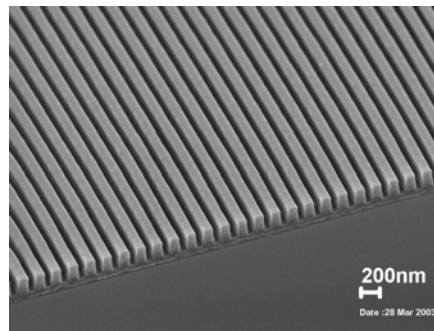


Product Information

NXR-1020 Nanoimprint Resist (Thermal Plastic)



NXR-1020 nanoimprint resist is designed not only for sub-10 nm patterning in nanostructure engineering in the near future, but also for today's micro- and nano-patterning. NXR-1020 nanoimprint resist offers ease of handling and processing, good flow characteristic at imprint temperature, and good thermal stability at room temperature. It has been thoroughly tested on our imprint machines.

Film casting

NXR-1020 nanoimprint resist can be spin-coated using a standard spinner. A filter (0.2 μm) is recommended to use when applying the resist to wafers. The solvent in resist film can be further driven out by baking at 80°C for 30 minutes in a vacuum oven. The resist film can be prepared up to microns in thickness, depending on resist concentration and spin-coating conditions. We recommend customers to keep the resist solution in a refrigerator when it is not in use.

Imprinting

NXR-1020 nanoimprint resist is typically imprinted at 120°C and 200 psi (or 15 bar) with high-resolution and excellent pattern transfer fidelity. It can be etched in oxygen plasma.

Stripping

NXR-1020 nanoimprint resist can dissolve in acetone before oxygen plasma etching, and $\text{NH}_4\text{OH}:\text{H}_2\text{O}_2:\text{H}_2\text{O}$ (1:1:5 volume ratio, 70-80°C) after oxygen plasma etching.

Spin Curve of NXR-1020 Resist (6%)

