

REINFORCED CAD/CAM COMPOSITE FOR PERMANENT RESTORATION

# BRILLIANT Crios

High performance – made brilliant



Ceramics – a smart solution  
in the kitchen.

Composite – a BRILLIANT solution  
in the practice.



## **BRILLIANT** Crios

**Reinforced CAD/CAM composite for permanent restoration**

Composite has long been the gold standard in direct filling therapy. With BRILLIANT Crios, the well-proven dental material entered the indirect CAD/CAM restoration technology. Compared to ceramics, CAD/CAM composites offer considerable advantages.

# BRILLIANT CRIOS FOR PERMANENT AESTHETIC RESTORATIONS

## REINFORCED COMPOSITE

- High flexural strength for resistant restorations
- Tooth-like modulus of elasticity for a shock-absorbing effect and pleasant bite feeling

## TOOTH-LIKE BEHAVIOUR

- Blends in extremely well to provide natural aesthetics
- High wear resistance and low abrasion on antagonist

## EFFICIENT HANDLING

- No firing process required
- Can be modified and repaired
- Exceptional grinding precision for more freedom of preparation
- Effortless polishing for fast gloss

## RELIABLE LUTING SYSTEM

- Secure bonding due to ONE COAT 7 UNIVERSAL
- Suitable luting material for every situation

## SHAPES

Block	<b>12</b>	12 × 10 × 15 (mm)
	<b>14</b>	14 × 12 × 18 (mm)
Disc	<b>H14</b>	14 × 98.5 (mm)
	<b>H18</b>	18 × 98.5 (mm)

## SHADES

### Low Translucent (LT)

Bleach, A1, A2, A3, A3.5, B1, B2, B3, C2

### High Translucent (HT)

A1, A2, A3, B1

### Super Translucent (ST)

Bleach, Universal

**NEW**

## INDICATIONS

BRILLIANT Crios is the ideal choice for single tooth restorations in the anterior as well as posterior region of teeth. This includes all conventional indications such as **inlays, onlays, crowns and veneers**.

BRILLIANT Crios

A2 HT H18  
Ø 98.5 mm

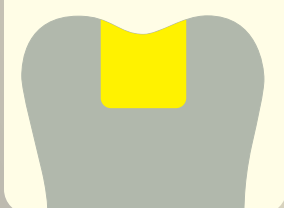
COLTENE

C

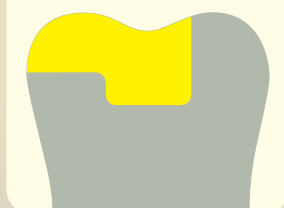
BRILLIANT  
Crios



Inlay



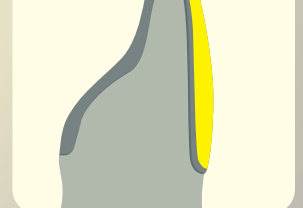
Onlay



Crown



Veneer



# REINFORCED COMPOSITE

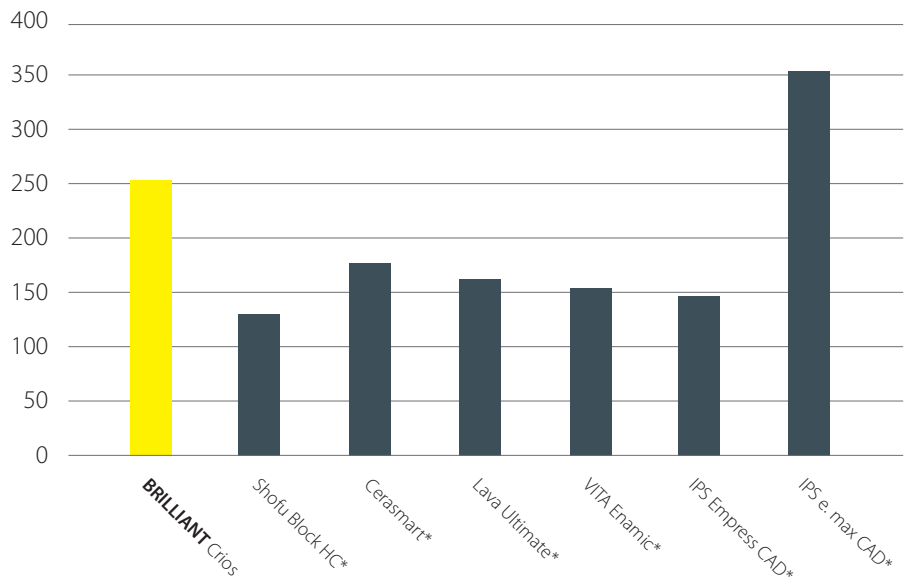
The outstanding mechanical properties of BRILLIANT Crios are the result of controlled, stress-free thermal curing. The multimodal composition of dental glass and amorphous silica in combination with a reinforcing resin matrix make BRILLIANT Crios the ideal material for permanent single tooth restorations.

