



# G-ænial from GC

The all-round restorative for straightforward invisible restorations.

Introducing the age-specific shade selection system.



# Create æ-motion with **G-ænial** from **GC**

The search is over. For an all-round restorative with outstanding invisible aesthetics, look no further than **G-ænial** from **GC**.

Are you looking for the most **effortless way to create invisibility** in your restorations? GC presents **G-ænial Anterior** and **Posterior**, two light-cured restoratives that were developed using **GC's** extensive expertise and knowledge of dental materials together with suggestions from loyal **Gradia Direct** users.

You can depend on the years of experience and industry know-how that went into creating G-ænial to **reinforce your aesthetic skills and ability to match every restoration with nature.**

G-ænial is your material of choice when it comes to key differentiators such as:

Shade system

Manipulation

Viscosity

Polishability

Radiopacity

Aesthetics

Physical properties

Colour stability

G-ænial embodies all these important characteristics into one user-friendly restorative that is indicated for:

All restorative classes



Highly aesthetic single shade or multi-shade build-ups



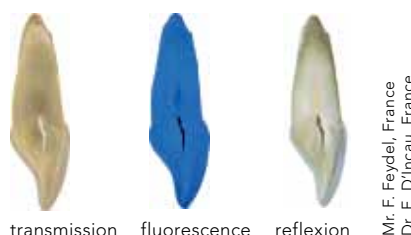
# Natural reflectivity creates invisibility

The challenge for each dentist is to create perfectly invisible restorations which satisfy the patients in a limited amount of time. However, copying the natural colour and reflection of a tooth is difficult. It took all GC's expertise to develop the **unique composition** of G-ænial, which makes its **optical properties match those of a natural tooth**.

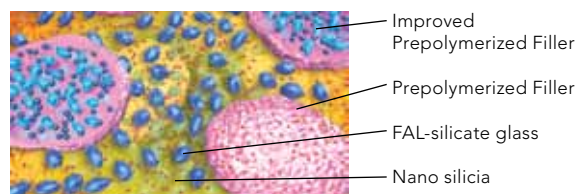
## A Unique Composition for a Natural Reflectivity

Our perception of the appearance of teeth is defined by the reflection of light from different angles. This process of **light reflection from the inside of a natural tooth** is determined by differences in structure, such as **enamel crystals, dentinal tubules, peritubular dentin and the dentin/enamel junction**. The internal structure of G-ænial consists of **diverse multifaceted structures** – a variety of particles that gives the material its **unique light scattering property and mimics the reflective capabilities of a natural tooth**.

The amount of each particle, its size and distribution within G-ænial is carefully calculated so that when combined, several different interfaces are created with various reflective properties. This results in an **internal reflectivity which accurately reproduces that of natural tooth**.

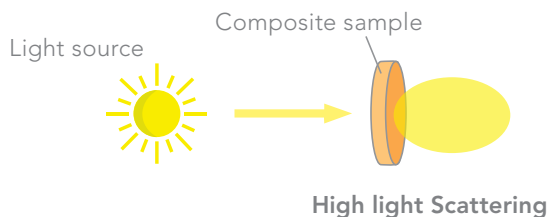
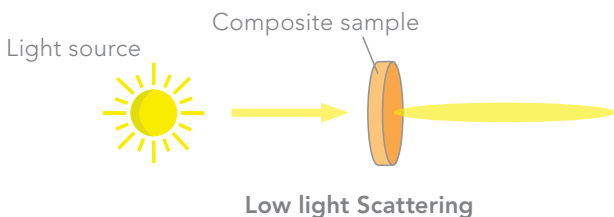


Composition of G-ænial



## High light scattering for guaranteed invisibility

Light scattering occurs when light is forced to deviate from its straight trajectory.



Thanks to its high light scattering properties, G-ænial will blend perfectly with the surrounding cavity. The **chameleon effect** which can be achieved with **just one shade** of G-ænial is of such a high standard that the restoration not only matches the surrounding natural tooth, **it blends and becomes aesthetically invisible**.



Initial situation: cavity in a composite block; shade A3

Cavity filled with competitor's material – low light scattering composite; shade A2

Cavity filled with G-ænial – high light scattering composite; shade A2

# Outstanding invisible aesthetics

G-ænial offers flexibility to the dentist. All techniques are possible when adopting G-ænial: from aesthetically invisible single shades to aesthetic masterpieces in a multi-shade build-up.

