RECOMMENDED HANDLING PROCEDURES FOR PREMIXED AND FROZEN MATERIALS

Epoxies, Etc. manufactures and packages some products premixed and frozen (<-40°C) for ease of use, safer handling, consistent quality and convenience. These products arrive in syringes and are ready to use after following a few easy steps.

Here are some tips and important steps to ensure that you get optimal performance when you are ready to use the product:

1. Premixed and frozen products are shipped in dry ice (approximately -80°C).
2. **Always** handle these packages with protective gloves. This is for 2 reasons: to protect the package from a thermal shock condition* and to protect the handler from severe frostbite.
3. Premixed and frozen packages should be transferred immediately to a -40°C freezer. **Do not** allow the package to dwell at room temperature.
4. Please take note of the recommended shelf life of the product. It can range from 1 month to 6 months at -40°C.
5. When you are ready to use the product, remove it from the freezer (while wearing protective gloves and handling only at the ends of the syringe or cartridge) and place it in a vertical position with the tip down.
6. Remove the barrel end cap on the back or upper portion of the syringe or cartridge.
7. Thaw times vary depending on material and package size. Here are some recommended thaw times for some standard syringe sizes:

<table>
<thead>
<tr>
<th>Size</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3cc</td>
<td>20 minutes</td>
</tr>
<tr>
<td>10cc</td>
<td>30 minutes</td>
</tr>
<tr>
<td>30cc</td>
<td>45 minutes</td>
</tr>
<tr>
<td>50cc</td>
<td>50 minutes</td>
</tr>
</tbody>
</table>

8. Dispense the product within the pot life (as specified by Epoxies, Etc.).
9. Do not re-freeze the syringe. This can result in void formation or moisture contamination and can compromise the properties of the product.

*Exposure to rapid temperature changes can cause cracking or voiding in the syringe. These are commonly referred to Freeze Thaw Voids (FTV). The appearance of voids in FreezeBond™ products will not affect the quality of the product, but can be disruptive in certain critical bonding applications.

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