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BRILLIANT CRIOS

BRILLIANT CRIOS IS A REINFORCED COMPOSITE BLOC FOR PERMANENT RESTORATIONS

- High flexural strength for resistant restorations
- Tooth-like modulus of elasticity for a shock-absorbing effect and pleasant bite feeling
- Blends in extremely well to provide natural aesthetics
- High wear resistance and low abrasion on antagonist
- Secure bonding due to ONE COAT 7 UNIVERSAL
- Suitable luting material for every situation

INDICATIONS

SHADES

Low Translucent

BL A1 A2 A3 A3.5 B1 B2 B3 C2

High Translucent

A1 A2 A3 B1

SIZES

BRILLIANT Crios is available in two different sizes.
KEY LUTING STEPS

STEP 1: TREATMENT OF BRILLIANT CRIOS RESTORATION

Sandblast the BRILLIANT Crios restoration. Use ONE COAT 7 UNIVERSAL as bonding agent on BRILLIANT Crios.
Note: Do not use hydrofluoric acid or silane!

STEP 2: BONDING AND LUTING TO SUBSTRATE

Bonding and luting material must be chosen due to wall thickness of the BRILLIANT Crios restoration and the luting substrate. Follow the detailed proceeding according manufacturer’s instructions for use.

0 - 3 mm wall thickness
- Bonding
  - Light-curing
  - Chemical-curing
- Luting
  - Light-curing, resin based
  - Dual-curing, resin based
  - Self-adhesive, dual-curing, resin based (metals or ceramics)

3 - 5 mm wall thickness
- Bonding
  - Light-curing with Activator
  - Chemical-curing
- Luting
  - Dual-curing, resin based
  - Self-adhesive, dual-curing, resin based (metals or ceramics)

STEP 3: FINAL CURING

Always light-cure each surface for 30 s at the end to cure the adhesive on the BRILLIANT Crios restoration.
LUTING MATERIALS FOR EVERY INDICATION

With the universal adhesive ONE COAT 7 UNIVERSAL, the BRILLIANT EverGlow composite or the dual-curing resin cements DuoCem and SoloCem, COLTENE offers a matched and proven luting system for BRILLIANT Crios for indication-appropriate solutions.

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

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

Source: internal data

BRILLIANT EverGlow®
Light-curing composite
Ideal as luting material to dentine or composite for thin restoration walls.

DuoCem®
Dual-curing resin cement
Offers exceptional bonding values to dentine or composite, in particular for greater wall thickness.

SoloCem®
Self-adhesive, dual-curing resin cement
Convincing bonding to metal or ceramic abutments, without requiring an additional bonding step.
IMPORTANT NOTES TO ENSURE A SUCCESSFUL LUTING

DO’S

• Use of a dental dam is recommended.
• Follow the guideline for preparation and wall thickness.
• ONE COAT 7 UNIVERSAL adhesive must be applied to BRILLIANT Crios, whereas the use of other bonding agents on the tooth substance is possible.
• If a light-curing bonding is used on tooth surface, always light cure before placing the restoration.
• Only resin based luting materials are allowed to be used.

DON’TS

• Do not use silane.
• Do not use inorganic cements.
• Do not lute with light-curing opaque shades.
• Do not fire BRILLIANT Crios.
• Do not use hydrofluoric acid.
**STEP-BY-STEP GUIDELINE**

**INLAY**

**STEP 1: PREPARATION**

- Minimal occlusive thickness 1.5 mm
- Preparation angle 4-6°

**STEP 2: TREATMENT OF BRILLIANT CRIOS RESTORATION**

- Sandblast the surface to be bonded with 25-50 µm aluminiun oxide at 1.5 bar. **Note:** Do not etch the restoration with hydrofluoric acid.
- Clean with ultrasonic or steam cleaner and dry with oil-free compressed air.
- Apply ONE COAT 7 UNIVERSAL to the bonding surface with a disposable dentalbrush and rub in for 20 s. **Note:** Do not use other bonding agents or silane!
- Blow gently with oil-free compressed air for 5 s.

