

# Used Products

TOOTH - Crown - Glass-ceramics - Variolink N - Syntac

☐ **Variolink N**

A dual-curing and light-curing luting composite for the adhesive cementation of ceramic and composite restorations



☐ **Proxyl fluoride-free**

Prophy paste without fluoride



☐ **OptraStick**

Application instrument that features a flexible adhesive tip



☐ **Ivoclean**

The universal cleaning paste Ivoclean effectively cleans the bonding surfaces of prosthetic restorations after intraoral try-in



☐ **Monobond N**

Monobond N is the universal primer for the conditioning of all types of restoration surfaces



☐ **OptraDam**

Anatomically shaped rubber dam for the absolute isolation of the working field



☐ **N-Etch**

N-Etch is an etching gel containing 37% phosphoric acid



☐ **Syntac**

Syntac is the classic bonding agent for a sound chemical bond between composite material and tooth structure



☐ **Liquid Strip**

Glycerine gel to prevent the oxygen-inhibited layer of composites with composite or ceramic restorations



☐ **OptraPol**

OptraPol is excellently suitable for finishing and polishing all popular composite materials in a single step



☐ **Fluor Protector**

Fluor Protector is a protective fluoride varnish for desensitization and caries prophylaxis



# Flowchart Variolink N

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## 1 The temporary is removed

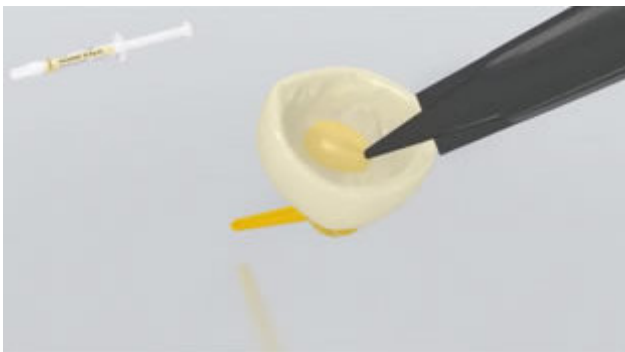


The temporary is removed. If necessary, any leftover temporary cement is removed from the preparation with a polishing brush and cleaning paste free of oil and fluoride (e.g. **Proxyl fluoride-free**). Subsequently, the preparation is dried with moisture-free and oil-free air.

## 2 The restoration is tried in



The occlusion is checked very carefully to prevent the restoration from fracturing. If necessary, proximal contacts are adjusted and polished with ceramic polishers.

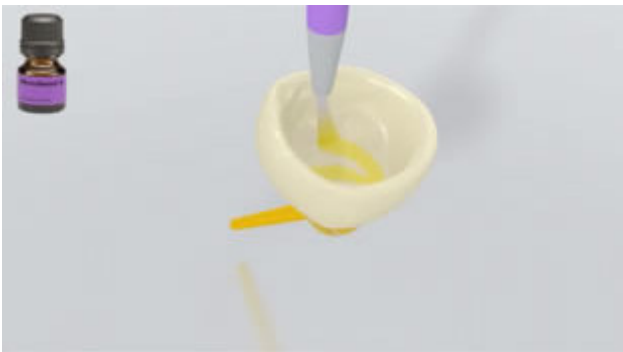


For optimum esthetic results, the shade of the restoration is checked with **Variolink N Try-In** pastes. After try-in, the paste is thoroughly removed with water spray and the restoration is dried with oil-free and moisture-free air.

### 3 The restoration is pretreated



The restoration is etched with 5% hydrofluoric acid (e.g. **IPS Ceramic Etching Gel**) for 60 seconds or as directed by the manufacturer of the restorative materials.



**Monobond N** is applied to the pretreated surfaces with a brush or microbrush and left to react for 60 seconds. Subsequently, it is dried with a vigorous stream of air.

### 4 The preparation is isolated and cleaned



Relative isolation of the treatment field - preferably with **OptraDam** or alternatively with absorbent pads and a saliva ejector - is indispensable.



The preparation is cleaned with a polishing brush and moisture-free and fluoride-free cleaning paste (e.g. **Proxyl fluoride-free**). Then it is rinsed with water spray. Subsequently, it is dried with air free of oil and moisture. Overdrying must be avoided.

**5** The preparation is pretreated and the adhesive is applied



First, **N-Etch** (37% phosphoric acid gel) is applied to the prepared enamel and then on the dentin. The gel is distributed into all the corners of the preparation using a brush or fine tip. On enamel phosphoric acid is left to react for 15–30 seconds and on dentin 10–15 seconds.



Then the gel is thoroughly rinsed off for at least 5 seconds with a vigorous stream of water. Excess moisture is removed until the dentin surface looks slightly moist and shiny (wet-bonding).



**Syntac Primer** is lightly brushed in the preparation. Syntac Primer should remain on the dentin for at least 15 seconds. Excess Syntac Primer is dispersed with air and thoroughly dried. It must not be rinsed off!



**Syntac Adhesive** is applied and allowed to react for 10 seconds. Then the preparation is dried completely with an air syringe. It must not be rinsed off!



**Heliobond** is applied and blown to a thin film.  
Heliobond is polymerized together with the luting material.

## 6 Variolink N Base and Catalyst are mixed



**Variolink N** is mixed on a mixing pad in a 1:1 ratio for 10 seconds (careful spatulation). The working time of the mixed Variolink N is about 3.5 min. at a temperature of 37 °C/99 °F.

## 7 The restoration is seated with Variolink N



The mixed **Variolink N** is applied to the preparation with a brush or spatula and/or if necessary (in the case of concave shapes to prevent the inclusion of air) to the inner surface of the restoration.



The restoration is seated and held in place using light constant pressure.



Gross excess is removed with a suitable instrument (e.g. spatula, brush). Care must be taken to remove all excess in hard-to-reach areas (proximal, gingival margins).



Like all composites, **Variolink N** is subject to oxygen inhibition. In order to avoid this problem, it is advisable to cover the restoration margins with glycerine gel/air block (e.g. Liquid Strip) immediately after the removal of excess cement.



When a polymerization unit with light intensity of at least  $800 \text{ mW/cm}^2$  is used, the ceramic must be cured for 10 seconds per mm thickness and segment (e.g. **Bluephase N**, HIGH mode,  $1,200 \text{ mW/cm}^2$ ).



**Liquid Strip** is rinsed off and the rubber dam is removed.



## 8 The completed restoration is finished



Proximal areas are adjusted with finishing and polishing strips. The occlusion and functional movements are checked and adjusted if necessary. The restoration margins are polished with polishers (e.g. **OptraPol**) or discs.

## 9 The teeth are fluoridated



A thin film of **Fluor Protector** is applied with a Vivabrush or brush and distributed evenly. The varnish is dried with an air syringe.