EBR PG

Edge Bead Remover

Description

EBR PG is specifically formulated to quickly and cleanly remove edge beads that buildup during the spin coat process. Edge bead removal is performed immediately after spin coat by directing a stream of EBR PG near the edge of the wafer while it is spinning. The edge bead remover nozzle can be positioned near the wafer's edge to dispense EBR PG from the top or from the backside/bottom. By controlling spin speed, nozzle position, and nozzle direction, the resist edge bead is removed. It is important during edge bead removal that the backside of the wafer/substrate not be contaminated with resist from the front. By choosing a spin speed appropriate for the size of the wafer, the resulting centrifugal force prevents this problem.

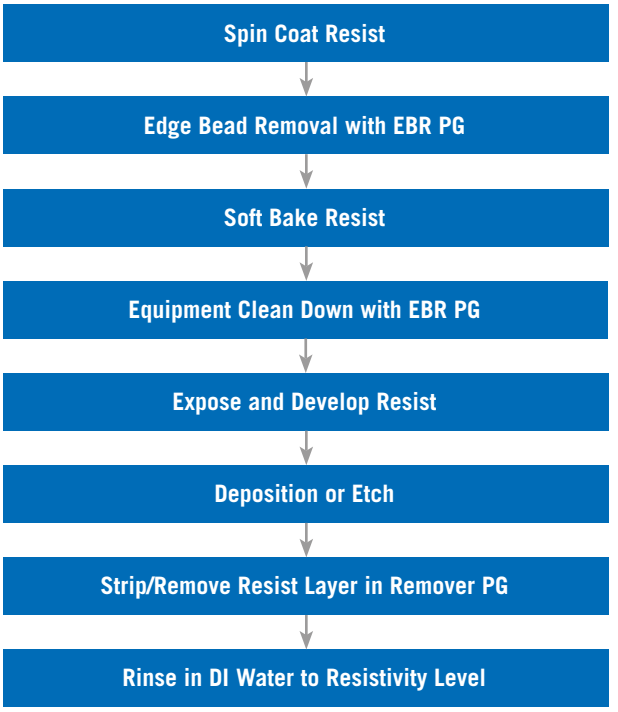
Benefits

- Permits use of single universal edge bead remover
- Low dispense volumes and reduced disposal costs
- Excellent for spin bowl and equipment clean up

Compatible With

- PMGI & LOR
- PMMA & copolymer
- SU-8
- g-Line, i-Line and DUV resists

Process Flow



The edge bead removal process is equipment and substrate specific. Therefore, the following baseline process suggestions may be modified and optimized after considering the following:

- Wafer size
- Topside or backside EBR dispense
- Nozzle position and angle with respect to wafer edge
- Thickness of edge bead being removed

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PROCESSING GUIDELINES

a. After resist spin coat, reduce spin speed to 800 rpm.
b. Dispense EBR PG at ~3 psi, for 3 seconds while maintaining 800 rpm.
c. Ramp to 1000 rpm at 5000 rpm/sec for 3-5 additional seconds of EBR dispense.
d. Turn EBR dispense off.
e. Accelerate to 2500 rpm at 1000 rpm/sec. Continue to spin for 10 seconds.
f. Reduce spin speed to 0 at 1000 rpm/sec.

Handling

Consult Safety Data Sheet (SDS) for details on the handling procedures and product hazards prior to use. If you have any questions regarding handling precautions or product hazards, please email productsafety@kayakuAM.com.

Material and Equipment Compatibilty

EBR PG is compatible with glass, ceramic, PTFE (TEFLON), stainless steel, and equivalent materials. The primary ingredient, a cyclic ether, will attack various elastomers such as VITON A, BUNA N, EPDM, and NEOPRENE over time. It will also attack PVC, CPVC and polyester. PTFE is recommended for both O-rings and tubing.

Storage

Store EBR PG upright and in tightly closed containers in a cool, dry environment, away from direct sunlight at a temperature of 40-80˚F (4-27˚C). Keep away from sources of ignition, light, heat, oxidants, acids, and reducers. Shelf life is thirteen months from date of manufacture.

Disposal

The material and its container must be disposed in accordance with all local, federal and/or international regulations.

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