

Sub-Protocol: Edge Bead Removal

Description: This document details the protocol for removing edge beads from wafers after spin-coating photoresist.

MATERIALS

Edge Bead Removal Solvent
Small magnet
Microfiber swab

EQUIPMENT

Laurell Technologies Photoresist Spinner Model WS-400B-6NPP Lite
EBR Shield
Wafer centering tool

PARAMETERS

Recipe Program E
1st Spin Speed: 200 RPM
1st Spin Time: 5 seconds
2nd Spin Speed: 750 RPM
2nd Spin Time: 40 seconds

PROCESS

1. PREPARE SPINNER

- 1.1. Place and center wafer on spinner using wafer centering tool. Typically this protocol is performed immediately following photoresist spinning and so this step is unnecessary.
- 1.2. Carefully lower EBR shield (black plastic cylinder) over wafer, without touching the wafer. With spinner lid still open, place magnet over lid sensor to override interlock. If necessary, use double sided tape to hold magnets in place.

2. PREPARE EBR SOLVENT

- 2.1. Fill a small glass beaker with EBR solvent and soak a large microfiber swab with solvent.

3. EDGE BEAD REMOVAL

- 3.1. Turn the wafer such that the flat faces '3 o'clock'. Blot away excess solvent from the swab and place it on the edge of the wafer such that the swab is only just in contact with the edge bead. Start the program and use the first 5 seconds to reposition the swab if necessary. After 20 seconds, retract the swab and allow the wafer to spin dry.

4. REPEAT IF NECESSARY