



**Dental Dual-Cured Adhesive Resin Cement** 

### **Gold Standard of Adhesive Resin Cement**

- Outstanding bond to all substrates: enamel and dentin, ceramics, porcelain, composite resin and metal.
- Lowest leakage as proven by independent studies.
- Legendary PANAVIA adhesive technology: Proven 25+ years of experience since 1983.
- Virtually no post-operative sensitivity.
- Fluoride-releasing and radiopaque.



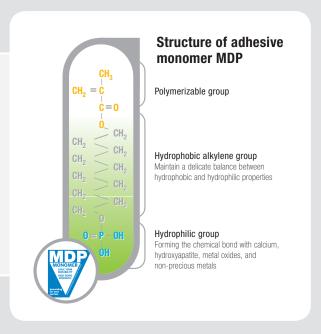
## PANAVIA F 2.0: Gold standard of adhesive resin cement

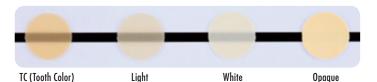
PANAVIA F 2.0 is a universal resin cement which shows high bond strength for all indications and materials. PANAVIA F 2.0 has been regarded as an indispensable tool for permanent adhesion technique in the areas of all ceramic and metal restorations, especially for high quality and difficult cases. It is recommended by independents as a premium product. The resin cement has rare postoperative sensitivity and provides consistently good results. The anaerobic-curing properties do not begin until direct contact has been made with the restoration. The smooth consistency make PANAVIA F 2.0 a popular aid in daily practice, due to the user's self-defined working time. Even after releasing fluoride, the cement maintains its high mechanical strength, due to the special surface coating technology of the sodium fluoride.



## MDP: Kuraray's Adhesive Technology

Kuraray's unique adhesive monomer MDP in the primers create a strong chemical bond to hydroxyapatite and metals/metal oxides, ensuring a reliable adhesion to both enamel and dentin, zirconia/alumina and non-precious metal such as titanium. Being in use for more than 25 years, the MDP has a proven excellence in adhesion. It is a guarantee for a high bond strength and shows a reliable adhesion durability to the tooth structure and restorations.





Available in four shades

TC (Tooth Color): Translucent A3 (most like tooth structure)

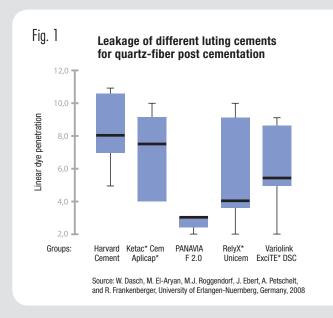
**Light**: A1-A2 Shade (Lighter than TC)

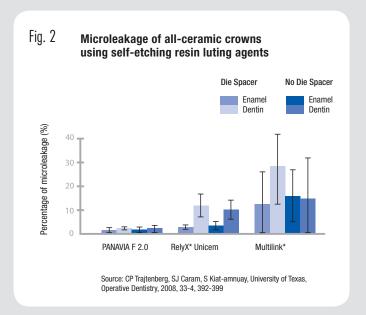
White: Lighter than A1

**Opaque**: Opaque A2

(masks staining and discoloration)

# High bond strength and consistent marginal integrity





# Independent scientific research studies compellingly demonstrated PANAVIA F 2.0's excellent marginal integrity.

**Fig. 1:** PANAVIA F 2.0 in combination with ED PRIMER II revealed least leakage values when DTLight quartz fiber posts were inserted. (The boxplot diagram depicts the median values and the 25 and 75 percentile values respectively of the relevant measurements of cements.)

Fig. 2: PANAVIA F 2.0 showed a lower degree of micro-leakage than RelyX\* Unicem and Multilink\* at both the enamel and dentin margins. The degree of micro-leakage for the die spacer group was not significantly different from the group with the no die spacer technique (p>0.1).

**Fig. 3:** Leakage of all ceramic crowns after simulated aging through cyclic loading (1.2 million) and dye penetration: micro-leakage is detected for RelyX\* Unicem, but not PANAVIA F 2.0.



