riva | helping you help your patients
what is a glass ionomer?
Glass ionomer is the generic name of a group of materials that use reactive silicate glass powder and an acqueous solution of polyacid copolymer. This group of materials can be divided into:
- Conventional glass ionomer
- Resin modified glass ionomer

Glass ionomers originally got their name from the glass filler and ionic matrix that forms ionic bonds to the glass filler and tooth structure.

how will a dentist benefit from using glass ionomers?
They are quick and easy for a dentist to use. Glass ionomers chemically bond to the tooth structure; therefore, dentists do not need to use a bonding agent like they do with composite resins. Glass ionomers can be bulk filled - shrinkage is extremely minimal.

how will a patient benefit from their glass ionomer?
- Smaller cavities – due to the unique chemical adhesion and bioactivity of the glass ionomer, smaller cavities can be cut, avoiding extensions or undercuts for retentive purposes.
- Fluoride releasing – helps prevent the formation of secondary caries underneath the restoration.
- Fluoride recharging – depleted / low fluoride content in the cement can be recharged simply by applying fluoride toothpaste or topical neutral fluoride gel over the restoration.

The super advantages of using a glass ionomer are the extremely high fluoride release, the chemical adhesion with the tooth structure and the ability to remineralize tooth structure.
You have a choice for your restorations: place a composite or a glass ionomer. Unlike glass ionomers, composites provide wonderful natural looking esthetics. Unfortunately, they are time consuming and technique sensitive for the dentist to place.

Glass ionomers are esthetic but not to the same extent as composites.

The super advantages of using a glass ionomer are the extremely high fluoride release, the chemical adhesion with the tooth structure and the ability to remineralize tooth structure.

Glass ionomers have the ability to arrest caries and remineralize the tooth. This means only the caries infected zone is required to be removed and the affected zone can be left behind.

The fluoride content of a glass ionomer is much higher than the normal fluoride content of a tooth. Fluoride ions from the cement (area of high concentration) diffuse to the tooth (area of low concentration). When this reserve of ions is depleted, it can be recharged with a topical application of fluoride in a gel, rinse or toothpaste.

Yes, glass ionomer cements assist in the remineralization of natural tooth structure.

All of SDI’s Riva materials utilize SDI’s proprietary ionglass™ filler developed by our glass technologists. ionglass™ is a radiopaque, high ion releasing, reactive glass and releases substantially higher fluoride to assist with remineralization of the natural dentition.
<table>
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<th>use riva self cure or riva self cure HV for</th>
<th>advantages</th>
<th>packaging</th>
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<td>the tooth remineralizing restorative</td>
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<tr>
<td>tooth remineralizing glass ionomer restorative material</td>
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<tr>
<td>When you are thinking composite resin, think again. Riva Self Cure could be your answer. Remember, no other strong restorative has such fabulous fluoride release, little need for undercuts and the ability to remineralize tooth structure.</td>
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<tr>
<td>• Non stress bearing Class I and II restorations</td>
<td>• Strongest dentin replacement</td>
<td>Riva Self Cure</td>
</tr>
<tr>
<td>• Deciduous teeth restorations</td>
<td>• High fluoride release</td>
<td>Boxes of 50 capsules</td>
</tr>
<tr>
<td>• Geriatric restorations</td>
<td>• Chemically adheres to tooth structure</td>
<td>Powder / liquid kits</td>
</tr>
<tr>
<td>• Intermediate restorative and base material for Class I and II cavities using the sandwich technique</td>
<td>• BPA &amp; HEMA free</td>
<td>Powder refills</td>
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<td>• Cervical (Class V) restorations</td>
<td>• Suitable for bulk filling</td>
<td>Liquid refills</td>
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<tr>
<td>• Core build ups</td>
<td>• No shrinkage</td>
<td>Shades: A1, A2, A3, A3.5, A4, B2 and B3</td>
</tr>
<tr>
<td>• Temporary fillings</td>
<td>• Great marginal adaptation</td>
<td>Regular Set and Fast Set</td>
</tr>
<tr>
<td>• Restorative in the field using the ART technique</td>
<td>• High acid resistance</td>
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<tr>
<td>• Dentin replacement</td>
<td>• Excellent for minimally invasive dentistry (MID)</td>
<td></td>
</tr>
<tr>
<td>• Bioactive proprietary ionglass™ technology</td>
<td>• Radiopaque</td>
<td></td>
</tr>
<tr>
<td>Special features for Riva Self Cure HV</td>
<td>new!</td>
<td></td>
</tr>
<tr>
<td>• Easy to shape and contour</td>
<td></td>
<td></td>
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<tr>
<td>• Non sticky</td>
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light cured, resin reinforced glass ionomer restorative material

You know how wonderful a traditional glass ionomer is for your patients’ healthy teeth, but you don’t like the esthetic qualities. Riva Light Cure has all the advantages of a true glass ionomer with the esthetic life-like look of a composite.