**STEP 3: ETCH**

- Apply Etchant Gel S directly from the applicator needle on the surface to be treated. **Etching time:** 15 s. **Note:** Selective etch is recommended for optimum adhesive results.
- Rinse thoroughly with water until all traces of Etchant Gel S have been removed.
- Dry with pressurized oil-free air, taking care not to overdry the dentine.

**COLTENE SUGGESTS**

- **Bond to restoration**
  ONE COAT 7 UNIVERSAL (mandatory)

- **Bond to tooth surface**
  ONE COAT 7 UNIVERSAL

- **Etch**
  Etchant Gel S

- **Lute**
  BRILLIANT EverGlow (≤ 3 mm wall thickness)

If other materials are used, the exact procedure can slightly differ. Please proceed according to manufacturer’s instructions for use.
Apply ONE COAT 7 UNIVERSAL to dentine and enamel with a disposable dentalbrush and rub in for 20 s.

Apply BRILLIANT EverGlow into the cavity and shape to the margins. Note: Do not use BRILLIANT EverGlow opaque shades for luting, because full curing can not be ensured.

STEP 4: BOND

Bond 20 s
Blow gently with oil-free compressed air for 5 s.
Cure
Light-cure for 10 s (Light intensity ≥ 800 mW/cm²).

STEP 5: LUTE

Lute
Blow 5 s
Cure
Light-cure each surface of the restoration for 30 s (Light intensity ≥ 800 mW/cm²).

Place
Remove excess
Position the restoration with light pressure. Remove remaining excess material while the restoration is held in position.

BRILLIANT EverGlow®
Light-curing composite

- Smooth consistency
- Exceptional polishability
- Excellent gloss retention
- Very good wettability
STEP-BY-STEP GUIDELINE
ONLAY

STEP 1: PREPARATION

- Minimal occlusal thickness 1.5 mm
- Minimal thickness under supporting cusp 1.5 mm
- Preparation angle: 4-6°

Apply Etchant Gel S directly from the applicator needle on the surface to be treated. Etching time: 15 s. Note: Selective etch is recommended for optimum adhesive results.

STEP 2: TREATMENT OF BRILLIANT CRIOS RESTORATION

Sandblast Clean Dry Bond 20 s Blow 5 s

Sandblast the surface to be bonded with 25-50 µm aluminium oxide at 1.5 bar. Note: Do not etch the restoration with hydrofluoric acid.

Clean with ultrasonic or steam cleaner and dry with oil-free compressed air.

Apply ONE COAT 7 UNIVERSAL to the bonding surface with a disposable dentalbrush and rub in for 20 s. Note: Do not use other bonding agents or silane!

Blow gently with oil-free compressed air for 5 s.

STEP 3: ETCH

Etch 15 s Rinse 20 s Dry

Apply Etchant Gel S directly from the applicator needle on the surface to be treated. Etching time: 15 s. Note: Selective etch is recommended for optimum adhesive results.

Rinse thoroughly with water until all traces of Etchant Gel S have been removed.

Dry with pressurized oil-free air, taking care not to overdry the dentine.

COLTENE SUGGESTS

Bond to restoration
ONE COAT 7 UNIVERSAL (mandatory)

Bond to tooth surface
ONE COAT 7 UNIVERSAL
One Coat 7.0 Activator

Etch
Etchant Gel S

Lute
DuoCem (≤ 5 mm wall thickness)

If other materials are used, the exact procedure can slightly differ. Please proceed according manufacturer’s instructions for use.
Apply ONE COAT 7 UNIVERSAL to dentine and enamel with a disposable dental brush and rub in for 20 s.

Blow gently with oil-free compressed air for 5 s.

