# Compendium of Cements

An Essential Guide for Cementation & Restoration





# Compendium of Cements

With the focus on a more conservative treatment mode in modern day dentistry, it is crucial to ensure the case-specific selection of the most suitable dental cement for clinical predictability, ease of use and enhanced productivity.

Shofu provides the clinician with reliable restorative and cementing options from its proven, time-tested range of dental cements.

# Hy-Bond Luting Cement

The range of Shofu luting cements contains the patented Hy-Agent additive which consists of tannic acid, zinc fluoride and strontium fluoride, that helps to improve its physical properties and reduce decalcification of enamel and dentin.

The most beneficial effect is that it helps to seal the dentinal tubules to prevent irritation to the pulp.



# **Hy-Bond Glasionomer CX**

An enhanced glass ionomer luting cement designed to provide an excellent marginal seal and minimize post-operative sensitivity.

#### Indication

- Permanent cementation of cast metal, porcelain fused to metal (PFM) crown & bridge restorations
- · Bonding of metal orthodontic appliances
- · Ideal for long PFM bridges

# Benefits

- · Higher compressive and bonding strength
- Low film thickness of 18µm
- · High flouride release
- Long working time with snap-set setting reaction once placed in the mouth, enhances application efficiency
- · Easy mixing & excellent handling characteristics
- · Biocompatible and Radiopaque
- Exhibits low water solubility with the highest resistance to water contamination at the initial stage

- Complete Set (Powder 45gm, Liquid 25ml)
  [ PN 1190 ]
- Powder (45gm) [ PN 1191 ]
- Liquid (30gm / 25ml) [ PN 1192 ]
- Mini Kit (15gm / 8.3ml) [ PN 1193 ]



# **Glasionomer Cement CX-Plus Capsule**

A radio-opaque glass ionomer luting material is now available in capsules for a simple, fast and predictable application.

#### Indication

 Cementation of cast metal (inlays), porcelain fused to metal crowns & bridges, as well as metal orthodontic appliances

#### **Benefits**

- High bond strength to both metal and tooth structure
- Working time of 3 minutes 10 seconds and snap-set reaction of 1 minute (after placement)
- · Exhibits ideal flow with a low film thickness
- Highest resistance to moisture contamination at the initial stage
- · Radiopaque and high fluoride release
- Easy mixing and excellent handling characteristics

# **Availability**

 Package x 50 capsules (0.53gm / capsule) [ PN 3277 ]





# **Hy-Bond Resiglass**

A radiopaque, resin modified glass ionomer (RMGI) cement with virtually no odour & post-operative sensitivity to ensure total patient comfort.

#### **Indications**

- Cementation of porcelain fused to metal crown & bridge restorations
- Metal inlays and onlays or crowns
- Selected porcelain or resin crown and bridge restorations
- Orthodontic appliances-metal or ceramic brackets

#### **Benefits**

- Chemically bonds to tooth structure with higher bonding strength
- · Biocompatible with high flouride release
- Minimum odour & virtually no post-operative sensitivity
- Improved fracture toughness and low solubility
- Provides an excellent marginal seal and prevents microleakage
- Exhibits high translucency
- Superior handling and easy removal of excess cement
- Long working time with a net setting time of 4min

- Complete Set (Powder 15gm, Liquid 8.6ml) [ PN 1103 ]
- Powder (15gm) [ PN 1104 ]
- Liquid (10gm / 8.6ml) [ PN 1105 ]





# **Hy-Bond Polycarboxylate Cement**

Developed with Shofu's patented Hy-Agent additive (tannin-fluoride), it helps to seal dentinal tubules and provide protection while minimizing post-operative sensitivity.

#### **Indications**

 Luting agent for cast restorations and orthodontic appliances

#### **Benefits**

- Chemically adheres to tooth structure and cast metal appliances
- Exhibits high adhesive strength
- Low solubility and disintegration
- Radiopaque, easy to mix and manipulate with low film thickness
- Can be placed on freshly cut dentin with no pulpal irritation
- Less technique sensitive due to the tannin-fluoride additive

# **Availability**

- 1-1 Set (Powder 60gm, Liquid 33ml)
  [ PN 1160 ]
- Powder (60gm) [ PN 1161 ]
- Liquid (40gm / 33ml) [ PN 1162 ]
- 1-1 Set (Powder 125gm, Liquid 70gm)





# **Hy-Bond Temporary Cement (Soft)**

A non-eugenol, polycarboxylate based cement designed for temporary cementation.

