## CASTABLE MOUNTING COMPOUNDS SELECTION GUIDE - BASED ON CURE TIME & MATERIAL

<table>
<thead>
<tr>
<th>Material</th>
<th>10 Minutes</th>
<th>20 Minutes</th>
<th>90 Minutes</th>
<th>6 Hours</th>
<th>9 Hours</th>
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</thead>
<tbody>
<tr>
<td><strong>Ceramics</strong></td>
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<tr>
<td>VariDur™ 200 Hard Acrylic</td>
<td>EpoHeat™ 2 Heat curing, Low Shrinkage, Low Viscosity</td>
<td>EpoCure™ 2 Low Shrinkage</td>
<td>EpoThin™ 2 Fills Very Small Holes; Low Shrinkage; Transparent</td>
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<td><strong>Steels</strong></td>
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<td><strong>Plated Layers/Thermal Sprays</strong></td>
<td>EpoHeat™ 2 Heat curing, Low Shrinkage, Low Viscosity</td>
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<tr>
<td><strong>Aluminum Copper/Brass</strong></td>
<td>SamplKwick Very Fast Translucent Acrylic, Some Shrinkage</td>
<td>EpoKwick™ Fast Epoxy</td>
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<td><strong>Plastics</strong></td>
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<td>SamplKwick Very Fast Translucent Acrylic, Some Shrinkage</td>
<td>EpoColor™ Dye-Enhanced Epoxy</td>
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</table>
## Technical Information Guide: Final Polishing & Preparation Guides

### CASTABLE MOUNTING COMPOUNDS - COMPARISON

<table>
<thead>
<tr>
<th>Castable Mounting Compounds Troubleshooting Guide</th>
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<tbody>
<tr>
<td><strong>Defect</strong></td>
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<tr>
<td>Non-Curing</td>
</tr>
<tr>
<td>Slow Curing</td>
</tr>
<tr>
<td>Rapid Curing</td>
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<tr>
<td>Gas Tunnels</td>
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<tr>
<td>Mount Stuck in Mold</td>
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<tr>
<td>Solvent Softening</td>
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<tr>
<td>Excessive Shrinkage</td>
</tr>
</tbody>
</table>

*Placing in oven at 120 °F (50 °C) for up to two hours may accelerate the curing of epoxies.

### Acrylic
- **SamplKwick**™
  - Translucent, general purpose acrylic system
  - Clearest acrylic (when cured under pressure)
- **VariKlear**™
  - Transparent, low shrinkage, low odor acrylic system
  - Filled low shrinkage, abrasion resistant acrylic
- **VariDur**
  - Best Edge Retention highest hardness, lowest shrinkage acrylic
  - Transparent general purpose epoxy system, low shrinkage
  - Transparent, low viscosity epoxy for filling pores
  - Lowest viscosity and fastest curing epoxy when heated
  - Clear, fastest curing epoxy system

### Epoxy
- **EpoxiCure**™
  - Clear, fastest curing epoxy system
  - Dye-enhanced epoxy to highlight specimen voids under polarized light
- **EpoThin**™
  - Transparent general purpose epoxy system, low shrinkage
  - Transparent, low viscosity epoxy for filling pores
- **EpoHeat**™
  - Lowest viscosity and fastest curing epoxy when heated
- **EpoKwick**™
  - EpoColor™

### Mix Ratio

<table>
<thead>
<tr>
<th>Mix Ratio (Volume)</th>
<th>Acrylic</th>
<th>Epoxy</th>
</tr>
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<tbody>
<tr>
<td>3 parts Powder: 2 Parts Liquid A: 1 Part Liquid B</td>
<td>4 parts resin: 1 Part Hardener</td>
<td>4 parts resin: 1 Part Hardener</td>
</tr>
<tr>
<td>4 parts resin: 1 Part Hardener</td>
<td>100 parts resin: 23 Parts hardener</td>
<td>100 parts resin: 45 Parts hardener</td>
</tr>
<tr>
<td>5 parts resin: 1 part hardener</td>
<td>100 parts resin: 20.6 parts hardener</td>
<td>90 minutes at 55°C</td>
</tr>
<tr>
<td>4 parts resin: 1 Part Hardener</td>
<td>90 minutes</td>
<td>90 minutes</td>
</tr>
<tr>
<td>4 parts resin: 1 Part Hardener</td>
<td>6 hours</td>
<td>6 hours</td>
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### Cure Time:
- 8 minutes
- 15 minutes
- 8 minutes
- 8 minutes
- 18 minutes
- 6 hours
- 9 hours
- 90 minutes at 55°C
- 90 minutes
- 6 hours

### Peak Exotherm:
- 79°C
- 100°C
- 95°C
- 80°C
- 106°C
- 40°C
- 30°C
- 170°C
- 145°C
- 145°C

### Shrinkage:
- High
- High
- High
- Medium
- Lowest
- Medium
- Medium
- Medium
- Medium
- Medium

### Pot Life:
- <5 minutes
- <5 minutes
- <5 minutes
- <5 minutes
- <5 minutes
- 30 minutes
- 60 minutes
- 180 minutes
- 10 minutes
- 30 minutes

### Shore D Hardness:
- ~80
- ~80
- ~80
- ~85
- ~90
- ~80
- ~75
- ~78
- ~82
- ~82

### Additional Equipment
- Pressure Pot Required for best clarity
- Vacuum optional for filling voids
- Vacuum optional for filling voids
- Lab oven required for curing
- Vacuum optional for filling voids