**Dupont Dry Film Resists**

Dry Film Resists for Microsystems Technology and Wafer Level Packaging

`micro resist technology GmbH` is a distributor of DuPont Dry Film Resists for applications in micro systems technology and wafer level packaging.

### Key benefits of Dry Film Resists

Unlike liquid resists for similar high film thicknesses the application of dry film resists results in the same film thickness over the whole substrate, independent on its size. No edge bead is formed. i.e. the substrate utilisation is better than with liquid resists. Furthermore, reliability in film composition is improved. The application of the resist film to the substrates by lamination is easier than spin-coating and softbake of liquid resists. In addition, hardly any coating waste is generated. With dry film resists it is possible to protect holes from metallisation or etching by tenting.

DuPont Dry Film Resists distributed by `micro resist technology GmbH` comprise:

- **MX5000 series** e.g. for via formation, plating and RDL etching, used in Bosch process
- **WBR2000 series** e.g. for solder bumping (resist patterns thermally stable at 310 °C) by electroplating or stencil printing and for metal pillar manufacture
- **WPR1000 series** as cost-efficient resist for permanent applications, aspect ratio ~ 1:1

### Product overview

<table>
<thead>
<tr>
<th>Resist</th>
<th>Application</th>
<th>Film thickness [µm]</th>
<th>Permanent/Removable</th>
<th>Developer</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX 5000 Series MX 5000, MX 5000c</td>
<td>Multipurpose, e.g. Via (TSV) formation (DRIE), plating and protection, RDL etching</td>
<td>15 - 50</td>
<td>Removable</td>
<td>Spray development, 0.75% K₂CO₃ (mr-D 4000/75)</td>
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<tr>
<td>WBR 2000 Series</td>
<td>Creation of solder bumps by electroplating or stencil printing of solder-paste and reflow, copper-pillar plating</td>
<td>50, 75, 100, 120</td>
<td>Removable</td>
<td>Spray development, 1% K₂CO₃ (mr-D 4000/100)</td>
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<tr>
<td>WPR 1000 Series</td>
<td>Multipurpose resist (green-yellow colour) for permanent applications</td>
<td>50, 75, 100</td>
<td>Permanent</td>
<td>Spray development, 0.85% Na₂CO₃ anhydrous or 1% Na₂CO₃ monohydrate</td>
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</table>

Data sheets of DuPont Dry Film Resists can be found here:
http://www.microresist.de/products/dupont/dupont_prod_en.htm