### Light-Cured, Resin Reinforced Glass Ionomer Restorative Material

<table>
<thead>
<tr>
<th>Molarities</th>
<th>Description</th>
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</thead>
</table>
| A1, A2, A3, A3.5, A4, B2, B3, B4, C2, C4, Bleach | Non-stress bearing Class I and II restorations  
  - Class III restorations  
  - Cervical (Class V) restorations  
  - Cervical erosions  
  - Abfraction lesions  
  - Root surface restorations  
  - Deciduous teeth restorations  
  - Geriatric restorations  
  - Core build ups  
  - Temporary fillings  
  - Base / dentin replacement  
  - Co-curing with composite (Sandwich technique)  
  - Liner  
  - Pit and fissure sealing  
  - Long term wear resistance due to high surface hardness  
  - Chemically adheres to tooth structure  
  - BPA free  
  - High fluoride release  
  - Orange light safe tip prevents premature setting  
  - Fabulous esthetic  
  - Highest color stability to tea & coffee  
  - Excellent marginal integrity  
  - High flexural strengths  
  - Flexible working time  
  - Bioactive proprietary ionglass™ technology  
  - Varnishing not required  
  - Radiopaque  
| A1, A2, A3, A3.5, B1 | Easy to manipulate and sculpt  

### Special Features for Riva Light Cure HV

- New!
- Used with Riva Light Cure + Riva Light Cure HV for:
  - Non-stress bearing Class I and II restorations
  - Class III restorations
  - Cervical (Class V) restorations
  - Cervical erosions
  - Abfraction lesions
  - Root surface restorations
  - Deciduous teeth restorations
  - Geriatric restorations
  - Core build ups
  - Temporary fillings
  - Base / dentin replacement
  - Co-curing with composite (Sandwich technique)

<table>
<thead>
<tr>
<th>Packaging Options</th>
<th>Description</th>
</tr>
</thead>
</table>
| Riva Light Cure HV | Boxes of 50 capsules  
  - Powder / liquid kits  
  - Powder refills  
  - Liquid refills  
  - Shades: A1, A2, A3, A3.5, A4, B2, B3, B4, C2, C4, Bleach |
| Riva Light Cure | Boxes of 50 capsules  
  - Powder / liquid kits  
  - Powder refills  
  - Liquid refills  
  - Shades: A1, A2, A3, A3.5, B1 |
### mercury free fluoride releasing silver restorative

#### self cured, conventional glass ionomer restorative material

When you need a tough and strong core build up material or occlusal restoration, Riva Silver could be your answer. Riva Silver is an excellent core build up material. At the same time, it is a great restorative. When all else fails, Riva Silver could be your solution.

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<tr>
<th>use riva silver for</th>
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<tbody>
<tr>
<td>Non stress bearing Class I and II restorations</td>
<td>Chemically adheres to tooth structure</td>
<td>Boxes of 50 capsules</td>
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<tr>
<td>Core buildups</td>
<td>High fluoride release</td>
<td>Powder / liquid kits</td>
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<tr>
<td>Deciduous teeth restorations</td>
<td>Easy handling</td>
<td>Powder refills</td>
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<tr>
<td>Geriatric restorations</td>
<td>No shrinkage</td>
<td>Liquid refills</td>
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<tr>
<td>Intermediate restoratives and base material for class I and II cavities using the sandwich technique</td>
<td>Great for core build ups</td>
<td></td>
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<tr>
<td>Class V restorations in non-esthetic situations</td>
<td>High early strength - perfect for children and challenging patients</td>
<td></td>
</tr>
<tr>
<td>Temporary fillings</td>
<td>Silver reinforced</td>
<td></td>
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<tr>
<td>Restorations where radiopacity is desirable</td>
<td>Very high radiopacity</td>
<td></td>
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<tr>
<td>Restorative in the field using ART (Atraumatic restorative techniques)</td>
<td>High wear resistance</td>
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<tr>
<td>Temporary endodontic fillings</td>
<td>Bioactive proprietary ionglass™ technology</td>
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<td></td>
<td>Light grey shade – minimal masking required</td>
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</tbody>
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[ionglass™]
the ultimate glass ionomer surface protector, sealant and liner