## A STRONG MATERIAL

The quality of BRILLIANT Crios is also reflected by its high flexural strength. The compact structure increases the material resistance and reduces the risk of fracturing.

## BIAXIAL FLEXURAL STRENGTH

Measured in MPa



Source: internal data | \* not a trademark of COLTENE

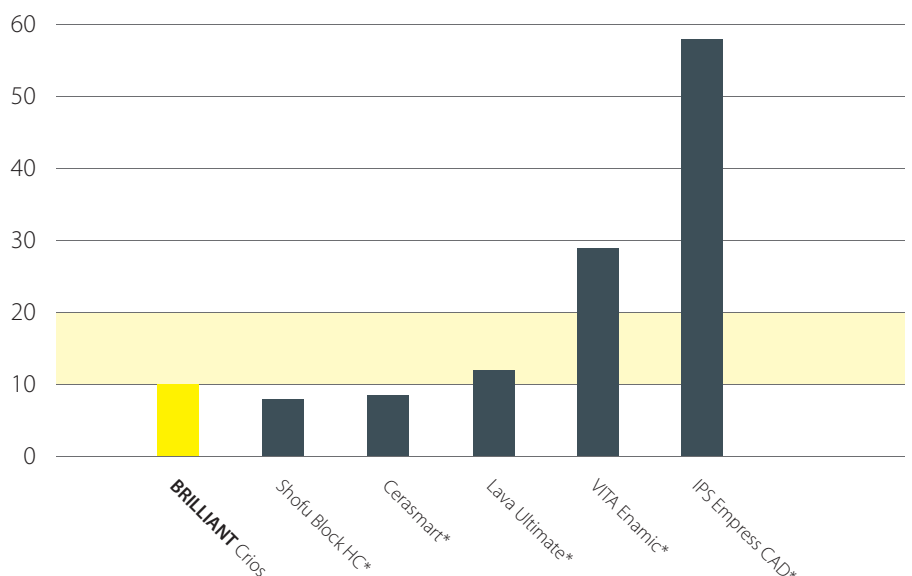
## SHOCK-ABSORBING EFFECT

The dentine-like modulus of elasticity of BRILLIANT Crios reduces stress peaks during chewing, resulting in decreased risk of material fatigue. Due to its shock-absorbing effect, it is extremely well suited for implant restorations and provides a pleasant bite feeling. As tooth substance and BRILLIANT Crios have a similar modulus of elasticity, loading stress is considerably reduced at the margins.

