Use ALLOY PRIMER with all dental metals for:
- Eliminating complicated tin-plating
- Intra- and extra- oral applications

- Equivalent bond strength to that of tin-plating
- Extensive clinical uses
- Easy handling

Metal Adhesive Primer
ALLOY PRIMER
ALLOY PRIMER is a metal conditioning agent used to enhance the bond strength between dental metals and resin-base materials. It contains VBATDT and MDP. Due to the VBATDT and MDP, ALLOY PRIMER enhances the bond strength to both precious and also non-precious metals. In addition, the fact that ALLOY PRIMER can be used intra- and extra- orally produces its clinical versatility. Finally, ALLOY PRIMER is very easy to use. Simply apply it to the metal adherend surface, and the surface treatment is completed. Complicated tin-plating is not required.

Non-precious metal: Phosphoric acid group of MDP bonds chemically to the non-precious metal atoms, while the double bonds on the other end of the molecule copolymerize with the resin monomers.

Precious metal: Sulfur atom of VBATDT bonds chemically to the precious metal atoms, while the double bonds on the other end of the molecule copolymerize with the resin monomers. The presence of MDP helps the reaction between VBATDT and precious metals, resulting in increased bond strength.

Operating Procedures / Clinical Usage

Metal inlays, onlays, crowns and bridges / Adhesion bridges and metal splints / Metal posts

Cementing a crown to precious metal core using PANAVIA 21

Repair of fractured resin-based facing crowns and porcelain-fused-to-metal bridges and crowns

Repairing with *CLEARFIL PORCELAIN BOND and CLEARFIL AP-X

*CLEARFIL PORCELAIN BOND consists of CLEARFIL NEW BOND and CLEARFIL PORCELAIN BOND ACTIVATOR. CLEARFIL PHOTO BOND can be used instead of CLEARFIL NEW BOND with CLEARFIL PORCELAIN BOND ACTIVATOR.
Tensile Bond Strengths between Resin-based Materials and Dental Alloys (MPa)

**PANAVIA 21**
- Au-Ag-Pd alloy
- Gold alloy

**CLEARFIL PORCELAIN BOND**
- Au-Ag-Pd alloy
- Gold alloy

**Self-cured acrylic resin**
- Stainless steel
- Titan
- Co-Cr Alloy

**Denture**
- Titan
- Co-Cr Alloy

<table>
<thead>
<tr>
<th>Alloy Primer</th>
<th>Tin-plating</th>
<th>No treatment</th>
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<tbody>
<tr>
<td>ALLOY PRIMER</td>
<td>Yellow</td>
<td>Green</td>
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</tbody>
</table>

*After 3,000 thermal-cycled at 4°C-60°C for 1 minute each*  
*After one day at 37°C in water*

Repair of dentures: Using self-cured acrylic resin

- Sandblast the adherend surface
- Apply ALLOY PRIMER to the adherend surface
- Apply the self-cured acrylic resin to the metal adherend surface

Operating Procedures / Laboratory Usage

Construction of removable dentures with a metal base, clasp or attachment

- Using denture base acrylic resins (heat-cured acrylic resin, self-cured acrylic resin)
- Fabrication of wax denture
- Sandblast the adherend surface
- Apply ALLOY PRIMER to the adherend surface
- Fabricate the denture base acrylic resin and cure it
Features

- ALLOY PRIMER enhances the adhesion between resin-base materials and dental metals (Non-precious metals as well as precious metals).
- Surface treatment is accomplished with just one coat of ALLOY PRIMER.
- ALLOY PRIMER can be used intra- and extra- orally.

<table>
<thead>
<tr>
<th></th>
<th>Precious Metal</th>
<th>Non-precious Metal</th>
<th>Availability for introral use</th>
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<tbody>
<tr>
<td>ALLOY PRIMER</td>
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<tr>
<td>Product A</td>
<td>○</td>
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<tr>
<td>Product B</td>
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Basic Procedure Step

Sandblasting Treatment → Application of ALLOY PRIMER → Adhesion Operation

Indications

1. Adhesion of metal inlays, onlays, crowns and bridges / Adhesion of metal cast posts
2. Repair of fractured resin-based facing crowns and porcelain-fused metal crowns and bridges
3. Construction of removable dentures with metal base, clasp or attachment
4. Repair of dentures

NOTE:
Please read ALLOY PRIMER Instructions for Use thoroughly before using the product. CLEARFIL and PANAVIA are trademarks of Kuraray Co., Ltd.

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