

Seeing is believing. *Introducing*

# EXACLEAR

*Crystal clear vinyl polysiloxane material*



*“GC”*

# Crystal clear for absolute control

EXACLEAR is an innovative, clear silicone material that fulfils the needs of demanding aesthetic cases and facilitates **CONSISTENT** results. Its absolute transparency offers total visual **CONTROL** making it ideal for **CREATING** outstanding aesthetic results in complex clinical situations.

## EXACLEAR



Visual control of composite injection.

## Competitor A



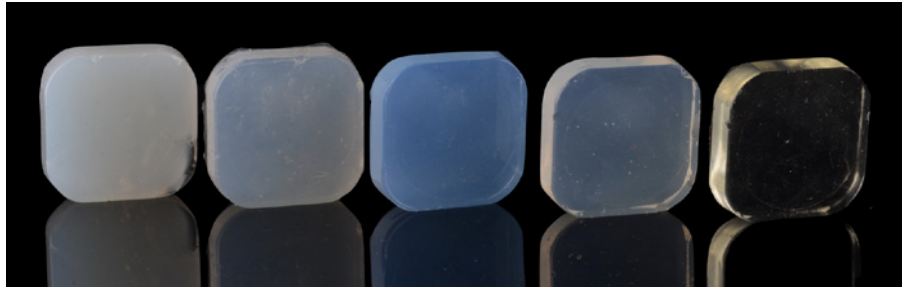
## Competitor B



EXACLEAR's high transparency allows for very effective light-curing through the silicone, leading to a higher conversion rate and eliminating the air inhibition layer for increased colour stability and easier, faster polishing.



Excellent light infiltration during injection moulding technique.



Transparency of EXACLEAR (far right) in comparison to competitors.

## Optimal consistency

EXACLEAR offers the perfect balance of properties for ease of handling and consistent results. EXACLEAR stays in place when extruded but flows nicely under pressure, resulting in perfect adaptation and reproduction of details. EXACLEAR is hard enough to resist deformation or tearing but soft enough to allow easy removal.



Optimal flow and consistency for easy placement.



Perfect adaptation to the preparation and precise reproduction of details.



Rigid and strong but flexible enough for removal without tearing or deformation, allowing precise placement and easy creation of the injection openings.

EXACLEAR offers optimal setting times for a fast and easy workflow. The impression can be removed intra-orally after just 2 minutes. Ideally suited for both chairside and laboratory use.



minutes

**Only 2  
minutes  
intra-orally**



minutes

**Only 7  
minutes  
extra-orally**

# Discover the injection moulding technique

EXACLEAR, used together with an injectable composite such as G-ænial® Universal Injectable, enables clinicians to create restorations which are as aesthetic as indirect veneers, but quicker, more affordably and using less invasive preparations.

Clinical case of a 44-year old male suffering from attrition and acid erosion from gastro-esophageal disease and parafunction, who presented with some chipping and short tooth height. The objective was to improve aesthetics and prevent further long-term damage.



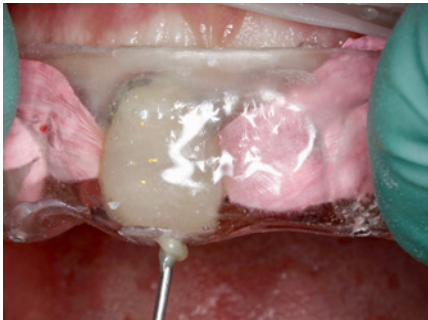
1. Preoperative situation demonstrating short height of teeth, chipping, thin incisal edges and tooth wear from attrition and erosion.



2. 3D printed models of diagnostic wax-up. Two wax-ups were created, with the first performed as an alternate tooth wax-up and the second as a full wax-up from 13-24.



3. EXACLEAR silicone templates were created over the two wax-ups with injection channels created.



4. G-ænial® Universal Injectable shade A2 injected into template onto isolated teeth (retraction cords placed and Teflon PTFE\* tape used to separate from adjacent teeth). Note: alternate tooth technique was performed to keep the composite within the designated tooth space and prevent the material from escaping laterally.



5. Removal of template reveals build-up of injectable resin with minimal flash and ideal tooth form and contour.



6. Completed direct composite resin buildups from 13-24.

## Perfect partners

### EXACLEAR and G-ænial® Universal Injectable

This case demonstrates management of the early worn dentition using EXACLEAR and G-ænial® Universal Injectable. The injection moulding technique is also ideal to treat wear cases or to recreate complex morphologies. The transparency of EXACLEAR allows clinicians to see and control the injection while treating several teeth simultaneously. The high flexural strength and wear resistance characteristics of G-ænial® Universal Injectable make it ideal for such posterior cases.