## MODULUS OF ELASTICITY

Measured in GPa

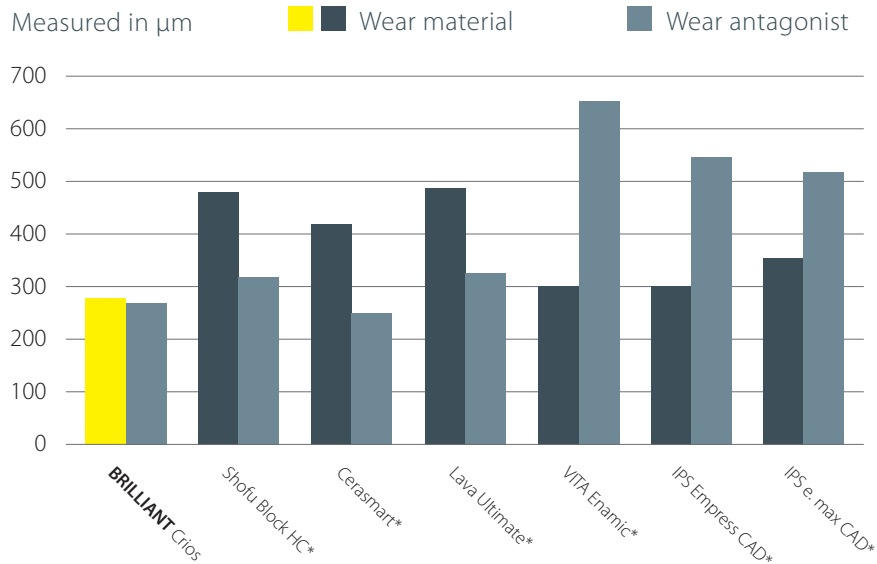
■ Modulus of elasticity of natural dentine



Source: R. Böhner et al., #597, IADR 2015, Antalya, Turkey  
\* not a trademark of COLTENE

# TOOTH-LIKE BEHAVIOUR

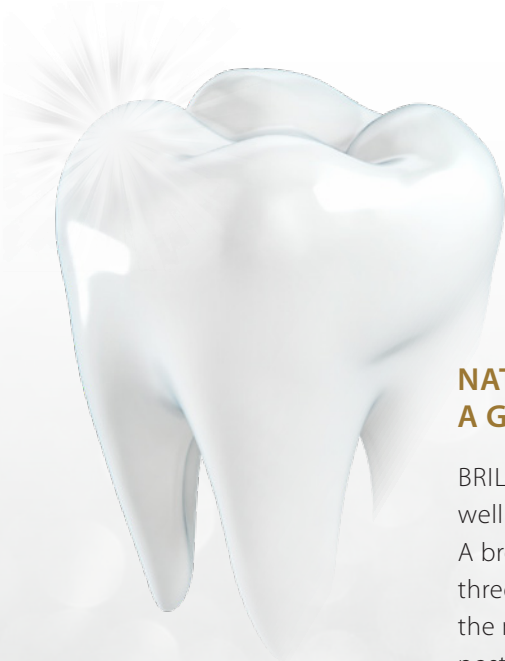
## TWO-BODY WEAR



Source: Stawarczyk et al., J Mech Behav Biomed Mater 55, 1-11 (2015) | \* not a trademark of COLTENE

## WEAR RESISTANT AND GENTLE AT THE SAME TIME

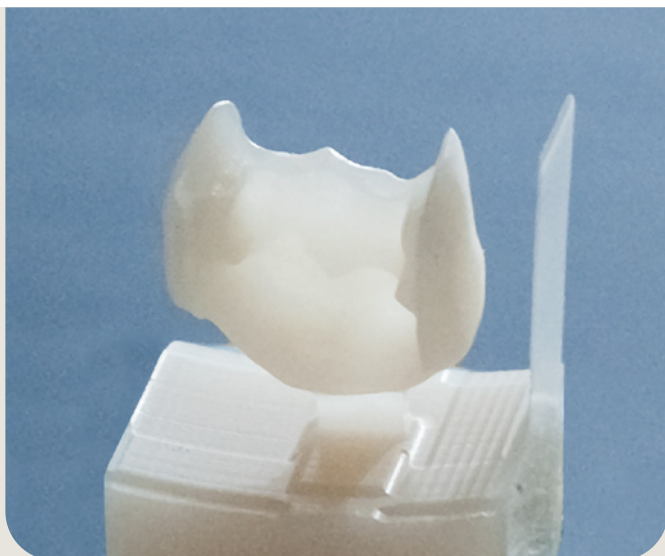
Studies confirm the excellent abrasion resistance of BRILLIANT Crios. Nonetheless, the wear-resistant composite material proves to be especially kind to the antagonist teeth in comparison to ceramic restorations. BRILLIANT Crios is suitable as a permanent restoration material – even under considerable chewing forces – and thus offers the best of both worlds.



