Ivoclean
Frequently asked questions

Question: What kind of effect does the contamination of the bonding surface with blood and saliva have on the adhesive bond of the restoration?
Answer: Body fluids such as blood and saliva contain proteins that show a very high affinity to dental ceramics, metals and alloys. Therefore, they form a very difficult-to-remove film on these types of surfaces. As a result, the reaction of the bonding agent (e.g. Monobond Plus) or self-adhesive composite cement (e.g. SpeedCEM) on the restoration surface is impaired. Laboratory tests show that the bond strength is considerably reduced as a result. In clinical situations a weak bond of this kind is responsible for a high rate of lost restorations, particularly with regard to non-retentive preparation geometries.

Question: Can the bonding surfaces of restorations made of oxide ceramics and base metal alloys be cleaned with phosphoric acid like glass-ceramic bonding surfaces?
Answer: Phosphoric acid has a surface-deactivating effect on oxide ceramic and base metal alloy surfaces. As a result, a chemical bond between the bonding agent and restorative material cannot be established.

Question: Can the bonding surface of the restoration be cleaned with alcohol after intraoral try-in?
Answer: This question was the topic of an in vitro study by B. Yang and M. Kern. They found that cleaning zirconium oxide ceramics with alcohol failed to promote a long-lasting bond. (B. Yang, M. Kern, dental materials 24 (2008) 508–513)

Question: When should Ivoclean be used?
Answer: Ivoclean should be used in situations where a restoration that has been prepared for adhesive cementation is tried in again before it is permanently seated and therefore contaminated with blood and saliva in most cases.

Question: How does Ivoclean work?
Answer: The active components contained in Ivoclean constitute very small metal-oxide particles, which are more attractive to salivary proteins than the restoration itself, because of their large surface area. Therefore, the proteins are all “attracted away” from the restoration and are rinsed off with water. The success of the systematic, user-friendly Ivoclean is confirmed by bonding studies: While only very weak bonds were established on restorations contaminated with saliva, specimens cleaned with Ivoclean showed the same results as uncontaminated restorations.

Question: How is Ivoclean used?
Answer: Ivoclean is applied to the bonding surface of the restoration and left to react for 20 seconds. Subsequently, it is completely rinsed off with water. Then the bonding surface is dried with oil-free air.
Question: Which restorative materials can be cleaned with Ivoclean?
Answer: The spherical metal-oxide particles are non-abrasive compared with sandblasting media. Furthermore, they do not form passive layers like those produced by phosphoric acid. As a result of the irresistible attraction of proteins to the metal-oxide particles contained in Ivoclean, the paste can be used to clean all types of restoration surfaces:
- Glass-ceramics
- Zirconium oxide ceramics
- Aluminum oxide ceramics
- Precious metal alloys
- Base metal alloys
- Lab-fabricated composite restorations

Question: What needs to be done when the bonding surface of the restoration is contaminated with blood and saliva after it has been cleaned and primed?
Answer: To ensure a strong bond, the bonding surface should be cleaned with Ivoclean once more and primed again.

Question: How should Ivoclean be stored?
Answer: Ivoclean can be stored at temperatures between 2 and 28 °C (36 and 82 °F). The bottle must be tightly sealed after use.

Question: How many times can the contents of a 5g bottle of Ivoclean be used?
Answer: A single crown is cleaned with approx 0.06g Ivoclean. If this figure is considered to be the average amount required per crown, then a bottle of Ivoclean will last for more than 50 applications.

Question: Can Ivoclean be used to clean restoration surfaces in the mouth, such as in the case of repairs or implant abutments?
Answer: Ivoclean is not indicated for intraoral use.