

## G-ænial®

LIGHT-CURED RADIOOPAQUE COMPOSITE RESTORATIVE

For use only by a dental professional in the recommended indications.

### RECOMMENDED INDICATIONS

- G-ænial ANTERIOR
  - In case of contact with Class III, IV, V cavities.
  - Direct restorative for wedge-shaped defects and root face cavities.
  - Direct restorative for veneers and diastema closure.
- G-ænial POSTERIOR
  - Direct restorative for Class I and II cavities.

### CONTRAINDICATIONS

- Avoid use of this product in patients with known allergies to methacrylate monomer or methacrylate polymer.
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### DIRECTIONS FOR USE

- Shade Selection
  - Clean the tooth with pumice and water. Shade selection should be made prior to isolation. Select the appropriate shade by comparing with a reference to the G-ænial shade guide.
  - Cavity Preparation
    - Prepare cavity using standard techniques. Dry by gently blowing with oil free air.
    - For pulp capping, use calcium hydroxide.

Bonding Treatment
 

- For bonding G-ænial to enamel and / or dentin, use a light-curing bonding system such as G-ænial Bond, G-Prémio Bond, or G-BOND (Fig. 1).

Follow manufacturer's instructions.

Placement of G-ænial
 

- Insert the G-ænial Unitip into the Unitip APPLIER or equivalent. Remove the cap and extrude the material directly into the prepared cavity. Use steady pressure (Fig. 2). Maintain pressure on the applicator handle while removing the Unitip APPLIER and Unitip from the mouth. This prevents the Unitip from coming loose from the applicator.

Dispensing from a syringe
 

- After dispensing, screw syringe plunger anticlockwise by a half to full turn to release residual pressure inside the syringe. Replace cap immediately after use.

- Basicly, material can be applied in a single layer to achieve aesthetic restorations using shade guide.

Material may be hard to extrude into small cavities from cold storage. Prior to use, leave to stand for a few minutes at normal room temperature.

At high temperatures, avoid too long exposure to ambient light. Ambient light can shorten the manipulation time.

### Clinical Hints

Anterior cavities
 

- In the case of small cavities
  - Restore using a one shade layering technique. In most cases the use of one Standard shade alone will be sufficient. In cases where a higher degree of translucency is needed, one of the Outside special shades can be selected. See also Examples of Clinical Applications.

In most cases a multi shade layering technique will be the best aesthetic result. To block out areas through from the inside, use a copy layer discolorated dentin, select an appropriate Inside special shade and continue to build up with a Standard shade.

To make a restoration more like e.g. to copy age related changes in appearance, the final layer should consist of an Outside special shade. See also Examples of Clinical Applications and / or consult the Shade Combination Chart.

Posterior cavities
 

- Restore using a one shade layering technique. In most cases the use of one Standard shade alone will be sufficient. In cases where a higher translucency is needed, one of the Outside special shades can be selected. See also Examples of Clinical Applications.

In the case of deep cavities
 

- Place a flowable composite such as G-ænial Flo X, G-ænial UNIVERSAL FLO, GRADIA® DIRECT FLO or GRADIA® DIRECT FLO\* on the cavity floor. Then place a Standard shade. For optimal esthetic use an Outside special shade as the final composite layer. See also Example of Clinical Applications.

\*Fujii LUNING® PASTE PK, Fujii LUNING® LC of Fujii IGP can also be used as a liner or composite. Follow the respective manufacturer's instructions for use.

### Examples of Clinical Applications (Clinical Hint No. 1, 2)

Shade combination chart for multiple layers in large cavities (anterior teeth) (b)

Inside special	BW	A2	A3	A3.5	A4	B1	B2	B3	C1
Standard	AI	A2	A3	A3.5	A4	BI	B2	B3	CI
Outside special	IE	AE	AE	AE	AE	IE	IE	IE	AE

For details of shades, refer to the following section of 94DES.

Contouring before Light Curing
 

- Contour using standard curing light.
- Light Curing
  - Light cure G-ænial using a light-curing curing light. Use the shade guide as close as possible to the surface. Refer to the following chart for irradiation Time and Effective Depth of Cure.

