

Restorations that cross generations

EQUIA Forte® HT

Bulk fill glass hybrid restorative system





Since 1921 100 years of Quality in Dental

Restorations for all generations

Building on the success of EQUIA Forte[®], the new EQUIA Forte[®] HT is a long-term bulk fill restorative system with enhanced mechanical properties, superior fluoride release, sound marginal seal and excellent handling. This makes EQUIA Forte[®] HT a versatile and durable restorative solution, ideal for patients of all ages, including pediatric, geriatric and high-risk caries patients.

Glass hybrid technology

EQUIA® was first launched in 2007, and numerous clinical studies have demonstrated its clinical efficacy in Class I and II restorations* ever since. In 2014, GC's new glass hybrid technology caused further considerable improvements, leading to the development of EQUIA Forte®. This restorative system combined a self-cure, bulk fill restorative, EQUIA Forte® Fil, laminated with a nano-filled, self-adhesive resin coat, EQUIA Forte® Coat. The new glass hybrid innovation was achieved through introduction of ultra-fine highly reactive glass and highmolecular weight polyacrylic acid powders within conventional glass which ensures advanced mechanical properties with improved flow and non-sticky handling. The nano-filled, self-adhesive resin, EQUIA Forte® Coat, ensures optimized marginal seal and wear resistance. *See technique guide for suggested cavity preparations.

- Surface-treated FAS (Fluoro Alumino Silicate) glass
 Highly reactive surfacetreated fine FAS glass
 High-molecular-weight polyacrylic acid
- Polyacrylic acid



EQUIA Forte[®] Fil and EQUIA Forte[®] HT Fil advanced glass hybrid technology



EQUIA® Fil

Taking glass hybrid to the next level

The strength and handling are further improved in EQUIA Forte® HT by developing an intelligent control of distribution and interaction of these glass particles. Also, EQUIA Forte® Coat is now available in an ergonomic flip-top bottle that minimizes waste.

The result? A strong restorative with prolonged working time and superb handling that is excellent for bulk-fill placement, even in load-bearing Class II restorations.* *See compressive and flexural strength data comparison charts



Improved translucency

Pushing the boundaries of glass hybrid technology even further, **EQUIA Forte® HT** has a perfectly adapted translucency for better looking posterior restorations. The **refractive index** of the fillers has been adapted to the matrix. As a result, the final restorations look more natural and aesthetic⁷.





EQUIA Forte® HT Fil Shade A2 EQUIA Forte® Fil Shade A2

Strong & durable

Glass hybrid systems offer the strength of the latest innovative glasses combined with the wear resistance of a filled coating. The **unique synergy between the coating and the restor-ative material** improves the durability and wear resistance of the restorations⁴.



EQUIA Forte[®] HT is indicated for stress-bearing Class II cavities*.



ISO9917-1: 2007. Source: GC R&D, Japan, 2018. Data on file.



Three-point bending test (ISO10477:2004). Source: University of Siena, Italy. Publication in preparation.



Source: GC R&D, Japan, 2018. Data on file.

Excellent biocompatibility & biomimetic properties

EQUIA Forte® HT exhibits a strong chemical bond to tooth providing exceptional marginal seal. The isolation is not needed as the bond strength is not compromised even in presence of saliva. Since no etchant is used, there is virtually no post-operative sensitivity. Due to its hydrophilic nature and coefficient of thermal expansion similar to dentine, it is an excellent biomimetic material i.e. creating a 3D structure which mimics the structure of the dental tissue. It is not only a tooth-friendly option but also an environment-friendly solution, making it a great choice for multiple clinical situations including as an amalgam alternative.









Extensive indications

Fast & easy placement

EQUIA Forte[®] HT can be used in the partial caries excavation technique to create **minimally invasive preparations** (MI). As no etching is used and the system relies on chemical adhesion, there is less risk of post-operative sensitivity – which also makes it a **safe treatment solution**.



Place True bulk-fill technique Convenient capsule delivery ShapeFProlonged working timeSEasy to contourNon -sticky

Finish e Set after 2'30" **Coat** Glossy surface without polishing with increased wear resistance and exceptional marginal seal

EQUIA Forte[®] HT, your best partner for posterior restorations





Finished in just 3'25"

Courtesy of Dr. Z Bilge Kütük, Turkey

Main indications for EQUIA Forte® HT

Long-term proven clinical performance

EQUIA Forte® HT is a reliable system based on 12 years of clinical experience with EQUIA®.

