Best Provisional Cements: Solutions for a Temporary Problem

Additional Information on Provisional Cements 2021

In a recent survey (n=704), clinicians identified over 50 different materials used as provisional cements. These data indicate that clinical success is possible with numerous different brands and chemistries, depending on clinician preferences.

The following table shows the 15 brands reported as most used. To help illustrate current trends, results are included from a 2011 CR comparison of provisional cements.

<table>
<thead>
<tr>
<th>Brand Company</th>
<th>Percent Users from Survey</th>
<th>Chemistry</th>
<th>Example Cost</th>
<th>Cure Mechanism</th>
<th>Mix Options</th>
<th>Results from 2011 Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp-Bond Kerr</td>
<td>35.3%</td>
<td>Zinc oxide eugenol</td>
<td>$121/Two syringes</td>
<td>Auto-cure</td>
<td>Auto-mix syringe or unidose, hand-mix tubes</td>
<td>Excellent CR Choice</td>
</tr>
<tr>
<td>Temp-Bond NE Kerr</td>
<td>28.7%</td>
<td>Zinc oxide non-eugenol</td>
<td>$121/Two syringes</td>
<td>Auto-cure</td>
<td>Auto-mix syringe or unidose, hand-mix tubes</td>
<td>Good</td>
</tr>
<tr>
<td>Durelon 3M</td>
<td>11.8%</td>
<td>Carboxylate</td>
<td>$162/Kit</td>
<td>Auto-cure</td>
<td>Hand-mix powder/liquid, triturated capsule</td>
<td>Excellent–Good</td>
</tr>
<tr>
<td>Temp-Bond Clear with Triclosan Kerr</td>
<td>10.2%</td>
<td>Resin</td>
<td>$91/Syringe</td>
<td>Dual-cure</td>
<td>Auto-mix syringe</td>
<td>Excellent–Good</td>
</tr>
<tr>
<td>IRM Dentply Sirona</td>
<td>10.0%</td>
<td>Zinc oxide eugenol, polymer reinforced</td>
<td>$118/Kit</td>
<td>Auto-cure</td>
<td>Hand-mix powder/liquid, triturated capsule</td>
<td>Excellent–Good</td>
</tr>
<tr>
<td>RelyX Temp NE 3M</td>
<td>7.8%</td>
<td>Zinc oxide non-eugenol</td>
<td>$58/Kit</td>
<td>Auto-cure</td>
<td>Hand-mix tubes</td>
<td>Excellent–Good</td>
</tr>
<tr>
<td>Integrity TempGrip Dentply Sirona</td>
<td>6.5%</td>
<td>Zinc oxide non-eugenol</td>
<td>$136/Two syringes</td>
<td>Auto-cure</td>
<td>Auto-mix syringe</td>
<td>Good</td>
</tr>
<tr>
<td>Zone Pentron</td>
<td>5.5%</td>
<td>Zinc oxide non-eugenol</td>
<td>$54/Syringe</td>
<td>Auto-cure</td>
<td>Auto-mix syringe or unidose, hand-mix tubes</td>
<td>Good</td>
</tr>
<tr>
<td>Cling' Clinician’s Choice</td>
<td>5.3%</td>
<td>Zinc oxide non-eugenol, polycarboxylate</td>
<td>$85/Syringe</td>
<td>Auto-cure</td>
<td>Auto-mix syringe</td>
<td>Good</td>
</tr>
<tr>
<td>Fynal Dentply Sirona</td>
<td>5.0%</td>
<td>Zinc oxide eugenol</td>
<td>$210/Kit</td>
<td>Auto-cure</td>
<td>Hand-mix powder/liquid</td>
<td>Excellent–Good</td>
</tr>
<tr>
<td>NexTemp Premier Dental</td>
<td>4.3%</td>
<td>Resin</td>
<td>$45/Syringe</td>
<td>Auto-cure</td>
<td>Auto-mix syringe</td>
<td>Excellent CR Choice</td>
</tr>
<tr>
<td>GC TEMADVANTAGE GC America</td>
<td>3.5%</td>
<td>Zinc oxide non-eugenol</td>
<td>$60/Syringe</td>
<td>Auto-cure</td>
<td>Auto-mix syringe</td>
<td>Excellent–Good</td>
</tr>
<tr>
<td>ClearTemp LC Ultradent</td>
<td>2.4%</td>
<td>Resin</td>
<td>$37/Four Syringes</td>
<td>Light-cure</td>
<td>Syringe</td>
<td>Not evaluated in 2011</td>
</tr>
<tr>
<td>Telio Link Ivoclar Vivadent</td>
<td>2.4%</td>
<td>Zinc oxide non-eugenol, resin-modified</td>
<td>$127/Syringe</td>
<td>Dual-cure</td>
<td>Auto-mix syringe</td>
<td>Not evaluated in 2011</td>
</tr>
<tr>
<td>Temrex Cement Temrex</td>
<td>2.2%</td>
<td>Zinc oxide eugenol</td>
<td>$45/25 g powder, 1 oz liquid</td>
<td>Auto-cure</td>
<td>Hand-mix powder/liquid</td>
<td>Not evaluated in 2011</td>
</tr>
</tbody>
</table>

- The Temp-Bond product line by Kerr continues to dominate the provisional cement market.
- Zinc-oxide chemistry continues to be most popular, with both eugenol and non-eugenol formulations.
- Resin-based and resin-modified provisional cements are increasing in number and popularity, with formulations designed to provide advantageous material properties, including: handling, strength, chemical adhesion, esthetics, light or dual-cure options, etc.

Additional Product Brands Reported in Use (in order of frequency)

- TempoCem (DMG)
- TempoCemNE (DMG)
- E.T.C. (Parkell)
- RelyX Temp E (3M)
- Provicol QM (Voco)
- UltraTemp (Ultradent)
- SensiTemp (Sultan Healthcare)
- HY-Bond (Shofu)
- Olympian-M (Dent Zar)
- Dycal (Dentsply Sirona)

- Zinc Oxide Eugenol (Henry Schein)
- EXACTA Cement Xtra (EXACTA)
- GC Fuji Temp LT (GC America)
- NOGENOL (GC America)
- NoMIX (Centrix)
- TempoCemID (DMG)
- TempoSIL 2 (Coltene Whaledent)
- ZOE B&T (Dentsply Sirona)
- Bifix Temp (Voco)

- DentoTemp (Itena)
- Durelon (3M) mixed with Vaseline
- Embonte (Pentron)
- Flowable resin (various companies)
- FREEGENOL (GC America)
- Harvard Cement (Harvard)
- Master-Dent Temporary Cement (Dentronics)
- PowerTemp (Morita)

- Premier Implant Cement (Premier Dental)
- Provicol QM Aesthetic (Voco)
- TempoLok NE (Sterngold)
- Temporary Cement Automix NE (Darby)
- Temporary Cement (Burkhart)
- TransTemp (Denttaco)
- TyLok Plus (Dentsply)
- Vivid TempoCem NE (Pearson)