**PRODUCT DESCRIPTION**
High-Compliance, Thermally Conductive, Low Modulus Material

**FEATURES AND BENEFITS**
- Thermal Conductivity: 3.0 W/m-K
- High-compliance, low compression stress
- Fiberglass reinforced for shear and tear resistance

Gap Pad® HC 3.0 is a soft and compliant gap filling material with a thermal conductivity of 3.0 W/m-K. The material offers exceptional thermal performance at low pressures due to a unique 3.0 W/m-K filler package and low-modulus resin formulation. The enhanced material is ideal for applications requiring low stress on components and boards during assembly. Gap Pad® HC 3.0 maintains a conformable nature that allows for quick recovery and excellent wet-out characteristics, even to surfaces with high roughness and/or topography.

Gap Pad® HC 3.0 is offered with natural inherent tack on both sides of the material, eliminating the need for thermally-impeding adhesive layers. The top side has minimal tack for ease of handling. Gap Pad® HC 3.0 is supplied with protective liners on both sides.

*Note: To build a part number, visit our website at www.bergquistcompany.com.*

---

**TYPICAL PROPERTIES OF GAP PAD HC 3.0**

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>IMPERIAL VALUE</th>
<th>METRIC VALUE</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Blue</td>
<td>Blue</td>
<td>Visual</td>
</tr>
<tr>
<td>Reinforcement Carrier</td>
<td>Fiberglass</td>
<td>Fiberglass</td>
<td>—</td>
</tr>
<tr>
<td>Thickness (inch) / (mm)</td>
<td>0.010 to 0.125</td>
<td>0.508 to 3.175</td>
<td>ASTM D374</td>
</tr>
<tr>
<td>Inherent Surface Tack</td>
<td>2</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>Density (Bulk Rubber) (g/cc)</td>
<td>3.1</td>
<td>3.1</td>
<td>ASTM D792</td>
</tr>
<tr>
<td>Heat Capacity (J/g-K)</td>
<td>1.0</td>
<td>1.0</td>
<td>ASTM E1269</td>
</tr>
<tr>
<td>Hardness (Bulk Rubber) (Shore 00) (4)</td>
<td>15</td>
<td>15</td>
<td>ASTM D2240</td>
</tr>
<tr>
<td>Young's Modulus (psi) / (kPa) (1)</td>
<td>16</td>
<td>110</td>
<td>ASTM D575</td>
</tr>
<tr>
<td>Typical Use Temp (°F) / (°C)</td>
<td>-76 to 392</td>
<td>-60 to 200</td>
<td>—</td>
</tr>
</tbody>
</table>

**ELECTRICAL**
- Dielectric Breakdown Voltage (Vac) (3) 5000 / 5000
- Dielectric Constant (1000 Hz) 6.5
- Volume Resistivity (Ohm-meter) $10^{10}$
- Flame Rating V-O

**THERMAL**
- Thermal Conductivity (W/m-K) (2) 3.0 / 3.0

**THERMAL PERFORMANCE vs. STRAIN**

<table>
<thead>
<tr>
<th>Deflection (% strain)</th>
<th>10</th>
<th>20</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Impedance (°C-in²/W) 0.040&quot; (2)</td>
<td>0.57</td>
<td>0.49</td>
<td>0.44</td>
</tr>
</tbody>
</table>

1) Young’s Modulus, calculated using 0.01 in/min. step rate of strain with a sample size of 0.79 inch² after 5 minutes of compression at 10% strain on a 1 mm thickness material.
2) The ASTM D5470 test fixture was used. The recorded value includes interfacial thermal resistance. These values are provided for reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied.
3) Minimum value at 20 mil.
4) Thirty second delay value on Shore 00 hardness scale.

**TYPICAL APPLICATIONS INCLUDE**
- Telecommunications
- ASICs and DSPs
- Consumer electronics
- Thermal modules to heat sinks

**CONFIGURATIONS AVAILABLE**
- Sheet form and die-cut parts

---

**Note:** To build a part number, visit our website at www.bergquistcompany.com.
Disclaimer

Note:
The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:
The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:
The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user’s purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage
Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. © denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.1