



# CLEARFIL MAJESTY Posterior

Superior physical properties Low polymerization shrinkage Low thermal expansion coefficient



# KURARAY ADHESIVE TECHNOLOGY PRESENTS: THE DAWN OF A NEW ERA OF COMPOSITES.

Kuraray produces many products which have excellent adhesion to tooth substance, metals and ceramics, based on our unique adhesive technology. This technology is one of our core competences and has now been transferred to the surface treatment of fillers for CLEARFIL MAJESTY™ Posterior, a light-curing, radiopaque hybrid composite. With this new composite, Kuraray has now entered a new era of direct filling restoration.



# NANO DISPERSION TECHNOLOGY

**Nano Dispersion Technology**, Kuraray's new filler surface treatment technology, shows a high surface-active effect and gives high filler dispersion to the monomer of the composite resin. Thanks to this new technology, a high filler content of 92 wt% (82 vol%) can be achieved, which offers 3 superior features that are essential for posterior composites:

#### 1 SUPERIOR PHYSICAL PROPERTIES

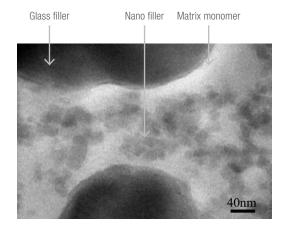
CLEARFIL MAJESTY<sup>TM</sup> Posterior shows high mechanical strength and high fatigue-resistance. These properties contribute to reliable and long-lasting restorations in posterior regions.

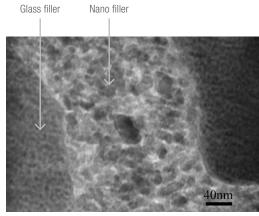
#### **2 LOW POLYMERIZATION SHRINKAGE**

Polymerization shrinkage is an important factor when trying to achieve a good adaptation to the tooth. CLEARFIL MAJESTY™ provides a high adaptation due to its minimal polymerization shrinkage (1.5 vol%).

#### **3 LOW THERMAL EXPANSION COEFFICIENT**

The thermal expansion coefficient is another very important characteristic if a long-lasting restoration has to be achieved. CLEARFIL MAJESTY™ Posterior has a remarkable low thermal expansion coefficient. As a result only minimal deformation — caused by thermal changes — will occur. This property also contributes to a first-rate, long-term marginal adaptation.





CLEARFIL MAJESTY™ Posterior

# **BENEFITS**

- ✓ The hybrid composite is easy and comfortable to use, despite the high filler content
- ✓ Almost no color change through polymerization
- ✓ Low water sorption
- Good polishability

# METAL-FREE RESTORATION



Before: Defective metal inlay restoration in molars.



After:
Restorations of Class I with CLEARFIL MAJESTY™ Posterior.

#### **Recommendations for polishing**

- 1 Shaping: Shape overall figure and marginal line smoothly using diamond tip (fine).
- 2 Finishing: Finish smooth surface using carbide bar (16 blades or 30 blades) or diamond tip (super fine).
- **3 Polishing:** Polish to glossy finish with CLEARFIL  $^{\text{\tiny TM}}$  Twist Dia.

### CLINICAL CASE



Fig. 1 Defective composite resin restoration in molars.



Fig. 2 Application of CLEARFIL™ SE BOND 2 to cavities.



Fig. 3 Restoration of the cavities with CLEARFIL MAJESTY™ Posterior in the A2 Classic shade.



Fig. 4 Final restorations of Class I and II with CLEARFIL MAJESTY™ Posterior and polish with CLEARFIL™ Twist DIA.

CLEARFIL MAJESTY™ Posterior is a resin composite with high strength and great optical properties developed for posterior restorations and suitable even for the most demanding patients. Figure 1 shows the initial clinical situation with insufficient resin composite restorations in the lower molars. After removal of the old fillings, the cavities were treated with CLEARFIL™ SE BOND 2 (Figure 2).

Then, I restored them with CLEARFIL MAJESTY™ Posterior in the A2 Classic shade (Figure 3). The fissures were highlighted with brown color modifier. Finally, finishing was performed in three steps: The excess of composite resin was removed with a fine-grained diamond bur. Final contouring was accomplished with a carbide bur, before CLEARFIL™ Twist DIA was used to obtain a natural gloss (Figure 4).

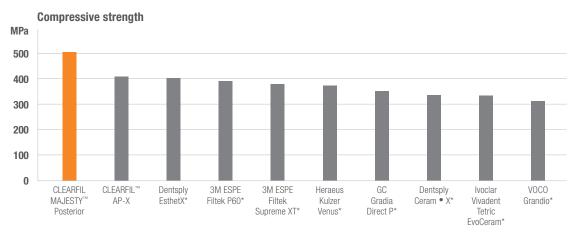
CLEARFIL MAJESTY<sup>™</sup> Posterior is characterized by high mechanical strength, hardness and bending strength, a low coefficient of thermal expansion, low polymerization shrinkage and good aesthetics. Due to these features and a reliable long-term behavior, CLEARFIL MAJESTY<sup>™</sup> Posterior should have a place in every dental office for direct posterior restorations. Excellent outcomes are achievable and therefore I recommend its use.

