

ZEP Resist

ZEP is a positive tone electron beam resist with high resolution and excellent dry-etching resistance

Characteristics:

- Positive tone
- High resolution
- High sensitivity
- Dry etch resistance comparable to most positive photo resists
- Not sensitive to white light

Resist available at TNFC	ZEP 520A
Storage	10-27 °C
Surface Preparation	In general, no surface preparation aside from normal cleaning is necessary. Excellent adhesion to most surfaces.
Spin	Speed 1000-6000 rpm, 60 sec. (300-700 nm)
Pre-bake	180°C hotplate, 2-3 min. May also be oven baked at 170°C for 30 min.
Expose	Dose around 250 $\mu\text{C}/\text{cm}^2$ at 100 kV.
Develop	ZED-N50, 1-3 min
Rinse	MIBK, 15-60 sec
Dry	By dry N ₂
Post-Bake	Not normally necessary.
Descum	Oxygen plasma asher
Stripping	ZDMAC, possible heated; deep-UV + organic solvent; Oxygen plasma

Link to ZEP520A manufacturer's data sheet:

<https://tnfc.utoronto.ca/wp-content/uploads/2020/04/ZEP520A.pdf>