#### **Indications**

- Temporary cementation of provisional restoration and implant prosthesis
- Indirect pulp capping and temporary sealing of prepared cavities as an intermediate restorative

#### **Benefits**

- Contains the patented Hy-Agent additive with tannin-fluoride that seals dentinal tubules to minimize pulpal irritation
- Ensures easy removal with sufficient adhesive strength for short-term cementation
- Easy to mix, manipulate and apply
- · Fast setting and easy to clean up
- · Minimum odour and taste

- 1-1 Set (Powder 125gm, Liquid 60ml) [ PN 1173 ]
- Powder (125gm)
- Liquid (70gm / 60ml)
- Mini Set (Powder 60gm, Liquid 30ml) [ PN 1176 ]





# **Hy-Bond Zinc Phosphate**

The only zinc phosphate cement that can be applied over freshly cut dentin without causing any pulpal irritation due to the Hy-Agent additive which helps to nullify the harshness of the phosphoric acid.

#### **Indications**

 Traditional luting agent for cementation of cast restorations and orthodontic appliances

#### **Benefits**

- Offers high compressive strength and good film thickness with adequate radiopacity
- Seals dentinal tubules and minimizes post operative sensitivity
- · Less technique sensitive with superior handling
- · Minimized solubility in oral fluids

#### **Availability**

- 1-1 Set (Powder 60gm, Liquid 25ml) [PN 1170]
- Powder (60gm) [ PN 1171 ]
- Liquid (40gm / 25ml) [ PN 1172 ]

# Glass Ionomer Restorative Cements

Glass ionomers are an essential part of restorative dentistry as they help to conserve tooth structure and assist in its remineralisation. The most significant characteristics of glass ionomers are their ability to bond chemically to dentin and enamel through the ion-exchange mechanism and long-term fluoride release without high solubility.



# **Glasionomer FX-II- Improved**

An enhanced direct restorative glass ionomer designed in Vita shades with remarkable mechanical properties and ease of handling.

#### **Indications**

- Restoration of pits and fissures, cervical erosion and abrasion
- Intermediate restoration for heavy stress bearing areas

- Final restoration for non-stress bearing Class I and II in adult dentition
- Created for Atraumatic Restorative Treatment (ART) and Minimal Intervention (MI) dentistry
- · Geriatric and Pediatric restorations

# **Benefits**

- · Superior mechanical properties
- · Optimal aesthetics with easy polishability
- · Exceptional handling characteristics
- Continuous release and recharge of fluoride ions, biocompatible and radiopaque with low solubility
- · Packable & Easy to use

- Shades: A2, A3, A3.5 & B2
- Complete Set (Powder 15gm, Liquid 8.4ml)
  [ PN 3245 ~ 3248 ]
- Mini Set (Powder 6gm, Liquid 3ml)
  [ PN 3255 ~ 3258 ]



## Glasionomer FX ULTRA

A truly self-adhesive, bulk filling glass ionomer restorative, Glaslonomer FX ULTRA provides superior aesthetics, translucency, lasting caries resistance and durability.

Glaslonomer FX ULTRA has an optimally balanced formulation with high initial reactivity and rapid maturation process that equalizes refractive indices of the glass core and matrix to provide a remarkably stable, strong, translucent and fluoriderich restoration.

#### **Benefits**

- Remarkable translucency for an easier shade match and better aesthetics
- Superior mechanical properties for durable posterior restorations
- Good wettability of powder and liquid assures an easy and fast mix
- Superior handling qualities with adequate working time and a sharp-set reaction
- · Low solubility and acid erosion
- · Significant fluoride release and recharge
- · Easy to pack and adapt

# **Availability**

- Shades: A2, A3, A3.5 & B2
- Complete Set (Powder 15gm, Liquid 8ml)
  [ PN 1120 ~ 1123 ]



# Glasionomer Cement Type 2 Version 2-Improved

A universal restorative glass ionomer for anterior restoration, with excellent handling and improved physical properties.

#### **Indications**

- Specially designed for Class III, Class V, Cervical Erosion / Abrasion
- For pedodontic restorations

#### **Benefits**

- Chemically bonds to enamel and dentin for a complete seal
- · Higher compressive and tensile strength
- Easy to mix with excellent handling characteristics
- Co-efficient of thermal expansion similar to natural tooth
- · High fluoride release and recharge
- Radiopaque and biocompatible

#### **Availability**

- Shade: Yellow Brown
- Complete Set (Powder 10gm, Liquid 8.4ml) [ PN 3263 ]
- Mini Set (Powder 6gm, Liquid 3ml) [ PN 3266 ]



# Glasionomer FX-II Capsule

The proven direct restorative glass ionomer now available in capsule delivery system to achieve simple and predictable application every time.