self cured, conventional glass ionomer sealant / liner

There are many situations where you know protection of the surface is required: pit and fissure sealants, root / tooth surfaces, preventing hypersensitivity, temporary restorations and temporary endodontic sealing. You will often see carious situations you would like to remineralize. Riva Protect is your weapon.

**use riva protect for**

- Pit and fissure sealing
- Root / tooth surface protection
- Hypersensitivity prevention
- Temporary fillings
- Temporary endodontic fillings
- Lining
- Bite openings (for orthodontics)

**advantages**

- Works in a moist environment – indicated for partially erupted teeth and challenging patients
- Chemically adheres to tooth structure
- BPA & HEMA free
- Super high fluoride release
- ACP nanotechnology – supercharges remineralization
- Assists in arresting and preventing caries - fluoride recharging and releasing
- Low viscosity for easy placement and pit/fissure penetration
- Bioactive proprietary ionglass™ technology
- Radiopaque

**packaging**

- Boxes of 50 capsules
- Powder / liquid kits
- Powder refills
- Liquid refills
- Shades: White and Pink
- Regular Set and Fast Set
When deciding on a luting cement, there are many types to choose from. Use Riva Luting when you need an easy self curing mix, with high fluoride release, good radiopacity, adhesion to metal and tooth surfaces.

### Use Riva Luting for
- Cementation of metal or porcelain fused to metal inlays, onlays and crowns
- Cementation of stainless steel crowns
- Cementation of metal posts and screws
- Attachment of metal orthodontic bands
- Lining

### Advantages
- Great for PFM crowns, metal posts, orthodontic bands, implants
- BPA & HEMA free
- Very low film thickness – flows easily between restoration and tooth
- Easy to clean up
- High fluoride release
- Chemically adheres to tooth structure and metal substrates
- Low water solubility - increased longevity and esthetics
- High bond strengths
- Bioactive proprietary ionglass™ technology – high ion exchange
- Light yellow shade

### Packaging
- Boxes of 50 capsules
- Powder / liquid kits
- Powder refills
- Liquid refills
self cured, resin modified glass ionomer luting cement

A luting cement that can be used with metal and resin based restorations, as well as a variety of substrates. Riva luting Plus is designed for final cementation of metal, PFM and resin crowns, bridges, inlays and onlays plus ceramic inlays and crowns. Riva Luting Plus chemically bonds to dentin, enamel and all types of core material.

universally indicated resin-modified glass ionomer luting cement*

- Cementation of resin, metal, or porcelain fused to metal inlays, onlays, bridges and crowns
- Cementation of ceramic inlays and crowns
- Cementation of pins, posts and screws

use riva luting plus for

- Chemically adheres to tooth and substrates
- BPA free
- High bond strengths
- High fluoride release
- High flexural strength - reduced cracking and failure in flexion
- Clinically insoluble
- High acid resistance
- Bioactive proprietary ionglass™ technology – high ion exchange
- Radiopaque
- Light yellow shade

advantages

packaging

Boxes of 50 capsules
Powder / liquid kits
Powder refills
Liquid refills

*Except for all ceramic veneers.
# Summary of Indications

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<th>RESTORATIVE</th>
<th>PREVENTATIVE</th>
<th>LUTING</th>
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<tr>
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<td>riva self cure</td>
<td>riva self cure HV</td>
<td>riva light cure</td>
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<tr>
<td>Dentin replacement</td>
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<tr>
<td>ART Technique</td>
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<td>Base</td>
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<td>Lining</td>
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<tr>
<td>Non stress bearing class I &amp; II restorations</td>
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<tr>
<td>Class III restorations</td>
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<td>Class V restorations:</td>
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<tr>
<td>• Abfraction lesions</td>
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<tr>
<td>• Cervical erosion</td>
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<td>• Root surface restoration</td>
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<tr>
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<td>• Hypersensitivity prevention</td>
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<td>Bite opening (for orthodontics)</td>
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<td>Cementing metal based restorations</td>
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