GENERAL INFORMATION
AZ® 4999 is a spray coating dedicated highly transparent photoresist tailored to excel on special spray coating equipment (e.g. SUSS Delta AltaSpray) where it provides defect free and conformal coatings on devices with severe topography. Thick (several to several tens of microns) and uniform resist coatings are obtained on topography such as V-grooves and trenches with optimum coverage of sharp edges. There is no accumulation of resist in trenches. The use of AZ® 4999 photoresist enables high reproducibility in volume production applications.

RECOMMENDED PROCESS
Softbake: 100°C, 60 sec, hotplate
or 80°C – 115°C, 30 min, oven
or follow spray coater instructions
Exposure: i-, h-, g-line, broadband and monochromatic
Post Exposure Bake (PEB): not required, optional with monochromatic exposure
Developer: AZ 400K Developer 1:4
AZ 826 MIF Developer
AZ 351B Developer 1:4
Development Time: ~ 30 sec per micron resist thickness

SUITABLE ANCILLARIES
AZ® EBR 70/30 Edge Bead Remover
AZ® 400T Stripper / AZ® 100 Remover
**PHYSICAL AND CHEMICAL PROPERTIES**

Viscosity [cSt at 25°C]: 0.52
Solids content [%]: 4
Absorptivity [l/(g*cm)] at 398 nm: 0.1
Spectral sensitivity: 310 nm – 440 nm

**CAUCHY COEFFICIENTS**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
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<tbody>
<tr>
<td>Unbleached</td>
<td>1.6154</td>
<td>0.010349 µm²</td>
<td>0.000816 µm⁴</td>
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<tr>
<td></td>
<td>1.6154</td>
<td>1.0349 x 10⁶ Å²</td>
<td>8.16 x 10¹² Å⁴</td>
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**REFRACTIVE INDEX**

<table>
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<th></th>
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<th>633 nm</th>
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<tbody>
<tr>
<td>Unbleached</td>
<td>n</td>
<td>1.6463</td>
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<tr>
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<td>k</td>
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**COATING ON TOPOGRAPHY**

- 150 µm Step
- 10.2 µm
- 9.7 µm
- 4.2 µm
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