FAQ
Panavia SA Cement Plus

Q: What type of cement is Panavia SA Cement Plus?
A: Panavia SA Cement Plus is a dual-cure, self-etch, self-adhesive resin cement that provides fluoride-release.

Q: What is the main advantage of Panavia SA Cement Plus compared to a regular resin cement?
A: Panavia SA Cement Plus is a self-adhesive, automix/handmix delivery system product with good adhesion properties. The main advantages are easy application, better adhesion, and easier removal of excess cement.

Q: What are the differences between Panavia SA Cement Plus and Panavia SA Cement?
A: SEE BELOW:

<table>
<thead>
<tr>
<th>Panavia SA Cement</th>
<th>Panavia SA Cement Plus</th>
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<tbody>
<tr>
<td>Good bond strength</td>
<td>Higher bond strength</td>
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<tr>
<td>Easy to remove the excess cement</td>
<td>Easy to remove excess cement; easier dispensing</td>
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<tr>
<td>Fluoride-releasing</td>
<td>Fluoride-releasing</td>
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<tr>
<td>2 shades (Universal; White)</td>
<td>Storage at room temperature</td>
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<tr>
<td></td>
<td>Shortened light-curing time (20 sec. to 10 sec.)</td>
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<tr>
<td></td>
<td>Available in 3 shades (Translucent; Universal (A2); White)</td>
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Q: What are the recommended uses for the 3 shades of Panavia SA Cement Plus?
A: Panavia SA Cement Plus is available in 3 shades and have the following recommendations for use:

- Translucent: high transparency shade for esthetic restorations
- Universal (A2): translucent (A2); satisfactory color adaptation on the cement margin
- White: paper white (whiter than (A1); slightly more opaque than Universal; high visibility for excess paste removal

Q: What are the clinical indications for Panavia SA Cement Plus?

A: The clinical indications for Panavia SA Cement Plus are as follows:

- Cementation of crowns, bridges, inlays and onlays made of ceramic, hybrid ceramics, composite resin or metal.

- Cementation of ceramic, hybrid ceramics, composite resin or metal restorations on implant abutments and frames.

- Cementation of Adhesion Bridges (ex. Maryland Bridges).

- Cementation of metal cores, resin cores, metal posts or glass fiber posts.

- Amalgam bonding.

Q: Can Panavia SA Cement Plus be used for veneer cementation?

A: Panavia SA Cement Plus is not recommended for veneer cementation. Both Panavia F 2.0 and Esthetic Cement EX can be used to cement veneers.

Q: Can a high-intensity BLUE LED; a BLUE LED or a Halogen lamp be used for curing Panavia SA Cement Plus? What are the recommended cure times?

A: SEE BELOW:

High-intensity BLUE LED = Twice for 3-5 seconds

BLUE LED (800-1400 mW/cm²) = 10 seconds

Halogen lamp (more than 400 mW/cm²) = 10 seconds

Q: How long does it take for Panavia SA Cement Plus to self-cure?

A: It takes (5) minutes in the mouth for Panavia SA Cement Plus to self-cure.

Q: What is the extra-oral working time of Panavia SA Cement Plus?

A: The extra-oral working time of Panavia SA Cement Plus is (1) minute (automix) and (2) minutes (handmix). If the paste is applied into the cavity using the Endo tip, place the core or post into the canal within (40) seconds after application of the cement.

Q: How is the Endo tip used with Panavia SA Cement Plus?
A: The use of the Endo tip makes it possible to directly insert the cement paste from the front end of the post hole when seating a post in the canal.

Q: How much material is lost in the mixing tip?
A: Approximately 0.19ml (0.34g) of material is lost in the regular tip. The Endo tip loss is approximately 0.14ml (0.26g).

Q: How many applications are in a syringe of Panavia SA Cement Plus?
A: There are approximately 15-20 applications, depending on the type of restorations which are cemented (crowns; inlays; onlays) with the Automix type syringe. For the Handmix version, there are approximately 50-60 applications per syringe.

Q: What is the best way to remove the excess cement?
A: First, tack-cure the excess Panavia SA Cement Plus for 2-5 seconds, or allow the cement to self-cure for 2-4 minutes after placing the restoration; then remove it with an instrument. Panavia SA Cement Plus can also be allowed to self-cure to reach its gel state, where it can be easily removed. When removing the excess, please hold the restoration in place to avoid the possibility of the restoration lifting.

Q: Is Alloy Primer necessary as a pretreatment for high noble alloy when using Panavia SA Cement Plus?
A: Yes, we recommend the use of Alloy Primer on the pure gold surface to assure long term durability. Alloy Primer contains the adhesive monomer VBATDT which bonds chemically to precious metals. Alloy Primer is not necessary when cementing gold alloys with Panavia SA Cement Plus, due to the concentrated MDP in the cement paste, and also since gold alloys include some non-precious metal.

Q: How do I prepare my metal/fiber posts when using Panavia SA Cement Plus?
A: Clean the surface of the post according to the post’s IFU. It is ready for use. A metal primer/or a silane is not necessary.

