Product Name: QPAC® 130

Technical Name: Poly (cyclohexene propylene carbonate)

Chemical Formula: \[
\begin{align*}
\text{O} & \quad \text{O} \\
\text{C} & \quad \text{O} \\
\text{n} & \quad \text{n}
\end{align*}
\]

Product Description: Poly (cyclohexene carbonate) is a solid polymer. It is an amorphous, clear, readily processible plastic with long term mechanical stability.

Molecular Weight Avail: Approximately 150,000-200,000

Applications:
- Binder applications for ceramics, metal or glass powders.
- Decomposable channel former
- Pore former

Typical Physical Properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density (g/cm³)</td>
<td>1.10</td>
</tr>
<tr>
<td>Decomposition Temperature (°C)</td>
<td>250 (onset estimate)</td>
</tr>
<tr>
<td>Glass Transition Temperature (°C)</td>
<td>120-130</td>
</tr>
<tr>
<td>Solubility</td>
<td>Upon request</td>
</tr>
</tbody>
</table>

Product Delivery Form: It is available as a granulate, film, or in solution form.

Benefits Include:
- Upon decomposition, QPAC®130 leaves less than 10 ppm ash residue, resulting in excellent mechanical and/or electrical properties.
- Low temperature decomposition is excellent for thermal sensitive materials and is more efficient than other binders.
- QPAC®130 has a higher Tg than QPAC®25 and QPAC®40 offering more stability at higher temperatures.
- Decomposition can occur in a wide range of atmospheres including air, oxygen, nitrogen, hydrogen, argon and vacuum.