OCG OiR 620i Photoresist

i-line (365 nm) specific photoresist, used with the GCA AutoStep 200 and 6300 10x Steppers.

Available as OiR 897-7i, 12i, 21i depending on film thickness desired.

1.a. (Optional) Dehydration bake at 150°C for 30 minutes.

1.b. Liquid prime with P-20 (20% HMDS) primer. Apply primer over entire wafer, allow to remain for 10 seconds, then spin dry (3000-5000 RPM, 30 sec.)

-or-

1. Vapor prime wafer with YES Oven HMDS process.

2. Dispense photoresist in middle of wafer. Spin immediately at desired speed, 20 - 30 seconds (thicker films take a longer time to reach uniformity). You may wish to ramp up to the desired speed for better coverage over topography.

3. Solvent removal bake at 90°C for 1-1/2 minutes on the hot plate or 20 - 30 minutes in the oven. Thicker films benefit from longer baking.

4. Expose. Time will vary depending on the exposure tool, resist thickness, bake time, substrate reflectivity, intermediate film thickness, etc.

5. Post-exposure bake, 115° - 120°C for 1-1/2 minute on hotplate. Post-exposure baking for this resist is required for optimum resolution.

6. Develop for 1 minute in AZ 300MIF or Shipley CD26 (no dilution).

7. (Optional) Hard bake at 115°C - 125°C for 1 - 2 minutes on the hot plate, or 20 - 30 minutes in the oven. The hard bake serves to promote adhesion during wet etching or increase selectivity during dry etching.