Q: How do I prepare porcelain (silica-based ceramics) and lithium disilicate (e.max Press) when using Panavia SA Cement Plus?
A: First, sandblast the adherent surface of the restoration, micro-etch or use HF etching gel to roughen the surface, according to the restoration. Then apply K-etchant Gel or K-Etchant Syringe to activate and clean the surface (if HF is used, there is no need to apply etching gel). After cleaning/activation, apply a silane coupling agent (Clearfil Ceramic Primer) to the adherent surface of the restoration. The Panavia SA Cement Plus paste is then applied directly to the restoration.

Q: How do I prepare my Zirconia crowns (metal oxide-ceramics; high strength ceramics) when using Panavia SA Cement Plus?

A: Sandblast the adherent surface of the restoration; ultrasonically wash and then dry. Panavia SA Cement Plus bonds directly to high strength ceramics. HF etching or silanating the internal surface is not necessary.

OTHER EXAMPLES:

A silane coupling agent (Clearfil Ceramic Primer) is not necessary for the following products before using Panavia SA Cement Plus:

1. Zirconia: Cercon, Lava, Katana, IPS e.max ZirCad, BruxZir
2. Alumina: Proceramic, In-Ceram
3. Indirect Composite: Sculpture, Targis, Belleglass, Sinfony

Recommend use of a silane coupling agent (Ceramic Primer) for the following silica-based ceramics:

4. Lithium disilicate: IPS e.max Press, Finesse, lithium disilicate
5. Leucite: IPS Empress, GN-1

Q: Will Panavia SA Cement Plus adhere to implants?

A: Yes, Panavia SA Cement Plus can be strongly bonded to titanium alloy implant abutment materials. Please note that Panavia SA Cement Plus is a permanent cement, and not a provisional one.

Q: What is the bond strength of Panavia SA Cement Plus to enamel and dentin?

A: The shear bond strength of Panavia SA Cement Plus to bovine tooth structure is approximately 17 and 13 MPa, respectively, when compared with 15 and 10 MPa for the original Panavia SA Cement.

Q: How is there an improved bond strength when using Panavia SA Cement Plus?

A: A new catalyst chemistry provides stronger bond strengths for Panavia SA Cement Plus.

Q: Is Panavia SA Cement Plus radiopaque?
A: Yes, Panavia SA Cement Plus is radiopaque. It is equivalent to 1.5mm (150%) aluminum (for the automix) and 2.0mm (200%) aluminum (for the handmix).

Q: Why does Panavia SA Cement Plus have a shorter curing time than Panavia SA Cement?

A: Panavia SA Cement Plus has a shorter curing time (20 sec. to 10 sec.) due to a new Radical Amplifier, which increases the rate of polymerization.

Q: How long will Panavia SA Cement Plus continue to release F-ions?

A: About 2-3 months. A small amount of F-ions will be released for almost one year.

Q: Is it possible to replace Panavia F 2.0 or Clearfil Esthetic Cement EX with Panavia SA Cement Plus?

A: Panavia SA Cement Plus does not have an indication for veneer cementation. Panavia F 2.0 and Clearfil Esthetic Cement EX show higher bond strength to tooth structure (especially to enamel) when compared with Panavia SA Cement Plus; therefore, Panavia SA Cement Plus can be used as a routine luting cement similar to other self-adhesive cements, resin-modified glass ionomers, or glass ionomer cements. When compared with other products in the self-adhesive category (RelyX Unicem; Maxcem), the performance level of Panavia SA Cement Plus provides a stronger bond.

Q: Why should eugenol-containing materials (temporary cement) not be used with Panavia SA Cement Plus?

A: Eugenol retards the polymerization process of Panavia SA Cement Plus. As a result, the bonding strength and mechanical properties will decrease.

Q: Why should hemostatic agents containing ferric compounds not be used with Panavia SA Cement Plus?

A: These materials may impair adhesion and may cause discoloration at the tooth margin or surrounding gingival tissue due to ferric sulfate ions which may remain.

Q: After the cementation of a resin-core or metal-core, how long should I wait before preparing the core?

A: Please wait for approximately (10) minutes and make sure the cement if fully cured before preparing the core tooth.

Q: What is the film thickness of Panavia SA Cement Plus?
A: The film thickness of Panavia SA Cement Plus is 15 microns (for the automix) and 17 microns (for the handmix).

Q: What is the amount of filler in Panavia SA Cement Plus?
A: The total amount of inorganic filler is approximately 45 vol% (66wt%) for both the automix/handmix syringes.

Q: Can Clearfil Universal Bond be used with Panavia SA Cement Plus?
A: Clearfil Universal Bond enhances the bond strength of self-adhesive cement. No additional primer/activator is needed when used with Panavia SA Cement Plus.

Panavia SA Cement Plus contains special chemistry. When Clearfil Universal Bond touches Panavia SA Cement Plus, a “Touch-Cure” affect is created, thereby allowing the bond to now be used in a dual-cure mode without an additional primer or activator.

Q: What is the shelf-life of Panavia SA Cement Plus?
A: The shelf-life of Panavia SA Cement Plus is 36 months from date of manufacture at room temperature. Refrigeration is not needed.