## NATURAL AESTHETICS WITH A GLOSSY RESULT

BRILLIANT Crios blends in extremely well and conveys natural aesthetics. A broad spectrum of 15 shades in three translucencies perfectly covers the needs in the anterior as well as posterior region of teeth. Immediately after grinding, BRILLIANT Crios displays an extremely homogeneous surface structure. The restoration can therefore be brought to a high gloss very quickly. Easy repolishing, for example during prophylaxis, is possible at any time if required.

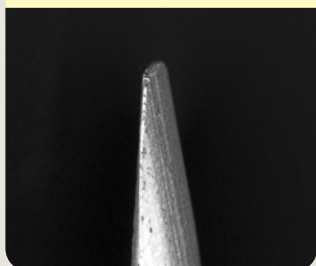
# EFFICIENT HANDLING



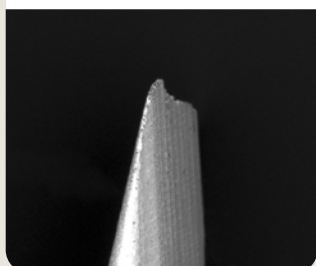
## EXCEPTIONAL GRINDING PRECISION

BRILLIANT Crios is distinguished by superior precision. Even when ceramic materials have already start chipping, BRILLIANT Crios can still be ground with ease and precision in the case of extremely thin margins. This exceptional grinding precision offers greater freedom of preparation.

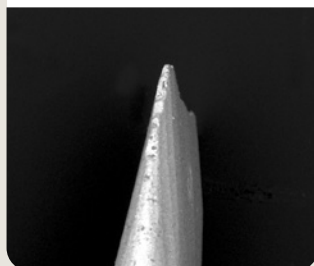
BRILLIANT Crios



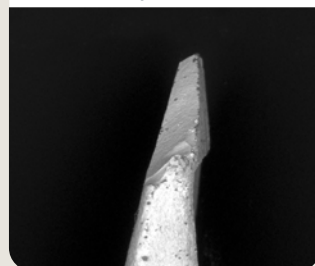
Lava Ultimate\*



VITA Enamic\*



IPS Empress CAD\*



Ground tip 0.1 mm (Sirona inLab MC XL)

Source: C. Kopfmann et al., Eur. J. Prosthodont. Rest. Dent., EMDC Special, P21, 2015, Nuremberg | \* not a trademark of COLTENE

## TIME AND COST EFFICIENT

- Effortless polishing for fast gloss
- No firing process required
- Quick grinding at high precision
- Easy to modify and repair

