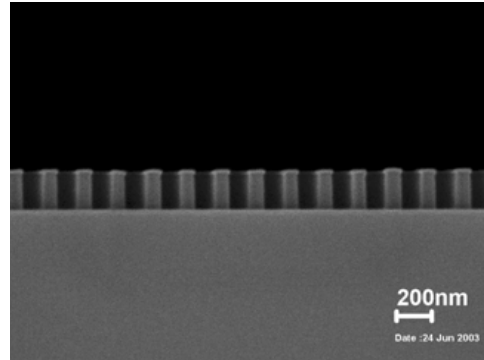


Product Information

NXR-3022 Underlayer Resist



NXR-3022 underlayer 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-3022 underlayer resist offers ease of handling and processing, good thermal stability, and ease for lift-off process. It has been thoroughly tested on our nanoimprinters.

Film casting:

NXR-3022 underlayer resist is a polymer material solution with a safer solvent. Uniform films can be formed on a substrate by spin-coating using a standard spinner. Filtering through a 0.2- μm filter is recommended when applying the resist to wafers. Residual solvent in the resist film can be further driven out by baking on a hotplate at 190°C for 60 to 90 seconds, or in a vacuum oven at 140°C for 30 minutes. The resist films can be prepared of thicknesses from a few tens of nanometers up to microns, depending on resist concentration and spin-coating conditions. The resist solution should be kept in a dark and cool place when not in use.

Imprinting:

NXR-3022 underlayer resist is typically used together with NXR-2030 (or NXR-2010) UV-curing imprint resist. The NXR-3022 underlayer serves as a pattern transfer layer between the imprinted UV-curing resist on top and the substrate material. Imprinted UV-cured resist patterns can be transferred to the NXR-3022 underlayer by

oxygen RIE, and the resist template thus created can then be used for metal lift-off or as the resist for further etching process.

Stripping:

NXR-3022 underlayer resist dissolves easily in either methanol or water. It can also be removed by oxygen plasma.

Spin Curve of NXR-3022 (6%)

