

# PHOTORESISTS AND SPECIALTY CHEMICALS

## PERMANENT NEGATIVE PHOTORESISTS

### Photo-patternable Epoxies

Product	Description	UV Sensitivity	Recommended Film Thickness	Resolution
SU-8	Photo-definable ultra-thick structures.	i-Line	25–200 $\mu\text{m}$	>10:1 Aspect Ratio
SU-8 2000	Improved wetting. Faster drying, higher throughput.	i-Line	10–100 $\mu\text{m}$	>10:1 Aspect Ratio
SU-8 3000	Improved substrate adhesion. Reduced coating stress.	i-Line	10–70 $\mu\text{m}$	>5:1 Aspect Ratio
SU-8 TF 6000	High resolution thin film patterning.	g-, h-, i-Line	0.5–10 $\mu\text{m}$	High Resolution
KMPR® 1000	Alkaline development. Excellent adhesion to metals & high dry etching resistance.	i-Line	4–75 $\mu\text{m}$	>5:1 Aspect Ratio
PermiNex® 1000	Wafer bonding adhesive. Solvent development.	i-Line	1–25 $\mu\text{m}$	3:1 Aspect Ratio
PermiNex® 2000	Wafer bonding adhesive. Alkaline development.	i-Line	1–25 $\mu\text{m}$	3:1 Aspect Ratio

### Photo-patternable Specialty Polymers

Product	Description	UV Sensitivity	Recommended Film Thickness	Resolution
KMSF® 1000	Ultra-low stress, low temperature cure dielectric.	Broadband	3–10 $\mu\text{m}$	1:1 Aspect Ratio

## TEMPORARY RESISTS

### Bi-layer Lift-off Resists

Product	Description	Temperature Range	Recommended Film Thickness	Undercut Rate
PMGI SF Slow	Very high level of undercut control for high resolution thin film depositions.	> 180°C	50–800 nm	Very Slow
PMGI SF	High resolution thin film depositions.	> 180°C	0.05–2 µm	Slow
LOR A	Enhanced dissolution rate for high to mid-resolution depositions. For use with 0.26N TMAH based developers.	150-190°C	0.1–2.5 µm	Medium
LOR B	Enhanced dissolution rate for lower resolution depositions. For MIB developers.	150-190°C	1–4 µm	Fast
LOR C	Excellent coverage over topography.	150-190°C	0.5–6.5 µm	Medium Fast

### E-beam Resists

Product	Description	Casting Solvent	Film Thickness
950 PMMA	High resolution. High contrast.	Anisole or Chlorobenzene	0.05–5 µm
495 PMMA	High speed.	Anisole or Chlorobenzene	0.05–2.2 µm
MMA (8.5) MAA Copolymers	For undercut profiles in multi-layer schemes including T-gate processes.	Ethyl lactate	0.1–1 µm

## ANCILLARIES

### For Photoresists & Specialty Resist Products

Developers

Removers

Adhesion Promoters

Thinners

Edge Bead Removers