With a single shade, a G-ænial restoration is aesthetically 'invisible'.

The range of restorative materials that are currently available on the market do not always suit the way in which dentists work nowadays. Often, a compromise must be made between aesthetics and simplicity.

Now, you don't have to settle for less and can offer your patients **the very best aesthetic restorations with one shade**, by using G-ænial from GC.

Approximately 95% of direct restoration procedures employ only one shade of restorative. This is done because it speeds up the process and **minimizes chair-side time**. When you use G-ænial, you will have the confidence in knowing that even single shade restorations will provide beautiful aesthetics, which will **make your patients happy** too.



Further outstanding high-end aesthetics is achieved when additional shades are employed.

Aesthetic results for more demanding cases using 2 or 3 shades are now also possible with the help of an **advanced shading system** that was designed with G-ænial. This means that even layering is simplified.

For complex aesthetic cases, you can blend G-ænial perfectly with the surrounding tooth structure by adding further shades **without sacrificing the simplicity or spending additional time**.



# Forward-thinking

## shading concept

### Standard Shades

There are 22 different shades based on the classical VITA\* shade system. For cases where no layering is required, the use of Standard Shades is sufficient to produce guaranteed results: **what you see is what you get**. Available in both the Anterior and Posterior versions, each is a **delicate balance between hue, chroma, value and translucency**.



### Special Shades

Although for the majority of cases, excellent aesthetics can be achieved with just a single shade; there may be times when a multi-shade technique is preferred, such as when extensive restoration is required. The G-ænial range offers two types of additional shades to choose from, called Special Shades which are placed **underneath** (Inside shades) or **on top** (Outside shades) of a Standard Shade.

#### Outside Special Shades – to replace enamel

A common technique in restorative dentistry is to relate the colour and translucency of the natural enamel to **the age of the patient**. The choice of the enamel shade is made accordingly.



**JE**  
Junior Enamel  
for young patients



**AE**  
Adult Enamel  
for adult patients



**SE**  
Senior Enamel  
for senior patients

#### Outside Special Shades – to create specific visual effects



**TE**  
Translucent Enamel  
simulates a depth-effect in restorations



**IE**  
Incisal Enamel  
can be applied on the enamel occlusal third and proximal surfaces, particularly with young patients



**CVE**  
Cervical Enamel  
offers the right translucency to let the darker cervical dentin shine through

#### Inside Special Shades – to add opacity

These are opaque shades which are placed underneath a Standard Shade **to add warmth** to the final colour and eradicate the characteristic **‘dark shine’** throughout the mouth. Available only in the G-ænial Anterior version there are three Inside Special Shades.



**AO2**



**AO3**



**AO4**

# Enjoy the effortless handling

On top of this G-ænial Anterior and Posterior bring you all the properties required for superb, long-lasting restorations.

## Easy Handling

G-ænial is one of the few composite materials that really qualify as being **user-friendly**, thanks to its **advanced shade system** and because it is a unique composite that offers **effortless manipulation**.

GC is confident that you will enjoy the handling of G-ænial because of how its **consistency and working times** are suited to the restorative classes:

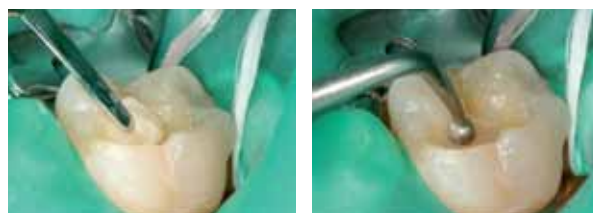
### G-ænial Anterior



The consistency of G-ænial Anterior is the same as Gradia Direct Anterior. The material has been tested for more than 6 years with a resulting unanimous agreement that **its consistency is what makes the material so noteworthy**.

The working time is around 4 minutes under ambient light, which allows for stress-free work in cases where multi-layer restorations are required.

### G-ænial Posterior



The viscosity of this material has been adapted accordingly as posterior applications often require a material that is **more packable**. With this consistency, G-ænial Posterior is **easy to sculpt, thixotropic and adapts well to cavity walls**.