Fig. 3: Courtesy of Markus B. Blatz, DMD, PhD, Philadelphia, PA, USA.

#### **Technical Data**

Source: Kuraray Medical Inc.

Share Bond Strength to Tooth Structure & Restorative Materials		
	24 hours	3000 thermal-cycles
Human enamel	28.7 MPa	28.0 MPa
Human dentin	15.8 MPa	15.4 MPa
Zirconia (Cercon)	43.4 MPa	34.4 MPa
Alumina (Procera)	32.4 MPa	28.4 MPa
Gold Alloy (Type IV)*	28.0 MPa	32.3 MPa
Titanium (Titan 100)	38.8 MPa	37.6 MPa
Porcelain (VITA CELAY)**	24.9 MPa	25.7 MPa

PANAVIA F 2.0 bonds to all substrates.

Outstanding adhesion to enamel, dentin,
CAD/CAM blocks, ceramics, precious and
non-precious metals, porcelain and resin.

For zirconia/alumina and non-precious
metal such as titanium, pre-treatment with
primer is not needed; PANAVIA F 2.0
bonds directly to the surface.

\*with ALLOY PRIMER,

\*\*with CLEARFIL™ CERAMIC PRIMER

<sup>\*</sup> RelyX, Multilink, Ketac, Aplicap, ExciTE, Cercon and Procera are NOT products of Kuraray Medical Inc.

# **Highlights of Cementation Procedure**

#### **Clinical procedure**

#### Cementation of precious & semi-precious metal restorations





Sandblast, Ultrasonic, clean and dry

Apply ALLOY Primer.

#### Pre-treatment of porcelain/composite resin







Sandblast, Ultrasonic, clean and dry

Apply a phosphoric acid for 5 sec. Rinse and dry.

Apply the primer and air-dry.

#### sec. Rinse and dry.







Dispense equal amounts of

paste A and B.

Mix paste A and B for 20 sec.

Apply mixed ED PRIMER II

A + B and wait for 30 sec.

Apply the mixture.

Air-dry gently.

Cement and remove the

#### For Zirconia/Alumina and non-precious metal



Sandblast, Ultrasonic, clean

Step 2a and 2b are not needed.



Light-cure the margin. Halogen/LED: 20 sec. Plasma arc: 5 sec.

3min.
Apply OXYGIJARD II\* for

Apply OXYGUARD II\* for self-cure. Wait for 3 min and wash.

\*Oxygen-inhibiting gel.

# PANAVIA Complete Kit

# PANAVIA 20 Manadathy No.

## **Ordering Information**

#### **Complete Kit**

#501KA TC #502KA White #503KA Opaque #504KA Light Contains: Each kit includes: 1 PANAVIA F 2.0 Paste A: 2.3 ml, 1 PANAVIA F 2.0 Paste B: 2.3 ml, 1 ED Primer II Liquid A (4 ml), 1 ED Primer II Liquid B: 4 ml, 1 PANAVIA F 2.0 OXYGUARD II: 6 ml, 1 CLEARFIL Ceramic Primer: 4 ml, 1 Alloy Primer: 5 ml, Accessories.

#### **Introductory Kit**

#480KA TC #481KA White #482KA Opaque #483KA Light Contains: 1 PANAVIA F 2.0 Paste A: 1 ml, 1 PANAVIA F 2.0 Paste B: 1 ml, 1 ED Primer II Liquid A: 1 ml, 1 ED Primer II Liquid B: 1 ml, 1 PANAVIA F 2.0 OXYGUARD II: 6 ml, Accessories.

#### **Refills**

PANAVIA F 2.0 A Paste: PANAVIA F 2.0 OXYGUARD II: 2.3 ml 6 ml

#493KA #490KA

PANAVIA F 2.0 B Paste: CLEARFIL CERAMIC PRIMER:

2.3 ml each 4 ml #494KA TC #2550KA

#495KA White

#496KA Opaque ALLOY PRIMER:

#497KA Light 5 ml #064KA

PANAVIA F 2.0 ED Primer II:

4 ml each K-ETCHANT GEL:

#491KA Liquid A 6 ml #492KA Liquid B #013KA

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