Magdalena Osiewicz, DDS, MSc, PhD

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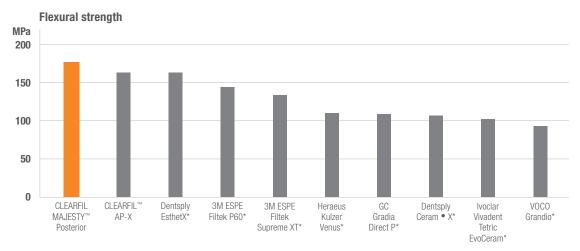
Department of Dental Materials Science, Academic Centre for Dentistry Amsterdam (ACTA), University of Amsterdam and Vrije Universiteit Amsterdam, Amsterdam, the Netherlands.

# SUPERIOR PHYSICAL PROPERTIES



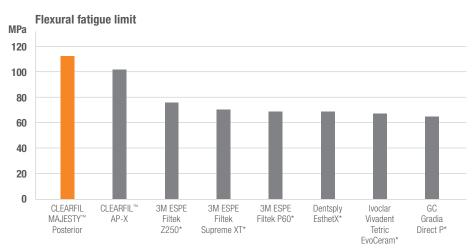
CLEARFIL MAJESTY<sup>™</sup> Posterior has a compressive strength of 504 MPa. That is the highest figure among all posterior composites.

Source: Kuraray Medical Inc., Japan \*Not a trademark of Kuraray Noritake Dental Inc.



CLEARFIL MAJESTY™ Posterior's flexural strength is 177 MPa. The material is extremely resistant.

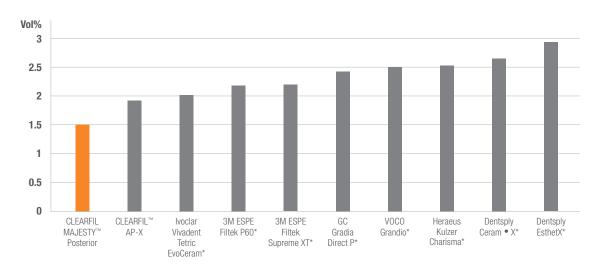
Source: Kuraray Medical Inc., Japan \*Not a trademark of Kuraray Noritake Dental Inc.



The flexural fatigue limit of CLEARFIL MAJESTY™ Posterior is also first-class. This demonstrates that the material has exceptional long-term stability.

Source: Kuraray Medical Inc., Japan \*Not a trademark of Kuraray Noritake Dental Inc.

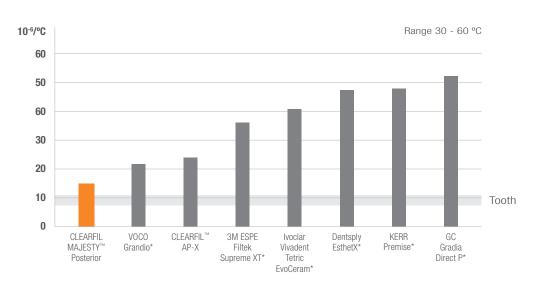
# LOW POLYMERIZATION SHRINKAGE



With only 1.5 vol% shrinkage, CLEARFIL MAJESTY<sup>™</sup> Posterior displays a low shrinkage through light-curing. The result generates a first-rate marginal adaptation with Kuraray bondings.

Source: JFE Techno-Research Corporation, Japan \*Not a trademark of Kuraray Noritake Dental Inc.

# LOW THERMAL EXPANSION COEFFICIENT



Restored composites suffer from thermal stress for a long time. The difference of the thermal expansion coefficient between the restoration material and the tooth will cause strain at the adhesive transition. CLEARFIL MAJESTY™ Posterior has the lowest thermal expansion coefficient of the materials tested. And its thermal expansion coefficient is close to that of enamel. This property strongly contributes to the clinical longevity of the restoration.

Source: JFE Techno-Research Corporation, Japan \*Not a trademark of Kuraray Noritake Dental Inc.

#### **AVAILABLE IN 6 ESTHETIC SHADES**

CLEARFIL MAJESTY<sup>™</sup> Posterior is available in 6 esthetic shades for posterior restoration. Simply choose one single matching shade for the entire cavity.



#### **ORDERING INFORMATION**

ARTICLE NUMBER	CLEARFIL MAJESTY™ POSTERIOR
#2581-EU	<b>A2</b> Syringe (4.9g/2.0 ml)
#2582-EU	<b>A3</b> Syringe (4.9g/2.0 ml)
#2583-EU	<b>A3.5</b> Syringe (4.9g/2.0 ml)
#2586-EU	<b>B2</b> Syringe (4.9g/2.0 ml)
#2590-EU	XL Syringe (Extra Light) (4.9g/2.0 ml)
#2597-EU	<b>0A3</b> Syringe (4.9g/2.0 ml)
#2572-EU	shade guide

ARTICLE NUMBER	CLEARFIL MAJESTY™ POSTERIOR
#2692-EU	<b>A2</b> PLT (20 x 0.25g/0.1ml)
#2693-EU	<b>A3</b> PLT (20 x 0.25g/0.1ml)
#2694-EU	<b>A3.5</b> PLT (20 x 0.25g/0.1ml)
#2695-EU	<b>B2</b> PLT (20 x 0.25g/0.1ml)
#2697-EU	<b>XL</b> PLT (Extra Light) (20 x 0.25g/0.1ml)
#2704-EU	<b>0A3</b> (PLT 20 x 0.25g/0.1ml)

#### YOUR CONTACT

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- Before using this product, be sure to read the Instructions for Use supplied with the product.
- The specifications and appearance of the product are subject to change without notice.
- Printed color can be slightly different from actual color.

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