Photo: Dr. Paulo Monteiro



# CLINICAL CASE

## Restored teeth

26 with BRILLIANT Crios A2 HT  
27 with BRILLIANT Crios A2 LT

## Luting

ONE COAT 7 UNIVERSAL  
with BRILLIANT EverGlow A2/B2

1. Initial situation



2. Prepare



3. CAD/CAM restoration (27)



4. Sandblasting



5. Bonding



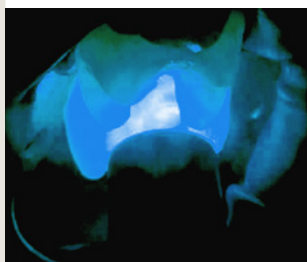
6. Etching



7. Bonding



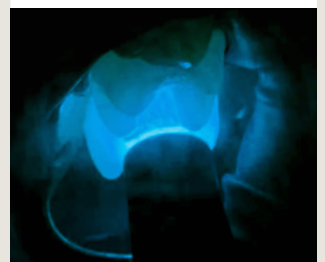
8. Light-curing



9. Luting



10. Light-curing



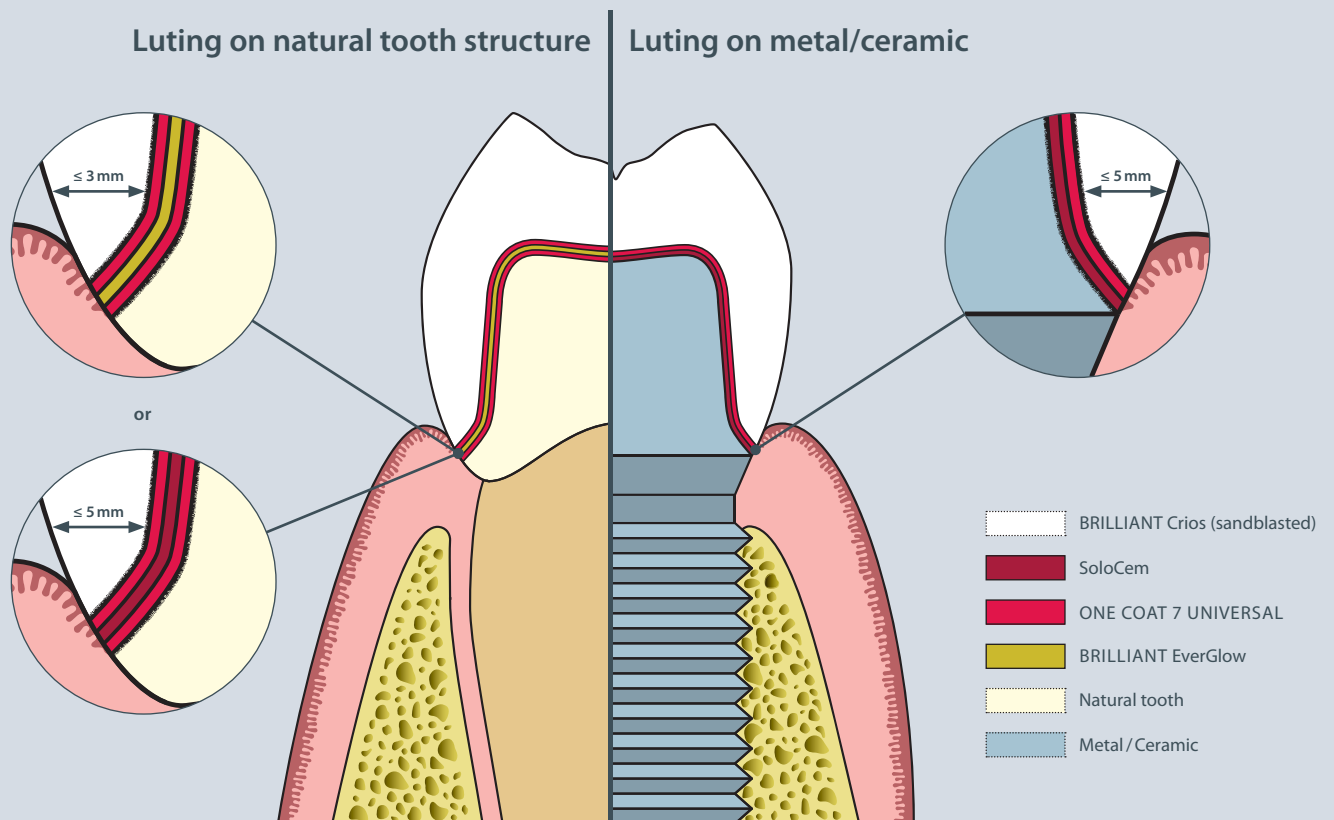
11. Final result



# RELIABLE LUTING SYSTEM

As part of its adhesive filling therapy, COLTENE offers a matched and proven luting system for BRILLIANT Crios. The key component of the luting concept is the universal adhesive ONE COAT 7 UNIVERSAL. The smooth BRILLIANT EverGlow composite or the dual-curing resin cement

SoloCem offer indication-appropriate solutions, depending on the wall thickness of the restoration and the luting substrate, ranging from natural dentine to a metal abutment.



## BRILLIANT EverGlow®

Light-curing composite

Ideal for luting indirect restorations with thin wall design to natural tooth substance or composite:

- Smooth consistency and excellent wettability to simplify restoration placement
- Exceptional aesthetic and long-lasting results

For restorations up to 3 mm wall thickness

## SoloCem®

Self-adhesive, dual-curing resin cement

Convincing universal luting solution for any kind of substrate:

- To tooth/composite using ONE COAT 7 UNIVERSAL as additional bonding agent
- To metal/ceramic abutments, without requiring an additional bonding step

For restorations up to 5 mm wall thickness



# SECURE BONDING

## ONE COAT 7 UNIVERSAL

ONE COAT 7 UNIVERSAL is matched perfectly to the BRILLIANT Crios components, resulting in strong anchorage and a reliable adhesion. This is why the ONE COAT 7 UNIVERSAL adhesive is to be used in conjunction with BRILLIANT Crios.