### G-ænial ANTERIOR: Irradiation Time and Effective Depth of Cure

Irradiation time	20 sec		40 sec	
	Height (mm)	Depth (mm)	Height (mm)	Depth (mm)
TE, IE, SE, CVE	10.0	10.0	15.0	15.0
AI, A2, B1, B2, XBW, BW, AE	2.5	2.0	3.0	3.0
A3, B3	2.0	2.0	3.0	3.0
A3.5, A4, C1, A2, A3, A2.4, A3.4, C, V, D	1.5	1.5	2.5	2.5

Shade
 

- P-A1, P-A2, P-P, P-E
- P-A3, P-A3.5
- P-A3.5, P-A3.5

Notes:
 

- Material should be placed and light cured in layers. For all material layer thickness, please consult the tables.
- Lower light intensity may cause insufficient light curing / discoloration of the material.
- Finishing and Polishing
  - Finish and polish using diamond burs, polishing pastes or diamond paste to obtain a high gloss, polishing pastes can be used.

### SHADES

Standard shade : XBW (Extra Bleaching White), BW (Bleaching White), AI, A2, A3, A3.5, A4, B1, B2, B3, C3, CV (Cervical), CVD (Cervical Dark)

Inside special shade : IE, AD, A2, A3, A4 (Adult), TE (Translucent)\*, IE (Incisal), SE (Senior), CVE (Cervical)

TE shades not radiopaque.

Outside special shade : P-A1, P-A2, P-A3, P-A3.5, A3.5, A4, C1, A2, A3, A2.4, A3.4, C, V, D

\*"Vita" is a registered trademark of Vita Zahnfabrik, Bad Säckingen, Germany.

### STORAGE

For optimal performance, store in a cool and dark place (4 – 25°C / 39.2 – 77.0°F) away from high temperatures or direct sunlight.

G-ænial ANTERIOR - 3 years from date of manufacture

G-ænial POSTERIOR - 3 years from date of manufacture

### PACKAGES

- Quick Start Kit
  - 7 x 0.2ml per syringe (each in 7 anterior shades: AI, A2, A3, B2, AE, IE) (2.7ml per syringe)
  - Shade guide

REFILL
 

- 1 syringe (in 28 shades) (2.7ml per syringe)

Weight per syringe : 4.7g for anterior syringe, 4.0g for TE shade, 5.5g for posterior syringe

Unitips
 

- Quick Start Kit
  - (35 Unitips in 7 shades)
  - 35 tips (5 tips each in 7 anterior shades: AI, A2, A3, B2, AE, IE, JE) (0.16ml per tip)
  - Shade guide

REFILL
 

- Pack of 20 tips (each in 14 shades) (0.16ml per tip)
- (8 anterior shades - AI, A2, A3, A3.5, A3.5, A4, B1, B2, B3, C1, AE, IE)

(6 posterior shades - P-A1, P-A2, P-A3, P-A3.5, P-P, P-E, IE)

Pack of 10 tips (each in 14 shades) (0.16ml per tip)

(14 anterior shades - XBW, BW, A4, B1, B2, B3, C3, A2, A4, CVD, TE, JE, SE, CVE)

Note: Weight per Unitip: 0.28g for anterior tip, 0.24g for TE shade, 0.33g for posterior tip

III. Option
 

- Unitip APPLIER
- G-ænial SHADE GUIDE
- Mixing pad (No.148)

### CAUTION

In rare cases the product may cause sensitivity in some people. If any such reactions have been experienced, discontinue the use of the product and inform your doctor.

In case of contact with oral tissue or skin, remove immediately with cotton or a sponge soaked in alcohol. Flush with water.

In case of contact with eyes, flush immediately with water and seek medical attention.

Prior to starting the filling process, partially extrude paste outside of the patient's mouth and away from the patient to ensure paste is flowing properly.

Take care to avoid ingestion of the material.

Wear plastic or rubber gloves during operation to avoid direct contact with all inhibiting resin layers in order to prevent possible sensitization.

For infection control reasons, Unitips are for single use only.

Wear protective eye glasses during light curing. When polishing the polymerised material, use a gentle collector and avoid dust mask to avoid inhalation of cutting dust.

Do not mix with other similar products.

Avoid getting material on clothing.

In case of contact with unintended areas of tooth or prosthetic appliances, remove with instrument, sponge or cotton pellet before light curing.

Do not use G-ænial with curing equipment containing materials which may hinder G-ænial from setting.

All shades except for the outside special shade TE are radiopaque.

Personal protective equipment (PPE) such as gloves, face masks and safety eyewear should be worn.

Disposal
 

- Dispose of used Unitip
  - Insert the G-ænial Unitip into the Unitip APPLIER or equivalent. Remove the cap and extrude the material directly into the prepared cavity. Use steady pressure (Fig. 2). Maintain pressure on the applicator handle while removing the Unitip APPLIER and Unitip from the mouth. This prevents the Unitip from coming loose from the applicator.

