

DIA-X BOND™

Universal

X-traordinary Strength. Remarkably Simple.

INDICATIONS:

- 🦷 **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, existing composite, all ceramic restorations w/o extra primer, etc.



DiaDent Group International
www.diadent.com

Scan for evaluation



DiaDent®

X-traordinary Strength, Remarkably Simple.

DIA-X BOND™ Universal

FEATURES & BENEFITS



- Exceptional handling properties
- No-waste, one-hand flip top bottle
- Saves chair time: true one-bottle bond
- Simple: for all etching techniques
- Versatile: for all direct and indirect restorations
- Uncompromising bond strength
- Low 2-micron film thickness
- Virtually no post-op sensitivity
- Long shelf life and stable in room temperature
- Advanced 10-MDP Monomer

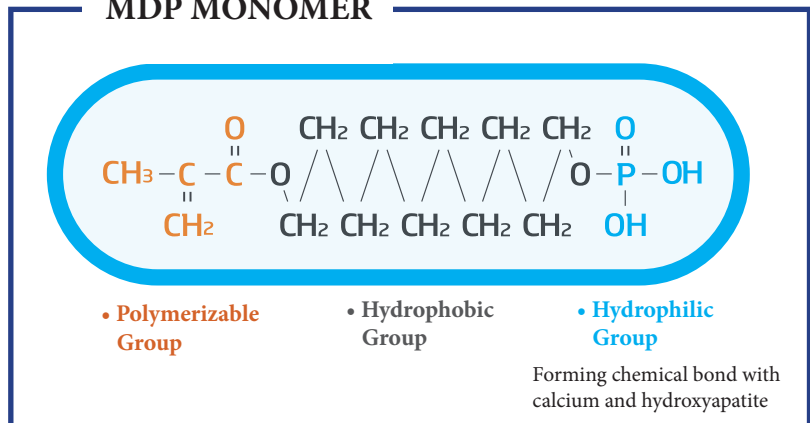
UNIVERSAL BOND VS. 7TH GENERATION BOND

Universal Bond (Dia-X Bond)	7th Generation Bond
Total-, Self-, or Selective-etching	Self-etching
Stable and hydrophilic	Needs to be thoroughly shaken before use
Superior bonding strength	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	Some post-op sensitivity
Long shelf life (2 years)	Short shelf life

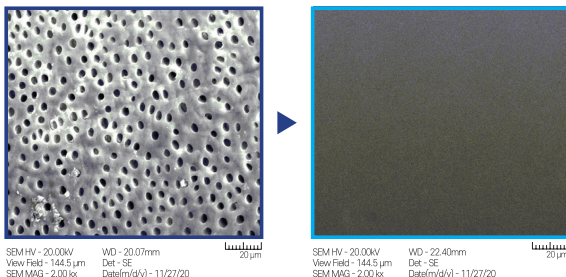
10-MDP MONOMER FEATURES

- 10-MDP (10-methacryloyloxydecyl dihydrogen phosphate) is an advanced functional monomer whose chemical structure allows for a polar behavior
- The **hydrophilic group** of 10-MDP forms a very intensive and stable chemical bonds with tooth components because of its molecular structure
- The **hydrophobic group** helps to improve adhesion strength, stability and long-term retention of restorative materials
- Outstanding bonding strength to metals such as zirconia and alumina
- Excellent bonding strength to teeth (dentin, enamel), indirect restorations (metal, zirconia, alumina), and direct restorations (composite resin)

MDP MONOMER



DESENSITIZATION / DENTIN TUBULES OCCLUSION



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

ORDER INFORMATION

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



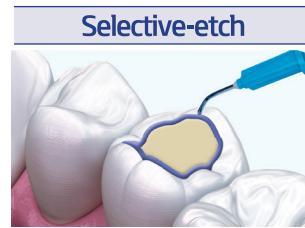
DIA-X BOND™

Universal

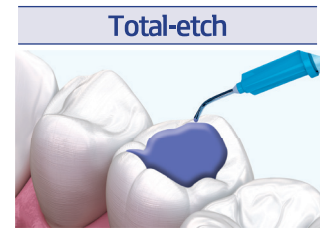
VERSATILITY:
All Etching Techniques



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 an etching technique ▶



Step 01
Selective-etch



Step 01
Total-etch

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



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 *skip 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



