Innovative Epoxy Curing Agent

MXDA

Epoxy Hardener Raw Material
MXDA Advantages

- Excellent Chemical Resistance
- Cost saving through Material Reduction
- Fast Curing even at Low Temperature
- Low Viscosity (Easy Handling)

Structures and Property

<table>
<thead>
<tr>
<th></th>
<th>MXDA (MGC)</th>
<th>IPDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>136.1</td>
<td>170.3</td>
</tr>
<tr>
<td>Amine Value</td>
<td>824 mgKOH</td>
<td>659 mgKOH</td>
</tr>
<tr>
<td>AHEW / phr</td>
<td>34.0 / 18.3 g (Cost Saving)</td>
<td>42.6 / 22.9 g</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>14.1 °C</td>
<td>10 °C</td>
</tr>
<tr>
<td>Viscosity (25°C)</td>
<td>6.8 mPa•s</td>
<td>18 mPa•s</td>
</tr>
</tbody>
</table>
Typical Applications

MXDA shows excellent Chemical Resistance therefore is widely used in these applications...

Excellent Chemical Resistances

<table>
<thead>
<tr>
<th>Hardener</th>
<th>10wt% Sulfuric Acid</th>
<th>10wt% Acetic Acid</th>
<th>Toluene</th>
<th>5wt% Salt Spray (35°C 4 weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MXDA Adduct</td>
<td>★★★★★ Excellent</td>
<td>★★★ Fair</td>
<td>★★★★★ Excellent</td>
<td>★★★★★ Excellent</td>
</tr>
<tr>
<td>IPDA Adduct</td>
<td>★★★★★ Excellent</td>
<td>★★★ Poor</td>
<td>★★★ Fair</td>
<td>★★★ Poor</td>
</tr>
</tbody>
</table>

Epoxy Resin; Bis-A Type (jER828)
Curing Condition 1 week at 23°C
Cost Savings: Lower AHEW

Lower AHEW means less material... which equals 20% Cost Saving

MXDA

18.3 g

20% Material Reduction = Cost Saving

IPDA

22.9 g

Phr (Added Weight in 100 g Standard Epoxy Resin)

Epoxy Resin: BisphenolA Type(ER828)

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