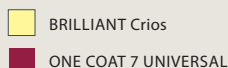
The monomers (red) contained in ONE COAT 7 UNIVERSAL penetrate into the polymerised resin matrix of BRILLIANT Crios



Polymer chains are formed during polymerisation of the monomers and these are anchored in the resin matrix.



The double bonds contained in the resin matrix form chains during polymerisation of the monomers.



## SHEAR BOND STRENGTH WITH ONE COAT 7 UNIVERSAL

Measured in MPa



The BRILLIANT EverGlow and SoloCem luting materials demonstrate excellent bonding strengths to give a secure adhesion to BRILLIANT Crios.

Source: Internal data  
According to Watanabe



## FURTHER PROPERTIES

ONE COAT 7 UNIVERSAL is a light-curing one component universal adhesive.

- Exceptional bonding values on enamel and dentine
- Excellent marginal seal
- Minimised postoperative sensitivity
- For all application techniques (Self-Etch, Selective Etch, Total Etch)

\*Methacryloyl-oxydecyl-dihydrogenphosphate

# ORDER INFORMATION

## BRILLIANT Crios Kits

### 60020095 Intro Kit CEREC 12

Each 1 × A2 LT 12, A3 LT 12, A3.5 LT 12, A2 HT 12, A3 HT 12  
 5 × 0.1 ml ONE COAT 7 UNIVERSAL Single Dose

### 60020097 Intro Kit CEREC 14

Each 1 × A2 LT 14, A3 LT 14, A3.5 LT 14, A2 HT 14, A3 HT 14  
 5 × 0.1 ml ONE COAT 7 UNIVERSAL Single Dose

### 60020099 Intro Kit Planmill 14

Each 1 × A2 LT 14, A3 LT 14, A3.5 LT 14, A2 HT 14, A3 HT 14  
 5 × 0.1 ml ONE COAT 7 UNIVERSAL Single Dose



## BRILLIANT Crios Refills

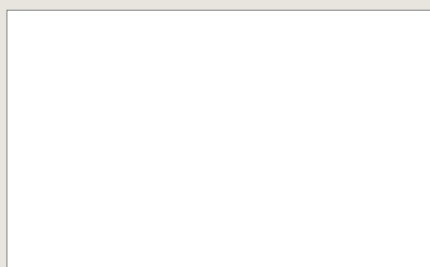
Translucency	CEREC/inLab				
	Low (LT)		High (HT)		Super (ST)
Size	12	14	12	14	14
Content	5 pcs	5 pcs	5 pcs	5 pcs	5 pcs
Bleach (BL)	60019998	60019985			60024174
A1	60019999	60019986	60020007	60019994	
A2	60020000	60019987	60020008	60019995	
A3	60020001	60019988	60020009	60019996	
A3.5	60020002	60019989			
B1	60020003	60019990	60020010	60019997	
B2	60020004	60019991			
B3	60020005	60019992			
C2	60020006	60019993			
Universal (UN)					60024175

Planmill	
Low (LT)	High (HT)
14	14
5 pcs	5 pcs
60020011	
60020012	60020020
60020013	60020021
60020014	60020022
60020015	
60020016	60020023
60020017	
60020018	
60020019	

Translucency	Disc					
	Low (LT)		High (HT)		Super (ST)	
Height (mm)	14	18	14	18	14	18
Ø (mm)	98.5	98.5	98.5	98.5	98.5	98.5
Content	1 pc	1 pc	1 pc	1 pc	1 pc	1 pc
Bleach (BL)					60024179	60024177
A1	60022899	60022886	60022907	60022894		
A2	60022900	60022887	60022908	60022895		
A3	60022901	60022888	60022909	60022896		
A3.5	60022902	60022889				
Universal (UN)					60024180	60024178



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