RM-3010 Bismaleimide (BMI) Resin for Vacuum Assisted Resin Transfer Molding (VARTM) Processing
Product Information
RM-3010 Bismaleimide (BMI) Resin

Developed using state-of-the-art formulating technologies, **RM-3010 One-Part BMI VARTM Resin** delivers superior hot/wet performance in airframe, missile and propulsion applications at service temperatures up to 400°F. RM-3010 BMI resin delivers improved damage tolerance at higher temperatures vs. industry-standard BMI resins. RM-3010 resin can be injected into a variety of woven and non-crimp fabrics as well as braids and other complex engineered preforms. Its long pot life (< 1000 cps @ 8 hours at 110°C) makes it very suitable for injecting large complex structural parts.

Renegade also offers a similar resin system for Resin Transfer Molding (RTM) processing to support molding of smaller, tightly tolerated parts called RM-3000 and an autoclave prepreg version called RM-3002.

<table>
<thead>
<tr>
<th>RM-3000 Resin Properties</th>
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<tbody>
<tr>
<td>Cured Resin Density</td>
<td>1.25 g/cc</td>
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<tr>
<td>Glass Transition Temperature</td>
<td></td>
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<tr>
<td>DMA by G' onset</td>
<td>550°F</td>
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<tr>
<td>TMA</td>
<td>525°F</td>
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<tr>
<td>72 hr., 180°F water immersion</td>
<td>485°F</td>
</tr>
<tr>
<td>Resin Flex Strength</td>
<td>18 ksi</td>
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<tr>
<td>Resin Flex Modulus</td>
<td>665 ksi</td>
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<tr>
<td>Resin Flex Strain to Failure</td>
<td>2.5%</td>
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</tbody>
</table>
“Seller makes no warranty regarding the accuracy of this information. Buyers should make their own evaluation to determine suitability of any product for their own intended purposes.”

RM-3010 Typical Viscosity at infusion Temperature

![Graph showing typical viscosity of RM-3010 over time](image)

- 000 cps = 5 hours and 20 minutes
- Viscosity at 10 hours = 1159 cps
Renegade Recommended Infusion Temperature and Cure Cycle for RM-3010

**RM3010 Cure Profile**
- Infusion Temperature 215 - 225°F
- Cure 275°F hold 2 hours.
- Ramp to 360°F, Hold 6 hours.
- Post cure 450 - 475°F/ 6 hours.

Renegade Recommended Storage Conditions and Shelf Life for RM-3010

Storage Life is dependent upon storage temperature. Keep containers sealed tightly when not in use. To reduce moisture pick-up, allow the container to reach room temperature prior to opening.

**STORAGE CONDITIONS:**
1) At or Below 10°F in a Sealed Container: 6 months.
2) Room Temperature (at or below 75°F) Storage in a Sealed Container: 1 month
Renegade Materials Corporation is a global leader in manufacturing composite materials for aerospace applications. We deliver light-weight, highly-engineered prepregs, adhesives and hybrid composite systems to enable maximum fuel efficiency in commercial and military aircraft structures.

For an MSDS, pricing or additional information on Renegade products, please call us at 937-350-5274 or visit our website at [www.renegadematerials.com](http://www.renegadematerials.com)

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