

Photo- or EBL- resist (epoxy resin) handling

Process:

To coat a wafer, glass slide, or user provided sample in a photosensitive or electron sensitive compound. This substrate will be baked, treated with light, and then placed in a developer solution as determined by the manufacturer.

Materials:

A wide variety of chemicals fit the criteria of a photo or electron sensitive compound that are used within the facility. CNM2 primarily provides Shipley 1813. Other chemicals will need to be submitted through the chemical approval process, to be clearly identified. Lab member provides glass or wafer substrates. Equipment: spin coater, aligner, stepper, or EBL writer, tweezers for handling.

Incompatible Materials:

Oxidizers, strong acids, and bases. Epoxy resin is usually mixed with an organic solvent.

Hazards: Solvent within resist may have specific hazards, check the MSDS. Once the solvent has been removed through baking the hazards are reduced.

Exposure Actions: Do what's below, and then notify CNM2 staff within a few hours. For advice, call CNM2 staff.

Eyes: Hold eyes open in running eyewash station for 15 mins and seek medical attention.

Skin: Remove splashed clothing, wash for 15 minutes and seek medical attention

Personal Protective Equipment:

Wear protective eyewear, double glove or use barrier gloves. If the top glove layer becomes contaminated, immediately discard the top glove and wash hands.

Acceptable Locations For Use:

The photolithography area sinks, and noted lithography equipment areas are the only areas for acceptable use.

Additional Process Notes:

Use Teflon or glassware for processing materials. Any deviations from existing processing protocols should be discussed with staff beforehand.

Disposal:

All materials contaminated with photoresist should be placed in a zip-lock bag and can be thrown in the regular trash.

Any wafers or glass that has photoresist materials on it should be placed in the sharps container. After development, pour solution into disposal bottle labeled "Aqueous Developers" and rinse all glassware in the sink with 3 DI water rinses. **MAKE SURE THE FUNNEL IS CLOSED** after pouring solution into the bottle. **Lift-off solutions (Acetone, NMP, etc) should be disposed in the "Flammables" bottle.**