

Product Information On

Quadrant Uni-SE-Bond

Light curing self-etching one component adhesive

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Version:	2021-09

- **Introduction.**

Quadrant Uni-SE-Bond is a light curing self curing one component adhesive for universal use in combination with adhesive restorations. Quadrant Uni-SE-Bond etchesprimes and bonds in one step. Quadrant Uni-SE-Bond is an acetone-based formulation of light-activated, adhesive resins.

The normal procedure, after a “lege artis” cavity preparation and conditioning of the tooth tissue involved (both enamel and dentin), is as follows:

- Apply Quadrant Uni-SE-Bond immediately after having removed the excess water.
- Soak the applicator tip or a soft disposable brush in Quadrant Uni-SE-Bond and apply a copious amount to the entire cavity surface.
- Apply one coat of Quadrant Uni-SE-Bond and wait for 20 seconds.
- Gently spread Quadrant Uni-SE-Bond with a gentle air stream to evaporate the solvent and excess moisture (approximately 5 – 10 seconds).
- If the cavity surface is not uniformly shiny after this step, apply additional coats of Quadrant Uni-SE-Bond as described above.
- Light cure Quadrant Uni-SE-Bond for 20 seconds with a standard light-curing unit.

Finally, the cavity can be filled with a composite filling material according to the manufacturer’s instruction.

Quadrant Uni-SE-Bond offers excellent bond strength to both enamel and dentine and protects the cavity from penetration of bacteria. It prevents post-operative sensitivity.

Quadrant Uni-1-Bond is developed and manufactured by Cavex Holland B.V., a Company that is certified according to the provisions of the Council Directive 2017/745 concerning Medical Devices, against ISO 9001 and ISO 13485.

Quadrant Uni-SE-Bond bears the CE-Mark of conformity.

- **Composition.**

The basic ingredients of Quadrant Uni-SE-Bond are:

methacrylate-based monomers	24	% w
4-Metacryloxyethyl-trimellitic acid	19	% w
Silica filler	~1	% w
Polymerisation catalysts	~1	% w
Acetone	36	% w
Water	19	% w

- **Manufacturing.**

Basically, all ingredients are carefully weighed and mixed.

- **Laboratory control.**

At present, a product standard for bonding agents is not available. Therefore, quality control is carried out according to a number of in-house standards.

The following table gives typical values for the most important properties:

	Quadrant Uni-SE-Bond	
Shear bond strength	22	MPa
pH	<2	MPa

- **Shelf-life test.**

There is no official shelf-life test described for composite resins and bonding agents. But it is well-known, that composite dental filling materials may show some deterioration upon storage, in particular at elevated temperature. Therefore, care should be taken to protect the product from a decrease in quality.

Extensive shelf-life studies have been carried out at different temperatures, recording any change in product qualities related to storage conditions.

Based on the results of these tests, we can guarantee the good qualities of Quadrant Uni-SE-Bond for a period of 2 years, provided the product is stored in a refrigerator when not in use.

- **Quality Control.**

A batch of Quadrant Uni-SE-Bond, that has passed all the tests, is released for sales. In case of one or more requirements being not in specification, that batch is withdrawn and not sold.

- **Statement of non-toxicity.**

We hereby declare that Quadrant Uni-SE-Bond can be safely used and is non-toxic to the dentist, the dental assistant as well as to the patient.

Quadrant Uni-SE-Bond will also normally not be irritant to oral tissues. Quadrant Uni-SE-Bond does not contain any poisonous ingredients in sufficient concentration to be harmful to human beings, when used as directed.