Dispensing from a syringe
 

- After dispensing, screw syringe plunger anticlockwise by a half to full turn to release residual pressure inside the syringe. Replace cap immediately after use.

Basicly, material can be applied in a single layer to achieve aesthetic restorations using shade guide.

Material may be hard to extrude into small cavities from cold storage. Prior to use, leave to stand for a few minutes at normal room temperature.

At high temperatures, avoid too long exposure to ambient light. Ambient light can shorten the manipulation time.

### Clinical Hints

Anterior cavities
 

- In the case of small cavities
  - Restore using a one shade layering technique. In most cases the use of one Standard shade alone will be sufficient. In cases where a higher degree of translucency is needed, one of the Outside special shades can be selected. See also Examples of Clinical Applications.

In most cases a multi shade layering technique will be the best aesthetic result. To block out areas through from the inside, use a copy layer discolorated dentin, select an appropriate Inside special shade and continue to build up with a Standard shade.

To make a restoration more like e.g. to copy age related changes in appearance, the final layer should consist of an Outside special shade. See also Examples of Clinical Applications and / or consult the Shade Combination Chart.

Posterior cavities
 

- Restore using a one shade layering technique. In most cases the use of one Standard shade alone will be sufficient. In cases where a higher translucency is needed, one of the Outside special shades can be selected. See also Examples of Clinical Applications.

In the case of deep cavities
 

- Place a flowable composite such as G-ænial Flo X, G-ænial UNIVERSAL FLO, GRADIA® DIRECT FLO or GRADIA® DIRECT FLO\* on the cavity floor. Then place a Standard shade. For optimal esthetic use an Outside special shade as the final composite layer. See also Example of Clinical Applications.

\*Fujii LUNING® PASTE PK, Fujii LUNING® LC of Fujii IGP can also be used as a liner or composite. Follow the respective manufacturer's instructions for use.

### Examples of Clinical Applications (Clinical Hint No. 1, 2)

Shade combination chart for multiple layers in large cavities (anterior teeth) (b)

Inside special	BW	A2	A3	A3.5	A4	B1	B2	B3	C1
Standard	AI	A2	A3	A3.5	A4	BI	B2	B3	CI
Outside special	IE	AE	AE	AE	AE	IE	IE	IE	AE

For details of shades, refer to the following section of 94DES.

Contouring before Light Curing
 

- Contour using standard curing light.
- Light Curing
  - Light cure G-ænial using a light-curing curing light. Use the shade guide as close as possible to the surface. Refer to the following chart for irradiation Time and Effective Depth of Cure.

### G-ænial®

LICHT-GEHARDTE RÖNTGENSCHITTBARE KOMPOSIT FÜR RESTAURATIONEN

Darf nur von zahnärztlichem Fachpersonal bei den angegebenen Indikationen verwendet werden.

### EMPHLEGENDE INDIKATIONEN

G-ænial ANTERIOR
 

- In case of contact with cavities der Klassen III, IV und V.
- Direkte Restaurationen von keilförmigen Defekten und Wurzel-Oberflächenkaries.
- Direkte Restaurationen von Veneers und zum Diastemaverschluss.

G-ænial POSTERIOR
 

- Direkte Restaurationen von Kavitäten der Klassen II und III.

### KONTRAINDIKATIONEN

Nicht zum Abdecken der Pulpa geeignet

Vermeiden Sie die Verwendung dieses Produkts bei Patienten mit bekannten Allergien gegen Methacrylat-Monomere oder Methacrylat-Polymer.

### VERABREICHUNG

Farbwahl
 

- Reinigen Sie den Zahn mit Borstenpaste und Wasser. Die Farbauswahl sollte vor dem Isolieren des Zahns erfolgen. Mit dem G-ænial Shade Guide mit der passenden G-ænial -Farbe auswählen.

Vorbereitung der Kavitäten
 

- Die Kavität wie gewohnt präparieren. Danach mit offener Luft behutsam trocknen.

Die zum Abdecken der Pulpa verwenden Sie Kalzium-Hydroxid.

Bonding
 

- Für den Haftverbund von G-ænial an dem Schmelz- und/ oder dem Dentin verwenden Sie ein handelsübliches Bondingsystem, wie G-ænial® Bond, G-Prémio Bond, oder G-BOND (Fig. 1)

Einmalige Anwendung
 

- Teils befolgen Sie die jeweilige Verarbeitungsanleitung.