# **Benefits**

- Chemically adheres to tooth structure with continuous release of fluoride ions
- Vita shaded with fluorescence close to natural teeth for better aesthetics
- Packable consistency with high compressive strength and excellent biocompatibility
- · Radiopaque with low solubility
- Assures a consistent mix every time with adequate working time
- · Fast set at intra-oral temperature

- Shades: A2, A3, A3.5, B2 [ PN 3270 ~ 3273 ]
- Package x 50 capsules (0.55gm / capsule)



# Hi-Dense XP (Silver Reinforced Glass Ionomer)

Hi-Dense XP contains spherical silver-tin alloy particles in a specially formulated glass ionomer powder for better performance with exceptional handling and physical properties under humid conditions.

#### **Indications**

- Ideal permanent restorative for posterior deciduous teeth and non-stress bearing permanent restoration
- · Core build-up and structural base
- Repair of amalgam restorations

#### **Benefits**

- Silver reinforced for high compressive strength to prevent cuspal flexure under large composite restorations
- Excellent adhesion to tooth structure, pins and amalgam
- · Easy to mix and handle
- Silver powder is premixed for easy homogeneous mixing
- · Packable and condensable
- Radiopaque, with high fluoride release and resistance to erosion

# **Availability**

 Hi-Dense XP Eco Pack (Powder 30gm, Liquid10ml) [ PN 3123 ]





# Zirconomer Improved (Enhanced Zirconia Reinforced Restorative)

Zirconomer Improved, the nano-zirconia reinforced restorative is developed in tooth colour, with the strength & durability similar to amalgam and sustained fluoride protection for permanent posterior restoration, strong structural cores and bases.

#### **Indications**

- · Class I & II cavities
- · Structural base in sandwich restorations
- Core build-up under aesthetic indirect restorations
- · Root surfaces where over-dentures rest
- · Pediatric and Geriatric restoration
- Long-term temporary replacement for cusps and fractured amalgam restoration
- · Suitable for ART techniques

#### **Benefits**

- Reinforced with zirconia nanofillers for a more natural tooth colour and remarkable strength
- Self-adhesive to enamel / dentin
- Exhibits low interfacial stresses for a secure marginal seal and long-lasting restorations
- Sustained high fluoride release and recharge for anti-cariogenic benefits
- Packable and condensable like amalgam without the hazard of mercury
- · Greater tolerance to moisture and humidity
- Superior mixing and handling characteristics for an easier application
- Adequate working time with snap-set reaction
- · Excellent resistance to abrasion and erosion

## **Availability**

 Complete Set (Powder 12gm, Liquid 5ml) [PN 3130]



## **Glasionomer Base Cement**

Developed as a dentin substitute, this acid etchable glass ionomer is ideal for cases where the sandwich technique is the preferred restorative option.

#### **Indications**

 Acts as a supportive and protective base under stress-bearing amalgam, composite and porcelain restorations

#### **Benefits**

- Chemically bonds to the tooth structure with high compressive strength and low water solubility
- Provides pulp protection through excellent electrical and thermal insulation
- · Exceptional radiopacity
- · High flouride release

## **Availability**

- Shades: White & Yellow
- Complete Set (Powder [ Yellow ] 15gm, Liquid 5ml) [PN 1110]
- White / Yellow Colour Powder (15gm)
  [ PN 1113 ] & [ PN 1111 ]
- Liquid (5ml) [ PN 1114 ]





#### CoreShade Glasionomer Base Cement

An economical and dependable metal-free core build-up material (when abutment is too short or lacks tooth structure to support the crown) that offers high compressive strength for posterior restorations and deciduous teeth.

#### **Indications**

- · Especially for core build-up
- As a supportive and protective base under stress bearing restorations

#### **Benefits**

- Grayish colour for easy differentiation from the tooth core during preparation
- · Superior handling characteristics
- Chemically bonds to tooth structure, metal pins and posts to ensure durable core build-up for long lasting restorations
- Radiopaque and biocompatible with adequate fluoride release

- Complete Set (Powder 25gm, Liquid 10ml)
  [ PN 1115 ]
- Powder (25gm) [ PN 1116 ]
- Liquid (10ml) [ PN 1117 ]