The longevity of posterior EQUIA® restorations has been proven in many independent, long-term clinical studies¹⁻⁵ showing after 6 years a success rate of 100% for Class I restorations²⁻³ and between 92.3% and 98.7% for Class II^{1-3.9}.

1. Gurgan et al. A randomized controlled 10 years follow up of a glass ionomer restorative material in class I and class II cavities, J Dent. 2020 March, 94:103175, doi: 10.1016/j. jdent.2019.07.013.

EQUIA[®] vs. composite

- 2. Gurgan et al. Clinical Performance of a glass ionomer restorative system: a 6-year evaluation. Clin Oral Investig. 2017;21(7):2335-2343.
 - EQUIA® vs. composite
- 3. Türkün *et al.* A Prospective Six-Year Clinical Study Evaluating Reinforced Glass Ionomer Cements with Resin Coating on Posterior Teeth: Quo Vadis? Oper Dent. 2016;41(6):587-598

EQUIA® vs. Riva[™] Self Cure[†]

- 4. Basso *et al.* 7 Years, Multicentre, Clinical Evaluation on 154 Permanent Restorations Made With a Glassionomer-based Restorative System. J Dent Res. 2016;95 Spec Issue B: #0446.
- 5. Klinke T. et al. Clinical Performance during 48 months of two current glass ionomer restorative systems with coatings: a randomized clinical trial in the field. Trials. 2016;17(1):239. doi: 10.1186/s13063-016-1339-8.

EQUIA® vs. glass ionomer with conventional coating

 Gurgan et al. 12-month Clinical-performance of a Glass-hybrid-restorative in Non-caries-cervical-lesions of Patients With Bruxism. J Dent Res. 2018; 97 Spec Issue A: #0235.

EQUIA Forte® vs. composite

- 7. Shimada et al. Evaluation of Mechanical Properties of New GI-restorative (EQUIA Forte® HT). J Dent Res. 2019; 98 Spec Issue A: #3662.
- EQUIA Forte® HT
- 8. Y. Hokii et al. Fluoride Ion Release/Recharge Behavior of Ion-Releasing Restorative Materials, Dental Materials, Volume 35, Supplement 1, 2019 (Accepted for publication).
- 9. Literature review, presented at IADR 2019 by Prof. Soraya Coelho Leal.
- 10. Miletic et al. Clinical Performance of a Glass Hybrid System Compared with a Resin Composite in the Posterior region: results of a 2 year Multicenter Study. J Adhes Dent. 2020;22(3):235-247. doi: 10.3290/j.jad.a44547.

EQUIA Forte® vs. composite

Schwendicke F et al. Gass hybrid versus composite for non-carious cervical lesions: Survival, restoration quality and costs in randomized controlled trial after 3 years. J Dent 2021;110:103689. doi.org/10.1016/j.jdent.2021.103689.
EQUIA Forte® vs. composite

Clinical cases

A strong & biomimetic amalgam alternative

The material can be placed in bulk and is easy to pack & contour. It takes only 3'25" to complete your restorations!* *Assuming average procedure times following the instructions for use.





Courtesy of Dr. Victor Cedillo Felix, San Diego, CA.





Restoration of a posterior tooth in a high risk caries patient

The moisture tolerant adhesion of EQUIA Forte[®] HT enables easy restoration of deep cavities, even when a rubber dam cannot be placed. The use of sectional matrix will contribute to the longevity of the restorations.



Courtesy of Dr. Z Bilge Kütük, Turkey





Restoration of sensitive, hypomineralized MIH teeth

The chemical adhesion of the material - even to untreated dentine - offers a more sustainable solution in situations where bonding is compromised. The material can be easily placed after partial manual caries removal, making it easier to use in hypersensitive patients or patients having molar incisor hypoplasia (MIH).







Courtesy of Dr. P. Rouas, France



EQUIA Forte® HT Fil

Contains: 50 EQUIA Forte [®] HT Capsules (Powder 0.4g, Liquid: 0.13g (0.10mL) per capsule). Shades: A2, A3

EQUIA Forte[®] Coat Bottle Contains: One EQUIA Forte[®] Coat (4mL) bottle.



GC DENTIN CONDITIONER Contains: One 6g (5.7mL) bottle.



GC CAPSULE APPLIER IV Contains: One capsule applier.



GC India Dental Pvt. Ltd. #233, Phase 3, IDA Pashamylaram, Sangareddy District - 502307 Telangana, India E: info.gcindia@gc.dental | W: www.gcindiadental.com