

CLEARFIL LINER BOND 2V

With new adhesive monomer MDP

CLEARFIL LINER BOND 2V, the successor of CLEARFIL LINER BOND 2, employs self-etching primer and contains MDP.

- **easy application and time saving:** no separate application of etching liquid, thus no washing and drying. (Figure 1)
- **high safety to pulp:** the pH level of the primer is neutral after application, due to the buffering effect with calcium ions from the tooth structure.

Higher bond strength of MDP

- to enamel
- to dentine
- to metals
- to porcelain and cured composite (when used in combination with CLEARFIL PORCELAIN BOND ACTIVATOR) (Figure 2)

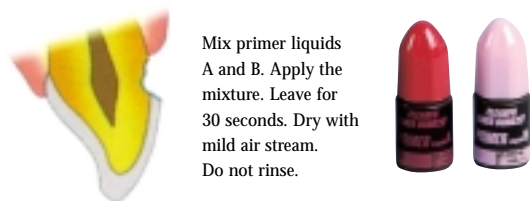


Figure 1

Primer only penetrates 1 micron deep !

As an effect of mild conditioning primer only penetrates to a depth of 1 micron. Resulting in the following advantages:

- **High pulpal protection**
- **Extreme bond strength**
During the second step (the application of the bonding liquid), the thin conditioned layer is filled with the bonding liquid, thus achieving an extremely high bond strength. Actually, an excessive etching depth and decalcification can result in very negative bonding values: the bonding liquid is not penetrating deeply enough into the conditioned layer, leaving an unfilled collagen and dentine layer in the decalcified zone, resulting in poor bonding strengths.

Wet or dry fields, no longer a problem

The new CLEARFIL LINER BOND 2V primer contains water, so there is no need to have a completely wet or completely dry field. This removes the guesswork from dentine bonding, usually present when acetone based wet bonding systems are used, allowing the dental doctor to concentrate on the restoration, taking away usual doubts and questions about the wet/dry field.

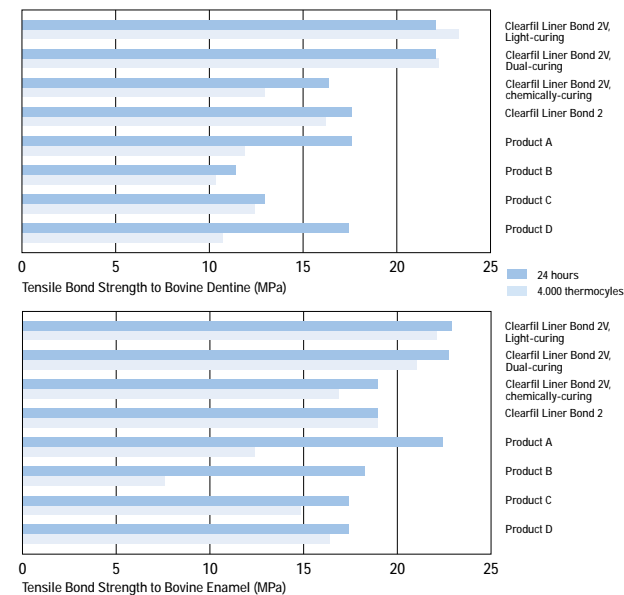


Figure 2

Collagen jungles

During etching process, there is a collapse of collagen fibre network. This collapse is a negative factor in the final bond strength of conventional bonding systems, resulting in low bond strength values. The CLEARFIL LINER BOND 2V primer has, however, intrinsically affinity towards the tooth tissues. The mild etching and decalcification effect of the primer, coupled with the water content, restores the collagen fibre network to its original and natural shape, structure and volume. These features of CLEARFIL LINER BOND 2V lead to a successful bond to both tooth and restoration.

Dual-curing and multi-purpose

CLEARFIL LINER BOND 2V allows you to work with both light-curing and chemical-curing composite, as well as bonded amalgam.



Light-curing

Apply bond A and dry with mild air stream to get a uniform, thin bonding liquid layer. Light-cure for 20 seconds, resulting in a very high bond strength. Place the composite, light-cure and finish. (Figure 3 and 4)

Chemical-curing

Mix bonding liquids A and B, apply the mixture and disperse throughout the prepared cavity with a gentle air stream as uniform as possible. Do not light-cure the bonding liquid prior to placement of the restorative material. Place the restorative material as in the usual manner, on top of the un-cured liquid, and finish. (Figure 5 and 6)



Figure 3



Figure 4

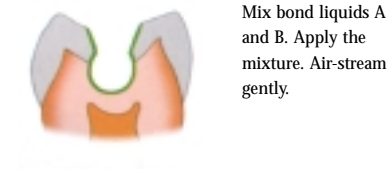


Figure 5

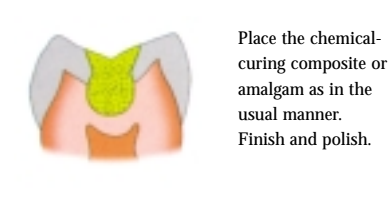


Figure 6