Austragen von G-ænial
 

- Austragen aus einem Unitip
  - Setzen Sie den G-ænial Unitip in einen Unitip APPLIER ein und extrudieren Sie das Material.
  - Entfernen Sie die Kappe und applizieren Sie das Material unter stetigem Druck direkt in die Kavität (Fig. 2).
  - Entfernen Sie sich nach dem Ausstragen des Material aus dem Mund sofort.

Austragen von G-ænial in Spritzenform
 

- Die Kappe der Spritze entfernen und Material auf einen Amischblock austragen. Mit einem geeigneten Instrument abtragen.

Die Kavität vollständig mit dem Material in die Kavität applizieren. Nach der Entnahme des Materials den Drehknoten entgegen dem Uhrzeigersinn eine halbe bis eine ganze Umdrehung drehen, um ein weiteres Austreten von Material aus der Spritze zu verhindern. Unmittelbar nach Gebrauch mit Wasser reinigen.

Hinweis:
 

- Grundsätzlich können ästhetisch ansprechende Restaurationen mit den Standardfarben in der Einsichttechnik erreicht werden. Details hierzu finden Sie bei den klinischen Hinweisen.
- Nach sehr Kühler Lagerung kann es schwierig sein, das Material zu entnehmen. Vor der Benutzung durch einige Minuten in Raumtemperatur aufwärmen.
- Nach dem Austragen sollte das Material nicht zu lange dem Umgebungsluft ausgesetzt werden, da sich hierdurch die Verarbeitungszeit verringert.

### Klinische Hinweise

Kleine Kavitäten
 

- Restaurieren mit der Einsichttechnik. In den meisten Fällen ist die Benutzung einer Standardfarbe ausreichend. Wenn eine stärkere Transparenz erforderlich sein sollte, kann zusätzlich eine Inside -Spezialfarbe verwendet werden. Siehe die Beispiele bei der klinischen Anwendung.

Große Kavitäten
 

- Das beste ästhetische Ergebnis wird in den meisten Fällen mit der Mehrschichttechnik erreicht. Um ein durchsichtigeres Aussehen der Kavität oder von verformten Dentin zu verhindern, wird zunächst eine Inside -Spezialfarbe verwendet, bevor mit dem Standardfarben der weitere Aufbau vorgenommen wird.

Die bei der Restauration lebenschutz zu gestalten, z. B. Altersgerechte Erscheinungsformen der Zahnoberfläche nachzubilden, kann eine Outside -Spezialfarbe verwendet werden. Siehe die Beispiele in der klinischen Anwendung und die Farbkombinationsstafel.

Seitliche Kavitäten
 

- Restaurieren mit der Einsichttechnik. In den meisten Fällen ist die Benutzung einer Standardfarbe ausreichend. Wenn eine stärkere Transparenz erforderlich sein sollte, kann zusätzlich eine Outside -Spezialfarbe verwendet werden. Siehe die Beispiele bei der klinischen Anwendung.

Große Kavitäten
 

- Die bei der Restauration lebenschutz zu gestalten, z. B. Altersgerechte Erscheinungsformen der Zahnoberfläche nachzubilden, kann eine Outside -Spezialfarbe verwendet werden. Siehe die Beispiele in der klinischen Anwendung und die Farbkombinationsstafel.

### CONTRAINDICATIONS

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Disposal
 

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For details of shades, refer to the following section of 94DES.

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### G-ænial ANTERIOR: Irradiation Time and Effective Depth of Cure

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	Height (mm)	Depth (mm)	Height (mm)	Depth (mm)
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AI, A2, B1, B2, XBW, BW, AE	2.5	2.0	3.0	3.0
A3, B3	2.0	2.0	3.0	3.0
A3.5, A4, C1, A2, A3, A2.4, A3.4, C, V, D	1.5	1.5	2.5	2.5

Shade
 

- P-A1, P-A2, P-P, P-E
- P-A3, P-A3.5
- P-A3.5, P-A3.5

Notes:
 

- Material should be placed and light cured in layers. For all material layer thickness, please consult the tables.
- Lower light intensity may cause insufficient light curing / discoloration of the material.
- Finishing and Polishing
  - Finish and polish using diamond burs, polishing pastes or diamond paste to obtain a high gloss, polishing pastes can be used.

### SHADES

Standard shade : XBW (Extra Bleaching White), BW (Bleaching White), AI, A2, A3, A3.5, A4, B1, B2, B3, C3, CV (Cervical), CVD (Cervical Dark)

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TE shades not radiopaque.

Outside special shade : P-A1, P-A2, P-A3, P-A3.5, A3.5, A4, C1, A2, A3, A2.4, A3.4, C, V, D

\*"Vita" is a registered trademark of Vita Zahnfabrik, Bad S



