step 02
Etch & wash off excess with water

Step 03
Apply bond & rub for 20 seconds

Step 04
Air dry for 5 seconds (do not desiccate)

Step 05
Light cure for at least 10 seconds

Step 06
Final restoration

• Indirect Restoration

Select the etching technique:

Self-etch >> Start from Step 02 if etchant is not used



Selective-etch



Total-etch



Step 02
Apply bond & rub for 20 seconds



Step 03
Air dry for 5 seconds (do not desiccate)



Step 04
Light cure for at least 10 seconds



Step 05
Apply bond on inlays/onlays



Step 06
Cementation



Step 07
Final restoration

• Desensitization/Sealing of Tooth



Step 01
Prepare & isolate tooth

Step 02
Etch & wash off excess with water *omitted if using self-etching method

Step 03
Apply bond & rub for 20 seconds

Step 04
Air dry for 5 seconds (do not desiccate)

Step 05
Light cure

Step 06
Remove the oxygen-inhibited layer with a cotton pellet moistened with alcohol

• Intra-Oral Repair



Step 01
Prepare surface

Step 02
Apply bond

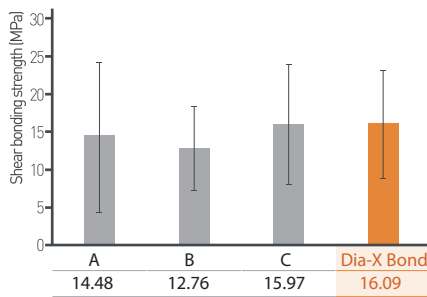
Step 03
Air dry

Step 04
Restoration

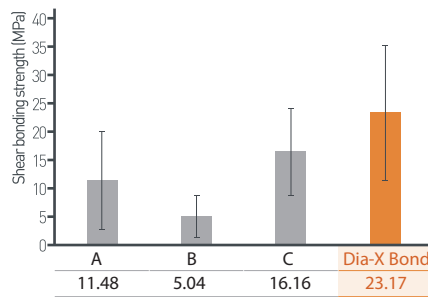
Step 05
Light cure

X-traordinary Strength, Remarkably Simple.

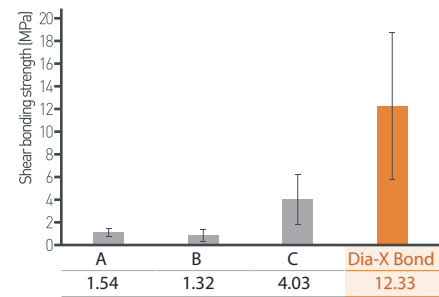
Indirect Restoration Material Comparison Tests



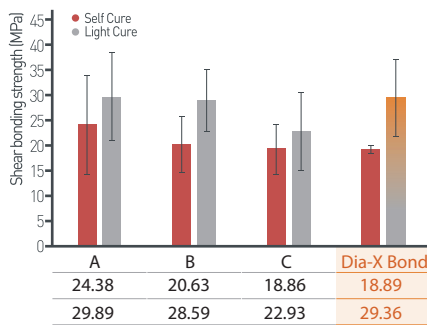
<Zirconia>



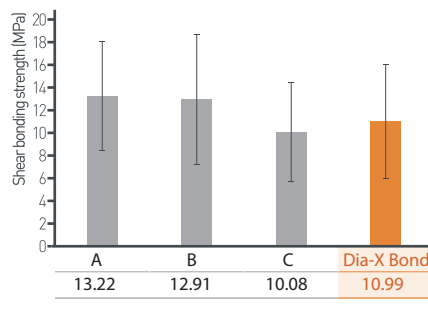
<Metal>



<Ceramic (Porcelain)>



<Light Cure Resin Cement>

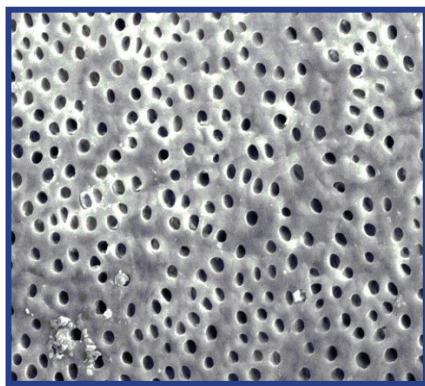


<RMGI>

Conditions:

- Number of specimens: 5 ea
- Light curing with D-Lux+ (high mode 10 secs)
- Resin cement: Self-cure at 6.5 minutes at 37°C
- 24H / 37°C / 0.75 mm/min shear adhesive strength measurement

Desensitization / Dentin Tubules Occlusion



SEM HV - 20.00kV
View Field - 144.5 µm
SEM MAG - 2.00 kx
WD - 20.07mm
Det - SE
Date(m/d/y) - 11/27/20



SEM HV - 20.00kV
View Field - 144.5 µm
SEM MAG - 2.00 kx
WD - 22.40mm
Det - SE
Date(m/d/y) - 11/27/20

Order Information

[A2001-2201] Dia-X Bond Universal
1 x 5ml bottle

SEM shows Dia-X Bond Universal's desensitization effectiveness by completely occluding the dentin tubules.



DiaDent Group International

#11 - 3871 North Fraser Way, Burnaby, BC, Canada V5J 5G6

TEL: 604-451-8851

FAX: 604-451-8865

WEB: www.diadent.com

EMAIL: diadent@diadent.com