These steps are only required if restoration wall thickness is > 3 mm and light curing of the inhibition layer of ONE COAT 7 UNIVERSAL can not be guaranteed. Otherwise they can be skipped.

Apply DuoCem directly to the inner surfaces of the restoration.

**STEP 4: BOND**

**STEP 5: LUTE**

DuoCem® Dual-curing resin cement

- Strong adhesion and properties similar to composites
- All-purpose material for a variety of indications
- Convenient flow properties and ideal processing times
- Easy removal of excess material

Apply the mixed bond to dentine and enamel with a disposable brush.

Blow gently with oil-free compressed air for 5 s.

Light-cure each surface of the restoration for 30 s (Light intensity ≥ 800 mW/cm²).

Dispense one drop ONE COAT 7 UNIVERSAL and one drop One Coat 7.0 Activator into the dispensing well and mix it with a clean disposable brush (approx. 5-10 s).

Lute directly to the inner surfaces of the restoration.

Position the restoration with light pressure. Remove remaining excess material while the restoration is held in position.

Light-cure for 10 s (Light intensity ≥ 800 mW/cm²).

Before applying dispense material and discard until an even, homogenous paste is flowing out.

**Note:** Before applying dispense material and discard until an even, homogenous paste is flowing out.
STEP-BY-STEP GUIDELINE
CROWN

STEP 1: PREPARATION

- Minimal occlusal thickness 1.5 mm
- Minimal buccal thickness 0.8 mm
- Minimal thickness under supporting cusp 1.5 mm
- Minimal cervical thickness 0.8 mm
- Preparation angle: 4-6°

STEP 2: TREATMENT OF THE BRILLIANT CRIOS RESTORATION

Sandblast the surface to be bonded with 25-50 µm aluminium oxide at 1.5 bar. Note: Do not etch the restoration with hydrofluoric acid.

Clean with ultrasonic or steam cleaner and dry with oil-free compressed air.

Apply ONE COAT 7 UNIVERSAL to the bonding surface with a disposable dentalbrush and rub in for 20 s. Note: Do not use other bonding agents or silane!

Blow gently with oil-free compressed air for 5 s.

STEP 3: ETCH

Apply Etchant Gel S directly from the applicator needle on the surface to be treated. Etching time: 15 s. Note: Selective etch is recommended for optimum adhesive results.

Rinse thoroughly with water until all traces of Etchant Gel S have been removed.

Dry with pressurized oil-free air, taking care not to overdry the dentine.

COLTENE SUGGESTS

Bond to restoration
ONE COAT 7 UNIVERSAL (mandatory)

Bond to tooth surface
ONE COAT 7 UNIVERSAL
One Coat 7.0 Activator

Etch
Etchant Gel S

Lute
DuoCem (≤ 5 mm wall thickness)

If other materials are used, the exact procedure can slightly differ. Please proceed according manufacturer’s instructions for use.
Apply ONE COAT 7 UNIVERSAL to dentine and enamel with a disposable dental brush and rub in for 20 s. Blow gently with oil-free compressed air for 5 s. These steps are only required if restoration wall thickness is > 3 mm and light curing of the inhibition layer of ONE COAT 7 UNIVERSAL can not be guaranteed. Otherwise they can be skipped.

Dispense one drop ONE COAT 7 UNIVERSAL and one drop One Coat 7.0 Activator into the dispensing well and mix it with a clean disposable brush (approx. 5-10 s).

Apply the mixed bond to dentine and enamel with a disposable brush.

Blow gently with oil-free compressed air for 5 s.

Light-cure for 10 s (Light intensity ≥ 800 mW / cm²).

STEP 4: BOND

STEP 5: LUTE

Apply DuoCem directly to the inner surfaces of the restoration. Note: Before applying dispense material and discard until an even, homogenous paste is flowing out.

Position the restoration with light pressure. Remove remaining excess material while the restoration is held in position.