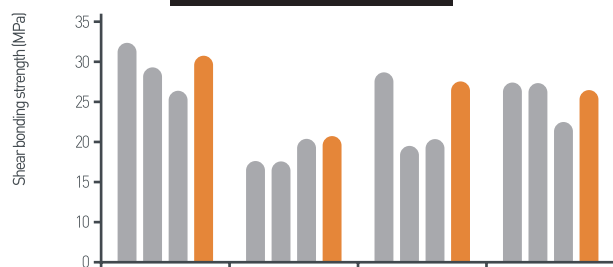
Step 04
Restoration



Step 05
Light cure

DIRECT RESTORATION IMMERSION TESTS

24 hrs Immersion Test

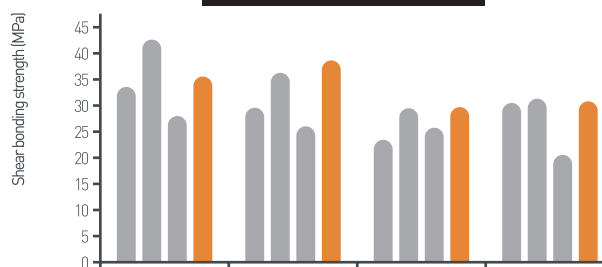


	T.E.	S.E.	T.D.	S.D.
Brand A	32.25	17.77	28.96	27.32
Brand B	29.25	17.72	19.59	27.29
Brand C	26.35	20.32	20.32	22.53
Dia-X Bond	30.81	20.83	27.64	26.43

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

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

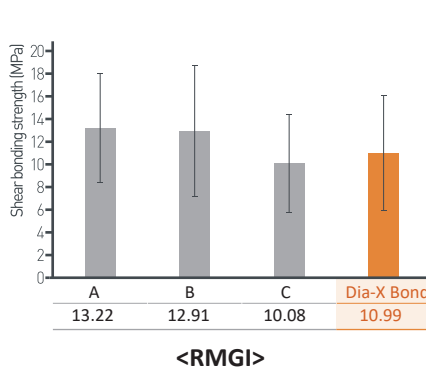
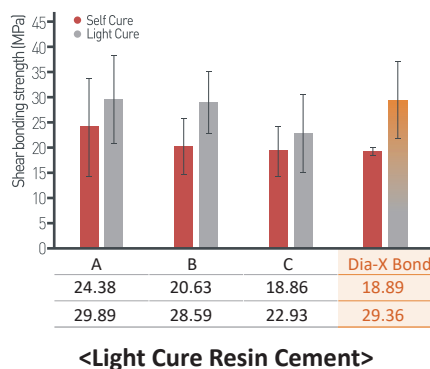
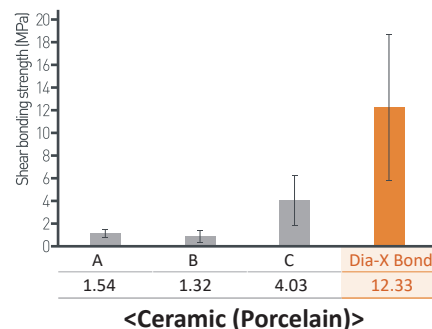
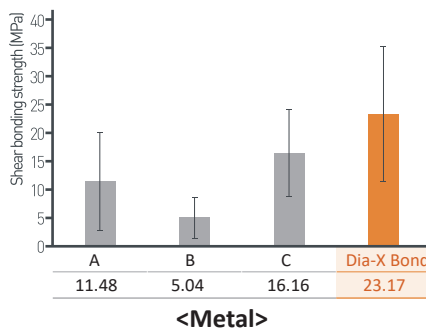
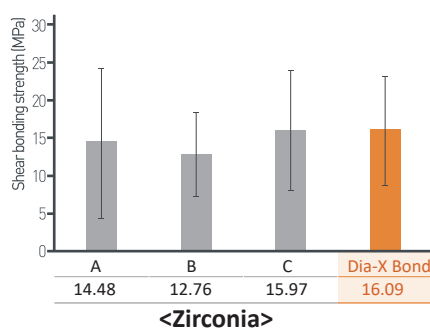
6 mos Immersion Test



	Initial T.E.	After S.E.	Initial T.D.	After S.D.
Brand A	33.64	29.75	23.24	30.33
Brand B	42.73	36.10	29.49	31.08
Brand C	28.07	26.02	25.80	20.37
Dia-X Bond	35.54	38.47	29.69	30.76

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

INDIRECT RESTORATION MATERIAL COMPARISON TESTS



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



Dia Dent®

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