Momentive’s **CoolFX** Hybrid Fillers are a new generation of materials developed to provide step-change improvements in cost and performance for thermal management applications. The portfolio is broad to enable use in a wide range of advanced material applications.

**Potential Applications**

**CoolFX** Hybrid Filler grades can be considered for use to enhance thermal conductivity while providing electrical isolation in thermoplastics. Potential end-use applications include:

- LED lighting fixtures
- Consumer electronic devices
- Aerospace, automotive cooling systems
- Motor and battery housings
- Temperature sensors
- Heat exchangers

**Key Features and Typical Benefits**

- Electrically insulating
- Better physical properties
- More consistent feeding
- Easier extrusion
- White formulations possible
- Potentially lower total cost

### Typical Physical Properties (1)

<table>
<thead>
<tr>
<th>Product Grade</th>
<th>For Use in Thermoplastic Resins</th>
<th>Filler Loading Range (wt%)</th>
<th>Thermal Conductivity Range (W/mK)</th>
<th>Bulk Density (g/cc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFX-1020</td>
<td>PA</td>
<td>43-57%</td>
<td>3-5</td>
<td>0.65</td>
</tr>
<tr>
<td>CFX-1026</td>
<td>PP</td>
<td>43-57%</td>
<td>3-5</td>
<td>0.65</td>
</tr>
<tr>
<td>CFX-1035</td>
<td>PC</td>
<td>43-57%</td>
<td>3-5</td>
<td>0.63</td>
</tr>
<tr>
<td>CFX-1036</td>
<td>PPS</td>
<td>43-57%</td>
<td>3-5</td>
<td>0.63</td>
</tr>
<tr>
<td>CFX-1022</td>
<td>All</td>
<td>61-72%</td>
<td>3-5</td>
<td>0.80</td>
</tr>
<tr>
<td>CFX-1021</td>
<td>All</td>
<td>60-73%</td>
<td>7-10</td>
<td>0.92</td>
</tr>
</tbody>
</table>

(1) Typical properties are average data and are not to be used as or to develop specifications.

**Scanning Electron Microscope Images of CoolFX Hybrid Fillers**

*CoolFX* is a trademark of Momentive Performance Materials Inc.
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