Light-cure each surface of the restoration for 30 s (Light intensity ≥ 800 mW / cm²).
STEP-BY-STEP GUIDELINE

VENEER

STEP 1: PREPARATION

- Minimal occlusal thickness 1.5 mm
- Minimal cervical thickness 0.3 mm
- Minimal labial thickness 0.6 mm

STEP 2: TREATMENT OF THE BRILLIANT CRIOS RESTORATION

- Sandblast the surface to be bonded with 25-50 µm aluminium oxide at 1.5 bar. Note: Do not etch the restoration with hydrofluoric acid.
- Clean with ultrasonic or steam cleaner and dry with oil-free compressed air.
- Apply ONE COAT 7 UNIVERSAL to the bonding surface with a disposable dental brush and rub in for 20 s. Note: Do not use other bonding agents or silane!
- Blow gently with oil-free compressed air for 5 s.

STEP 3: ETCH

- Apply Etchant Gel S directly from the applicator needle on the surface to be treated. Etching time: 15 s. Note: Total etch is recommended for optimum adhesive results.
- Rinse thoroughly with water until all traces of Etchant Gel S have been removed.
- Dry with pressurized oil-free air, taking care not to overdry the dentine.

COLTENE SUGGESTS

- Bond to restoration
  ONE COAT 7 UNIVERSAL (mandatory)
- Bond to tooth surface
  ONE COAT 7 UNIVERSAL
- Etch
  Etchant Gel S
- Lute
  BRILLIANT EverGlow

If other materials are used, the exact procedure can slightly differ. Please proceed according to the manufacturer’s instructions for use.
**BRILLIANT EverGlow®**
Light-curing composite

- Smooth consistency
- Exceptional polishability
- Excellent gloss retention
- Very good wettability

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**STEP 4: BOND**

1. **Bond 20 s**
   - Apply ONE COAT 7 UNIVERSAL to dentine and enamel with a disposable dentalbrush and rub in for 20 s.

2. **Blow 5 s**
   - Blow gently with oil-free compressed air for 5 s.

3. **Cure**
   - Light-cure for 10 s (Light intensity ≥ 800 mW/cm²).

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**STEP 5: LUTE**

1. **Lute**
   - Apply BRILLIANT EverGlow to the contact surface of the restoration and shape to the margins.

2. **Remove excess**
   - Position the restoration on the tooth and move carefully to the final position. While holding in position, remove excess.

3. **Cure**
   - Light-cure each surface of the restoration for 30 s (Light intensity ≥ 800 mW/cm²).
STEP-BY-STEP GUIDELINE
CROWN ON IMPLANT ABUTMENT

STEP 1: PREPARATION

- Minimal occlusive thickness 1.5 mm
- Minimal buccal thickness 0.8 mm
- Minimal thickness under supporting cusp 1.5 mm
- Minimal cervical thickness 0.8 mm
- Preparation angle: 4-6°

Apply SoloCem directly to the inner surfaces of the restoration.

Note: Before applying dispense material and discard until an even, homogenous paste is flowing out.

STEP 2: TREATMENT OF THE BRILLIANT CRIOS RESTORATION

Sandblast the surface to be bonded with 25–50 µm aluminium oxide at 1.5 bar. Note: Do not etch the restoration with hydrofluoric acid.

Clean with ultrasonic or steam cleaner and dry with oil-free compressed air.

Apply ONE COAT 7 UNIVERSAL to the bonding surface with a disposable dentalbrush and rub in for 20 s. Note: Do not use other bonding agents or silane!

Blow gently with oil-free compressed air for 5 s.

STEP 3: LUTE

Apply SoloCem directly to the inner surfaces of the restoration. Note: Before applying dispense material and discard until an even, homogenous paste is flowing out.

Position the restoration with light pressure. Remove remaining excess material while the restoration is held in position.

Light-cure each surface of the restoration for 30 s (Light intensity ≥ 800 mW/cm²).