1. Early wear evident on a 40-year old patient needing conservative management.



2. Fill the impression tray with EXACLEAR and take an impression of the wax-up on the model.



3. Alternatively EXACLEAR can be used to create the injection stent from the digital mock up.



4. Old composite restorations removed and teeth micro-etched.



5. Build-up and restorations on the occlusal surface using the alternate teeth technique.



6. Final restorations using a single shade injection technique, shade A1.

# Simple laboratory technique for transparent stent fabrication

This case features laboratory fabrication of a clear stent for the creation of provisional and permanent restorations utilising the injection moulding technique. EXACLEAR offers the flexibility to allow clinicians to have a wax-up model made by a laboratory. A clear stent is fabricated to assist in the precise application of the restorations using the injection moulding technique. This will result in the proper reproduction of the anatomy and details, saving valuable chair-time.



1. Laboratory diagnostic wax-up on GC FUJIROCK EP model.



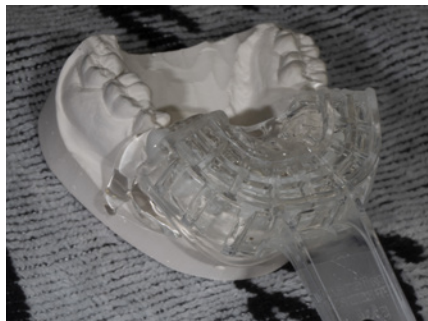
2. EXACLEAR adaptation onto diagnostic wax-up.



3. Ensure good coverage prior to tray positioning.



4. Extrusion of EXACLEAR onto tray ensuring full coverage of material.



5. Seating of clear impression tray and removal after 7 minutes.



6. Completed fabrication of transparent stent ready for fabrication of restorations.

# Q&A

## 1. Which tray should be used to take the impression for the injection moulding technique?

Either a plain metal tray or a transparent impression tray may be used. The tray should be big enough to ensure that there will be 3-4 mm of transparent silicone around the preparations.

When taking the impression of the wax-up, take care not to press too hard on the silicone, to ensure all incisal edges are covered with a sufficiently thick layer. This will avoid potential tearing and deformation of the key.

## 2. Which bur should be used to create the injection openings and how and where should the openings be created?

A needle shaped bur is suitable to make the openings. In the anterior region, the openings should be positioned at the mesial and distal aspects of the incisal edge of each tooth. In the posterior region, the openings should be positioned in the mid-buccal cusp and mid-lingual cusp areas. Two openings are created to eliminate air trapping and to reduce the amount of excess.

The opening should be as small as possible, but large enough to enable the tip of the composite syringe to pass through easily and fully.

Be careful not to damage the vestibular part inside the silicone key with the bur, to ensure the surface texture detail created during the wax-up is not damaged.

## 3. Should isolation be used for the injection moulding technique?

Isolation is recommended and encouraged whenever the clinical situation allows. In a posterior case, total isolation with rubber dam should be achievable as the margins are mostly located above the gingival level. Whenever this is not possible, using Teflon PTFE\* tape is recommended.

## 4. How should EXACLEAR be placed in the mouth?

Trim the silicone key cervically to allow proper seating without any tension between the key and the rubber dam (if rubber dam isolation is being used).

The silicone key should extend far enough to include at least two teeth distally on both sides of the teeth to be treated. This ensures stability of the key when it is positioned in the mouth and accurate reproduction of the aesthetic detail, ensuring a more predictable outcome.

## 5. What is the working time of EXACLEAR?

The working time of EXACLEAR at 23°C is 45 seconds.

## 6. How should I store EXACLEAR?

EXACLEAR does not require refrigeration and can be stored at room temperature (14-25°C). It should be kept away from high temperatures or direct sunlight.

## 7. What is the shelf-life of EXACLEAR?

The shelf-life of EXACLEAR is 2 years.

## EXACLEAR



### Package:

#### 2 Cartridge Pack

2x 48 ml Cartridge,  
6x Mixing Tip Size L

## G-ænial® Universal Injectable



### Packages:

#### 1 Syringe Pack

1x Syringe 1.7g (1.0 ml), 5x Dispensing Tip Needle,  
5x Dispensing Tip Long Needle, 1x Light-protective Cap

#### 2 Syringe Pack

(available in shades A1, A2, A3)  
2x Syringe 1.7g (1.0ml), 10x Dispensing Tip Needle,  
10x Dispensing Tip Long Needle

#### Dispensing Tip Refill

20x Dispensing Tip Long Needle  
20x Dispensing Tip Regular Needle

### Shades:

XBW, BW, A1, A2, A3, A3.5, A4, B1, B2, CV, CVD, AO1, AO2,  
AO3, JE, AE

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Towards Century of Health

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