Room Temperature Curing Optical Adhesives

Why are Room Temperature (RT) Optical Adhesives Important?

- Ideal for bonding temperature sensitive substrates.
- No need for an oven to accommodate large parts.
- Lowest stress cure for large parts or high stress temperature cycling.

<table>
<thead>
<tr>
<th>Product</th>
<th>Viscosity (cPs)</th>
<th>TI</th>
<th>Cure Time @ 23°C</th>
<th>Pot Life (hrs)</th>
<th>Tg</th>
<th>Die Shear (kg)</th>
<th>Color After Cure</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>301-2FL Family</strong></td>
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<tr>
<td>301-2FL</td>
<td>100-200 @100 rpm</td>
<td>n/a</td>
<td>3 days @ 23°C</td>
<td>10</td>
<td>&gt;45°C</td>
<td>&gt;10</td>
<td>clear/colorless</td>
<td>Flexible, optically clear, low temperature cure adhesive</td>
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<tr>
<td>301-2FL-T</td>
<td>492 @100 rpm</td>
<td>2.6</td>
<td>3 days @ 23°C</td>
<td>5</td>
<td>67°C</td>
<td>9</td>
<td>cloudy/colorless</td>
<td><strong>NEW</strong> Thixotropic version of 301-2FL</td>
</tr>
</tbody>
</table>

| **302-3M Family** |                 |     |                   |                |    |                |                  |                                                                          |
| 302-3M        | 800-1,600 @100 rpm | n/a| 24 hours @ 23°C | 1              | >55°C | >10            | clear/colorless  | Optically clear, low temperature cure adhesive with excellent reliability and 85°C/85%RH resistance. |
| 115-133-3     | 586 @100 rpm    | n/a| 24 hours @ 23°C | 2              | 62°C | 23             | clear/orange    | Version of 302-3M with enhanced 85°C/85%RH resistance                   |
| 115-133-1     | 926 @100 rpm    | 2.1| 24 hours @ 23°C | 1              | 63°C | 22             | cloudy/orange   | Three levels of viscosities/rheologies for a variety of application techniques. |
| 115-133-2     | 1,163 @100 rpm  | 2.9| 24 hours @ 23°C | 1              | 59°C | 24             | cloudy/orange   | IR transparent, fast curing, with superior moisture resistance. Orange in color when cured above 100°C. |
**Exceptional Moisture Resistance with a Low Temperature Cure**

- Stress sensitive FO connections
  - PM fibers
  - Polymer fibers
  - Multi-mode fibers
- Precision optics attach
  - Low shrinkage for best possible alignment of prisms, lenses and mirrors
- Near hermetic sealing (package sealing in temperature sensitive environments)
  - Batteries
  - Sensitive electronics

**Semiconductor Packaging**

- Low shrinkage for large die underfill or encapsulant
- SMD/SMT staking of temperature sensitive packages
- Stress sensitive ferrite bonding

**Small Potting/Encapsulation**

- Moisture sensitive electronics and sensors

**Medical/Life Science**

- Suggested for plastic structural and sealing applications of medical electronics outside the body, whether home care or clinical care
- Water-proofing, potting and sealing consumer related electronics, whether hand held or worn, found in leisure, sports rehab, or home-care devices and applications

Please consult our **Application Experts** to assist in selecting the most suitable adhesive for your specific technical challenge: techserv@epotek.com