COLTENE SUGGESTS

Bond to restoration
ONE COAT 7 UNIVERSAL (mandatory)

Lute
SoloCem (≤ 5 mm wall thickness)

If other materials are used, the exact procedure can slightly differ. Please proceed according manufacturer’s instructions for use.
SoloCem®
Self-adhesive, dual-curing resin cement

- High bonding strengths
- Low shrinkage
- Antibacterial zinc oxide
- Easy to use and time saving
Handling Guideline – BRILLIANT Crios

**STEP-BY-STEP GUIDELINE**

**POLISHING CHAIRSIDE**

**STEP 1: ADJUSTMENT AND FINISHING**

Grinding off sprue, grinding-in of the precontacts and modification of cusp slopes with a fine diamond bur (368-314-023-5F). Finish of the sprue area and, if necessary, of other surfaces with a flame shaped polisher (2303RA).

RPM 368-314-023-5F: 40'000 – 75'000
RPM 2303RA: 3’000 – 8’000

**STEP 2: PREPOLISHING**

Prepolishing of the occlusal surface (23SG11RA), buccal and palatal (23SG14RA) with DIATECH ShapeGuard for composite (System Comprepol Plus).

RPM: 10’000 – 12’000

**STEP 3: HIGH LUSTER POLISHING**

High luster polishing of the occlusal surface (24SG11RA), buccal and palatal (24SG14RA) with DIATECH ShapeGuard for composite (System Composhine Plus).

RPM: 10’000 – 12’000

**STEP 4: FINAL REFINEMENT**

Final refinement with DIATECH brush (7001RA) for a tooth-like enamel gloss. RPM: 5’000 – 10’000

**COLTENE SUGGESTS**

It is recommended to polish BRILLIANT Crios intraorally using DIATECH ShapeGuard silicone polishers for a fast and superior high luster result.

All DIATECH polishers can be used without paste and should be used wet when polishing intraorally.

**DIATECH Finishing & Polishing Kit for BRILLIANT Crios**
STEP-BY-STEP GUIDELINE
POLISHING LABORATORY

STEP 1: ADJUSTMENT AND FINISHING

Grinding off sprue with a fine diamond bur (860-104-012-S-F). Finish of the sprue and, if necessary, of other surfaces with a flame shaped polisher (2303RA).
RPM 860-104-012-S-F: 70,000 – 140,000
RPM 2303RA: 3’000 – 8’000

STEP 2: PREPOLISHING AND HIGH LUSTER POLISHING

Prepolishing and high luster polishing of the occlusal surface, buccal and palatal with DIATECH Diashine Compomant Plus (9104HP and 9121HP). Please use an elevated pressure for prepolishing and reduced pressure for high luster polishing.
RPM prepolishing: 7’000 – 10’000
RPM high luster polishing: 3’000 – 8’000
STEP-BY-STEP GUIDELINE
MODIFICATION OR REPAIR

BRILLIANT EverGlow®
Light-curing composite
- Smooth consistency
- Exceptional polishability
- Excellent gloss retention
- Very good wettability

COLTENE SUGGESTS
Bond to restoration
ONE COAT 7 UNIVERSAL
Modification / Repair
BRILLIANT EverGlow

If other materials are used, the exact procedure can slightly differ. Please proceed according manufacturer’s instructions for use.

STEP 1: PREPARATION

Roughen
Roughen the surface of the restoration using a diamond-coated rotary instrument.

STEP 2: BOND

Bond 20 s
Apply ONE COAT 7 UNIVERSAL to dentine and enamel with a disposable dentalbrush and rub in for 20 s.

Blow 5 s
Blow gently with oil-free compressed air for 5 s.

Cure
Light-cure for 10 s (Light intensity ≥ 800 mW / cm²).

STEP 3: MODIFY

Apply
Apply BRILLIANT EverGlow to the surfaces.

Model
Model to the desired shape.

Cure
Light-cure for 20 s (Light intensity ≥ 800 mW / cm²).