Imagine a specialty compound based on a Polycarbonate (PC) and Acrylic alloy. One that can be processed at lower temperatures than PC, decreasing the cooling time and, in turn, the cycle time of the injection molding process. At RTP Company, we'll put our imagination to work to create an ideal PC/Acrylic compound for your application.

The synergistic effect of a PC/Acrylic alloy results in a compound that displays higher impact strength than PC while maintaining the processing ease associated with Acrylics. Better yet, pricing for PC/Acrylic Compounds are comparable to those made with PC/ABS, even though overall properties are similar or better.

RTP Company engineers can tailor your PC/Acrylic Compound to incorporate wear additives, flame retardants, and PermaStat® permanently anti-static protection. The compound’s natural opaque white provides excellent base for a wide range of colors. Compounds can also be overmolded with elastomers providing a “soft-touch” feel.

Key applications for PC/Acrylic Compounds include:
- Housings (e.g. hand held devices, fire alarms, lighted signs, appliances, security system control panels, and medical diagnostic devices)
- Computer components (e.g. PCI dividers and dummy SIMM fillers)
- Shutter actuator for printer toner cartridges (see story on back)
- Snow board bindings
- Existing PC or PC/ABS applications

PC/Acrylic Compounds from RTP Company…another innovation from the leader in specialty compounding.

PermaStat® is a registered trademark of RTP Company.
### PC/Acrylic Compounds Balance Performance and Processability

#### Superior Impact Resistance

<table>
<thead>
<tr>
<th>Test</th>
<th>Recolored PC/Acrylic</th>
<th>Recolored PC</th>
<th>Recolored PC/ABS</th>
<th>Flame Retardant PC/Acrylic</th>
<th>Flame Retardant PC</th>
<th>Flame Retardant PC/ABS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Notched (ft-lbs/in)</td>
<td>D-256</td>
<td>30</td>
<td>18</td>
<td>10</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Impact Unnotched (ft-lbs/in)</td>
<td>D-256</td>
<td>*</td>
<td>*</td>
<td>*</td>
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<td>*</td>
</tr>
<tr>
<td>Tensile Strength (psi)</td>
<td>D-638</td>
<td>8,850</td>
<td>9,500</td>
<td>8,500</td>
<td>7,500</td>
<td>8,600</td>
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<tr>
<td>Tensile Modulus (x10^6 psi)</td>
<td>D-638</td>
<td>0.35</td>
<td>0.35</td>
<td>0.40</td>
<td>0.32</td>
<td>0.33</td>
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<td>Flexural Strength (psi)</td>
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<td>12,000</td>
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<tr>
<td>Flexural Modulus (x10^6 psi)</td>
<td>D-790</td>
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<td>0.34</td>
<td>0.40</td>
<td>0.34</td>
<td>0.32</td>
</tr>
</tbody>
</table>

* No break

#### Superior Processability

When injection molding PC/Acrylic compounds, processing conditions are 75-100°F cooler than those required for the processing of PC. This allows for greater throughput. The chart at left depicts viscosity versus shear rate, which displays the superior flow characteristics of RTP Company’s PC/Acrylic alloy.

At Lexmark, an RTP 1800A Series PC/Acrylic compound reduced both material and processing costs. The actuator holds open the shutter on a printer toner cartridge and must retain its dimensions and resist bending for long periods of time. Lexmark performs extensive drop testing and these parts have not failed a single drop test.

Full story: www.rtpcompany.com/info/apps

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The Leader in Specialty Compounding

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