



Lab Manual



Chapter 4.5

Miscellaneous Spin-Coat Processes

Miscellaneous Spin-Coat Materials at the Marvell Nanofabrication Laboratory		
	MicroChem LOR - 5A	Dow Chemical AR3-600
Thickness Range:	0.5 - 1.0 μm	0.05 - 0.09 μm
Spin Coat	(svgcoat3)	(svgcoat3)
Spin Speed (RPM):	5000, 1000	3750
Time:	30 sec.	30 sec.
Dispense:	Dynamic	Dynamic
Thickness:	0.5, 1.0 μm	0.06 μm
Prebake (soft bake)	(hotplate on svgcoat3)	(hotplate on svgcoat3)
Temp:	190 $^{\circ}\text{C}$	190 $^{\circ}\text{C}$
Time:	140, 200 sec.	60 sec.
Exposure	Can be used with DUV, i-line and g-line	Use when resolving features < 500 nm
Dose:		
Exp time:		
Post Exposure Bake (PEB)	Refer to process used for top layer patterning resist	Refer to process used for top layer patterning resist
Program:		
Bake Temp:		
Bake Time:		
Chill Time:		
Develop	Refer to process used for top layer patterning resist	Refer to process used for top layer patterning resist
Developer:		
Program:		
Method:		
Temp:		
Time:		
Rinse	Refer to process used for top layer patterning resist	Refer to process used for top layer patterning resist
Method:		
Time:		
Dry	Refer to process used for top layer patterning resist	Refer to process used for top layer patterning resist
Method:		

Hard Bake Method: Temp: Time: or UV Bake Method: Temp: Time:	Not recommended.	Refer to process used for top layer patterning resist
Strip Stripper: Method: Temp: Time:	(msink20) MicroChem Remover PG Ultrasonic Bath 60 °C 1 min. or (matrix) Plasma 2 min. 30 sec.	(msink1) PRS-3000 Bath 80°C 30 min. or (matrix) Plasma 2 min. 30 sec.
Post Strip Rinse/Dry Method: Time:	(msink20) Remover PG, Acetone, IPA Rinse /Dry 5 min.	(srdmsink1) Standard recipe Rinse /Dry 5 min.