

Basic ZEP 520A recipe

ZEP520A: High resolution EBL resist, suitable for lift-off & RIE

Preparation:

Base Piranha clean samples. Get a suitable ZEP 520A syringe batch from fridge 15 minutes prior to processing (filter not required), to allow it to warm up to room temperature. Return it A.S.A.P. after use (limited shelf life , €€€). This is a very expensive polymer, please be frugal with it!

- dry bake substrates @ 150° C⁺ for 5 minutes
- Transfer substrate to spincoater in a timely fashion and cool it down with N₂
- Apply HMDS solution (MP primer) and wait 10 seconds!
- Spin @ 4k rpm for 30 seconds
- bake substrate @ 150° C⁺ for 1 minute
- Transfer substrate to spincoater and cool it down with N₂
- Apply ZEP 520a
- Instant acceleration to final rpm for 45 seconds
- bake substrate @ 180° C for 5 minutes
- Perform EBL
- Develop in N-amyl acetate for 1-2 minutes
- Rinse in MIBK:IPA 9:1 for 15 seconds
- Rinse in IPA for 15 seconds
- Blow dry with N₂