CEPSR Clean Room
at Columbia University

Remover PG Process

The CEPSR Clean Room stores one gallon bottles of Remover PG. The bottles are located in both the large and small yellow rooms under the fume hoods in the solvent/developer storage area. Although the exact components are proprietary, one of the main ingredients is NMP. The use of this solvent is for the complete removal of PMMA, LOR, SU8, PMGI, and other resists on Si, $Si0_2$ GaAs and other substrate or wafer compositions. This premade chemical can also be used as an alternate to acetone for liftoff. When used in immersion mode, a two-bath or dipping system is recommended to reduce the possibility of redeposition of removed resist. The first bath removes most of the film and the second provides a rinse by removing traces of material. Always optimize your parameters for your particular device.

Process

Note: The flashpoint of Remover PG is 88 degrees Centigrade when closed, use caution during the process.

1) Remove the PG Remover from under the fume hood and prepare two beakers filled with this stripper. Set a hotplate between 50 to 80 degrees Centigrade. Fill a third beaker with IPA.

2) Fully immerse your substrate into the first beaker of solution and place on hotplate (removal time will vary depending on the resist as well as its previous condition; sonication will assist in peeling away residues and resist films).

3) Remove the sample from the first beaker and place into second beaker set at the same parameters.

4) After both baths, place sample in third beaker that contains IPA to prevent scumming and residue buildup.

5) Take substrate out and rinse with DI water.

6) Thoroughly blow dry your sample a nitrogen gun.

7) Clean up your work station.