Manufactured in U.S.A. by:

SCI-PHARM®

Sci-Pharm Catalog No. 51-03
Glass Ionomer Cavity Liner and Cement
in Automix Dispensing System

TECHNICAL BULLETIN
Instructions

GLASION® P/P

GLASS IONOMER CAVITY LINER AND CEMENT

KIT CONTENTS:

- Two 8g Cement Syringes
- 12 Mixing tips
- Accessories
- Instructions

Cat. No. 51-03

Manufactured under U.S. Patent 5,965,632
And Others Pending

SPECIAL FEATURES OF GLASION P/P

Convenient automix dispensing allows for elimination of time consuming, imprecise, and inaccurate blending of powder and liquid components of the prior art system.

This new form of an unadulterated glass ionomer technology preserves all the advantages of the coventional powder/liquid type glass ionomer cements, particularly good adhesion to dentin and enamel, and sustained ability to release fluoride.

Transient flexibility during the initial period after cure prevents cement from cracking when strong forces are applied to the freshly set material.

INTRODUCTION

Glasion® P/P in a new automix dispensing system represents an advanced formulation designed primarily for use as a cavity liner and as a cement for orthodontic bands and dental prostheses. It offers ease of handling and excellent reproducibility of physical properties and setting characteristics, along with all other features that make glass ionomers so prominent among the materials used in modern dentistry.

Glass ionomers are expected to have a secure place in dentistry in years to come. Their unique characteristics, including the ability to bond to dentin and prevent caries due to fluoride release, make glass ionomer the material of choice in many clinical situations, as luting agent, cavity liner or restorative.

Unfortunately, overly aggressive marketing and exaggerated claims are doing a lot of harm to the reputation of glass ionomers. Glass ionomers are often applied indiscriminately in clinical situations or applications where they are clearly not suitable or where other types of materials would provide much better service. In this bulletin, we have attempted to provide objective information regarding their advantages and shortcomings in their main clinical applications.

CAUTION

Federal law restricts this device to sale by or on the order of a dentist.

A. USE AS A LUTING AGENT FOR CONVENTIONAL DENTAL PROSTHESES

Advantages:
- Bonds to dentin
- Caries protection

Disadvantages:
- Pulp irritation potential

Indications:
- On non-vital teeth or vital teeth with no substantial coronal reduction
- Where adequate retention is of concern

Counterindications:
- Sensitive teeth
- Proximity to the pulp
- Where moisture control is difficult

B. USE AS AN ORTHODONTIC BAND CEMENT

Advantages:
- Bonds to enamel
- Prevents enamel decalcification
- Caries protection

Disadvantages:
- More expensive than most commonly used band cements

Indications:
- Most clinical situations; particularly indicated in cases of poor oral hygiene

C. USE AS A CAVITY LINER

Advantages:
- Bonds to dentin
- Caries protection

Disadvantages:
- Needs etching if applied under composite restoratives
- Use of calcium hydroxide bases is indicated in case of pulp exposure or pulp proximity

Indications:
- Under amalgam restorations

Counterindications:
- In deep restorations (proximity to the pulp)
- Under composite restoratives where light-cured resin based liners offer easier handling

PROPERTIES OF THE CURED MATERIAL	
Compressive Strength	Wet: 65 MPa (9500 psi)
(24 hrs after cure at 37°C)	Dry: 110 MPa (15 500 psi)
Film Thickness	20 µm
Working time at 23°C (73°F)	Minimum 80 seconds
Setting Time at 23°C (73°F)	Maximum 7 minutes

INSTRUCTIONS FOR USE

*CEMENTATION OF DENTAL PROSTHESES**

1. Remove the cap of the syringe unit after turning it counterclockwise. On first use, or after prolonged non-use, express a small pea-sized amount of material to ensure uniform dispensing, then insert static mixer. Lock static mixer by turning it clockwise.

2. Dispense desired amount of cement on the restoration by slowly pushing the plunger forward.

3. Make certain that all dentin surfaces are covered with cement and immediately follow with place ment of the restoration.

4. Hold the restoration under constant pressure for 90 seconds. Keep moisture away from the cemented restoration during this period.

5. Remove excess cement from the margins with a carver or scale prior to onset of initial set (gel stage). Once initial set has begun, do not attempt to remove excess cement, as the material may be pulled from under the margins. The cement will harden in seven minutes.

6. Remove the static mixer after turning it counterclockwise; wipe excess before replacing cap.

**Glasion® P/P has not yet been tested for cementing all-porcelain crown and bridges. Consequently, at present, we cannot recommend it for such applications.*

CEMENTATION OF ORTHODONTIC BANDS

1. Remove the cap of the syringe unit after turning it counterclockwise. On first use, or after prolonged non-use, express a small pea-sized amount of material to ensure uniform dispensing, then insert static mixer. Lock static mixer by turning it clockwise.

2. Dispense desired amount of cement on the appliance by slowly pushing the plunger forward to cover the entire inner surface of the band.

3. Secure the band in place and remove excess cement from the margins. The cement will harden in seven minutes.

4. Remove excess cement from the margins with a carver or scale prior to onset of initial set (gel stage). Once initial set has begun, do not attempt to remove excess cement, as the material may be pulled from under the margins.

5. Remove the static mixer after turning it counterclockwise; wipe excess before replacing cap.

USE AS A CAVITY LINER

1. Remove the cap of the syringe unit after turning it counterclockwise. On first use, or after prolonged non-use, express a small pea-sized amount of material to ensure uniform dispensing and insert static mixer. Lock static mixer by turning it clockwise.

2. Dispense desired amounts of cement into the preparation by slowly pushing the plunger forward to cover in a thin layer the walls of the cavity. The cement will harden in seven minutes.

3. Remove the static mixer after turning it counterclockwise; wipe excess before replacing cap.

STORAGE AND SHELF-LIFE

1. Store at temperatures not exceeding 75°F (24°C). If the material is used infrequently, store in refrigerator. When stored under such conditions, the material has a shelf-life of 18 months.

2. After prolonged storage, or as a result of accidental cross-contamination, the material at the exit point (tip) of one or both barrels may considerably thicken, making its dispensing difficult. If this occurs, use a needle or paper clip to remove the thickened paste from the affected tip.

For technical information, call or write:

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