



AZ[®] nLOF[™] 2000 Photoresist

Product Description

AZ[®] nLOF[™] 2000 Series I-line photoresists are uniquely formulated to simplify the historically complex lift-off lithography process. You can now run a standard lithography process to get the desired lift-off profiles. The fast nLOF resists work well in both surfactant and surfactant-free TMAH developers using standard conditions.

nLOF 2000 Series resists can be used for coating thickness beyond 7.0µm, achieving aspect ratios of up to 4:1!!

Features

- High Throughput
- Streamlined Lift-Off Process
- Process Compatibility
- Process Versatility

Benefits

i-line DTP < 100mj (2.0µm-3.5µm thickness)

Standard single-layer lithography process to achieve lift-off profiles. No extra steps required!!

Easy integration into an existing process with standard processing conditions!

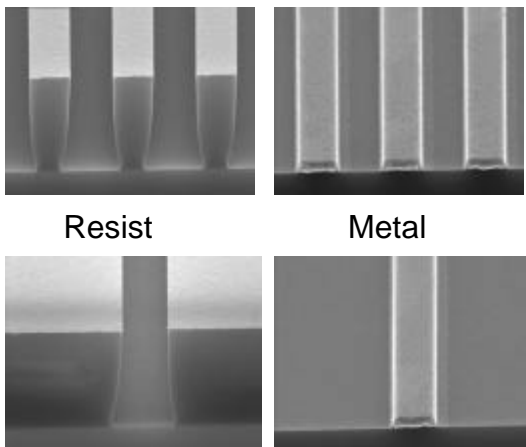
Obtain Lift-off profiles with resist thickness above 7.0µm, with uniform lift-off profiles up to 4:1 aspect ratios.

Standard Process Conditions

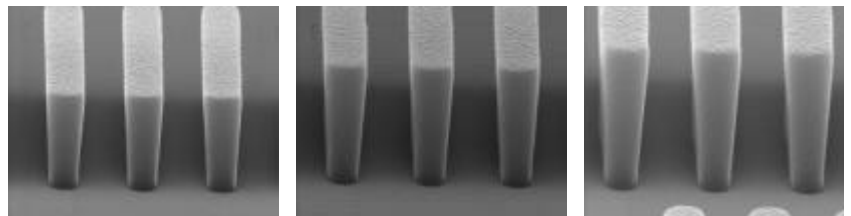
Coat: 1.0µm resist thickness
 Softbake: 110°C for 60sec
 Exposure: Nikon Stepper @ NA=0.54
 DTP = 65-80mJ/cm²
 PEB: 110°C for 60sec
 Develop: AZ[®] 300MIF Developer for 120sec single puddle @ 23°C

Metal Lift-off Process Results

AZ nLOF 2035 Photoresist, 1.5µm CD

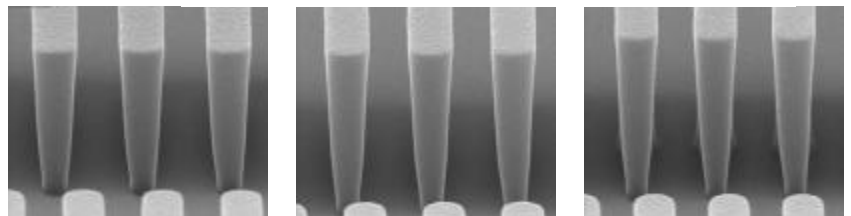


AZ nLOF 2020 Photoresist
 2.0µm thickness, DTP – 66mJ/cm²



0.80 µm 0.75 µm 0.70 µm

AZ nLOF 2035 Photoresist
 3.50µm Thickness, DTP – 80mJ/cm²



1.1 µm 0.95 µm 0.90 µm



AZ[®] nLOF[™] 2000 Photoresist

Storage

Keep in sealed original containers away from oxidants, sparks, and open flame. Protect from light and heat. Keep refrigerated. Recommended storage temperature of 45°F. Empty container may contain harmful residue and/or vapors. Dispose of appropriately.

Equipment Compatibility

AZ nLOF 2000 Series resists are compatible with all commercially available wafer and photomask processing equipment. Recommended materials of construction include stainless steel, glass, ceramic, PTFE, polypropylene, and HDPE.

Solvent Safety

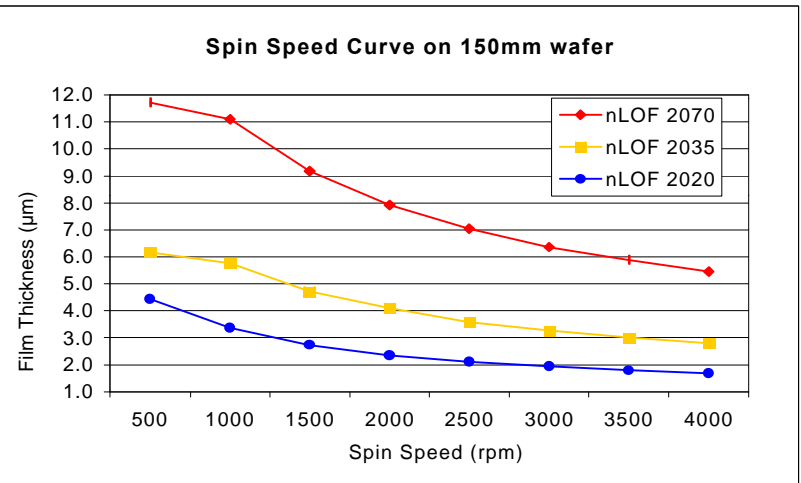
AZ nLOF 2000 Series resists are formulated with 100% PGMEA, a safer solvent. We recommend AZ EBR 70/30 as a compatible solvent for EBR processing, resist cleaning, basic resist stripping and re-work. AZ 300T, AZ 400T, or AZ Kwik Strip[™] are recommended for typical resist stripping processes.

Handling Precautions / First Aid

Refer to current Material Safety Data Sheet (MSDS) for detailed information prior to handling.

nLOF 2000 Series Resists

- nLOF 2020 – 1.7µm-4.5µm; DTP = 66mJ/cm²
- nLOF 2035 – 2.8µm-6.0µm; DTP = 80mJ/cm²
- nLOF 2070 – 6.0µm-12.0µm; DTP = 175mJ/cm²



AZ nLOF 2035 Photoresist Depth of Focus for 2.0µm CD