## Good polishability

For improved aesthetics, G-ænial Anterior and Posterior **polish quickly and easily to a smooth, glossy surface**.



# The ideal properties for long-lasting aesthetics

## Simplified follow-ups



Dr. E. D'Incau, France



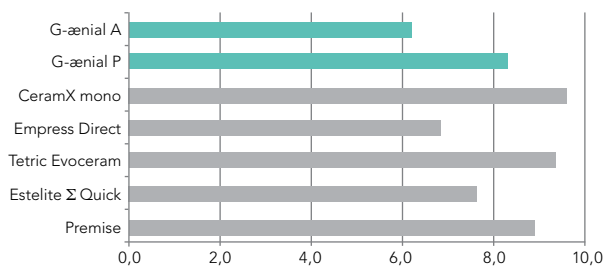
Dr. J. Sabbagh, Belgium

Although aesthetically invisible, both G-ænial Anterior and Posterior are easily traceable through x-rays. Featuring a unique and GC **patented High-Density Radiopaque (HDR) Technology**, the radiopacity of G-ænial is significantly increased without compromising aesthetics.

## Tough and flexible

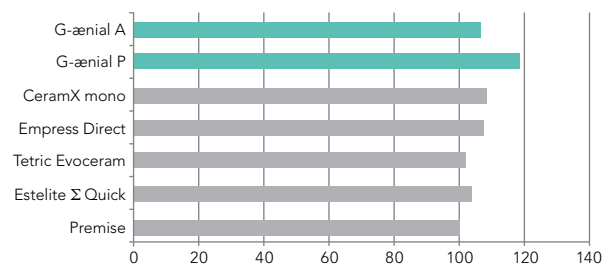
G-ænial Anterior and Posterior have a high fracture toughness and flexural strength combined with a low modulus of elasticity to avoid bending and occlusal forces, as well as the spreading of cracks. All the right properties **to guarantee very durable restorations.**

Modulus of elasticity (GPa)



Source: GC R&D Internal data  
Test performed according to ISO 4049:2000

Flexural strength (Mpa)



Source: GC R&D Internal data  
Test performed according to ISO 4049:2000



#### SYRINGES

**Quick Start Kit** 7 syringes of:

A1, A2, A3, B2, JE, AE, IE and a shade guide

**Advanced Kit** 7 syringes of:

A3.5, AO2, AO3, B1, B3, C3, TE

#### Refill

1 syringe of all available colours

#### UNITIPS

**Quick Start Kit** 5 unitips each of:

A1, A2, A3, B2, JE, AE, IE and a shade guide

**Advanced Kit** 5 unitips each of:

A3.5, AO2, AO3, B1, B3, C3, TE

#### Refill

20 unitips of: A1, A2, A3, A3.5, AO3, CV, AE, IE,

PA1, PA2, PA3, PA3.5, PJE, PIE

10 unitips of: BW, A4, B1, B2, B3, C3, CVD, AO2,

AO4, JE, TE, SE, CVE, XBW

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#### SHADES ANTERIOR

**Standard:** BW, A1, A2, A3, A3.5, A4, B1, B2, B3, C3, CVD, XBW, CV

**Inside special:** AO2, AO3, AO4

**Outside special:** JE, AE, SE, IE, TE, CVE

#### SHADES POSTERIOR

**Standard:** P-A1, P-A2, P-A3, P-A3.5

**Outside special:** P-JE, P-IE

#### ACCESSORIES

Shade guide, Unitip Applier

Content per unitip: 0.16 mL (0.28 g)

for anterior and 0.16 mL (0.33 g) for posterior

Content per syringe: 2.7 mL (4.7 g)

for anterior and 2.7 mL (5.5 g) for posterior

#### GC EUROPE N.V.

Head Office  
Researchpark Haasrode-Leuven 1240  
Interleuvenlaan 33  
B-3001 Leuven  
Tel. +32.16.74.10.00  
Fax. +32.16.40.48.32  
info@gceurope.com  
<http://www.gceurope.com>

#### GC UNITED KINGDOM Ltd.

12-15, Coopers Court  
Newport Pagnell  
UK-Bucks. MK16 8JS  
Tel. +44.1908.218.999  
Fax. +44.1908.218.900  
info@uk.gceurope.com  
<http://uk.gceurope.com>