Technical datasheet

AZ® 4999 Photoresist





APPLICATIONS

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.

PHYSICAL AND CHEMICAL PROPERTIES

• Viscosity [cSt at 25°C]: 0.52

• Solids content [%]: 4

Absorptivity [I/(g*cm)] at 398 nm: 0.1
Spectral sensitivity: 310 nm - 440 nm

TYPICAL 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

OPTICAL/MODELLING CONSTANTS*

Cauchy A	1.6154
Cauchy B (µm²)	0.01034 9
Cauchy C (µm ⁴)	0.00081 6
n @ 633nm	1.6463
K @ 633nm	0



OPTICAL/MODELLING CONSTANTS*

Cauchy A	1.6154
Cauchy B (µm²)	0.010349
Cauchy C (µm⁴)	0.000816
n @ 633nm	1.6463
K @ 633nm	0

^{*} Unexposed photoresist film

COMPANION PRODUCTS

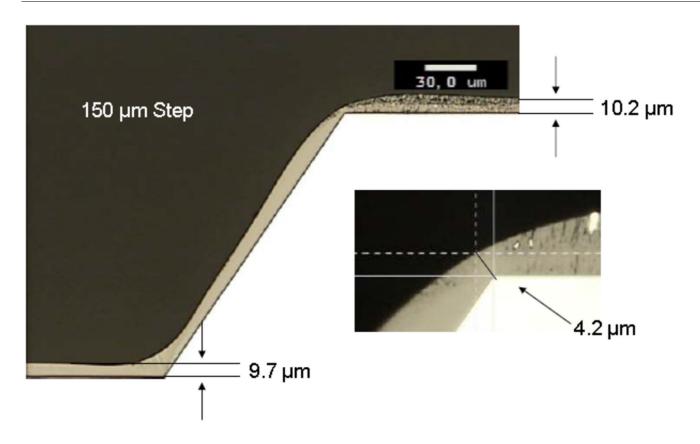
EDGE BEAD REMOVAL

AZ EBR Solvent or AZ EBR 70/30

REMOVERS

AZ 100 Remover or AZ 400T Stripper





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