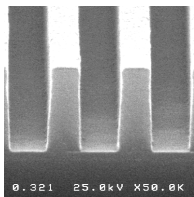




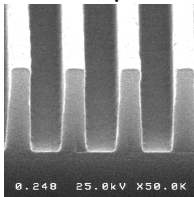
ARCH 8250

A multipurpose 248nm photoresist

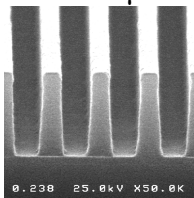
Resolution



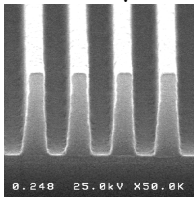
0.32µm



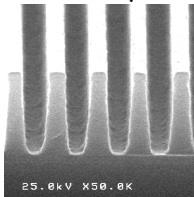
0.25µm



0.22µm

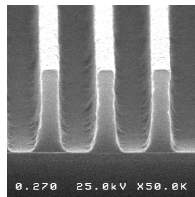


0.21µm

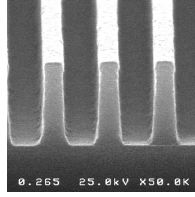


0.20µm

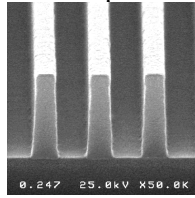
D.O.F. 0.25µm dense lines



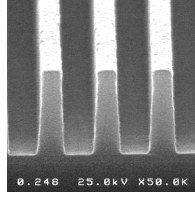
-0.60µm



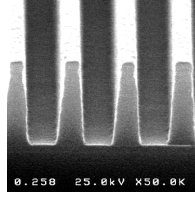
-0.45µm



-0.15µm



0.15µm



0.45µm

ARCH 8250 is a multi-purpose DUV photoresist based on ARCH's proprietary bulky acetal technology. Benefits obtained using ARCH 8250 include the following:

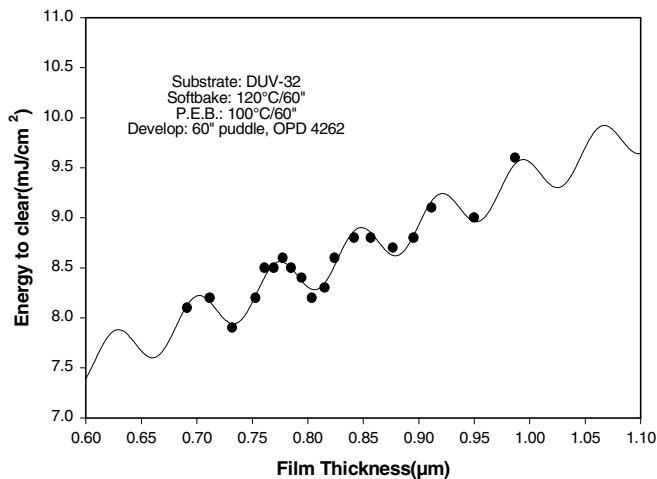
- Etch resistance equivalent to DNQ/Novolac.
- Superior performance on TiN; no footing at substrate/photoresist interface.
- Excellent P.E.D. stability.
- Multiple application capability:
 - L/S.
 - Contacts.
 - Pillars.
- Square profiles.
- Low defectivity.
- Compatible with binary and PSM processes for vias.

Substrate: 500Å DUV32
Resist Thickness: 0.78µm
Soft Bake: 120°C/60"
Exposure: 20mJ/cm²
ISI XLS 7800
NA/Sigma: 0.53/0.74
P.E.B.: 100°C/60"
Develop: OPD4262
60"puddle

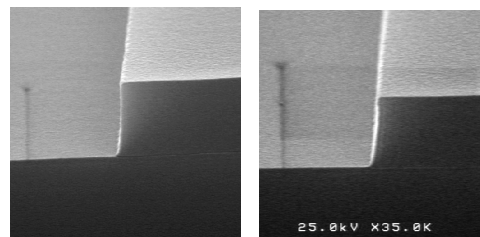


**Arch
Chemicals,
Inc.**
Semiconductor
Photopolymers

**ARCH 8250 on DUV-32
E₀ Swing Curve**

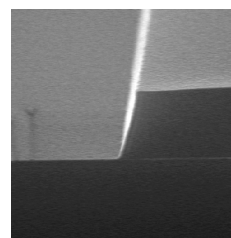


Thermals(bulk Pads) 60" Bake

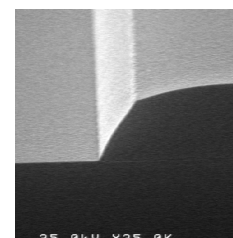


no bake

130°C

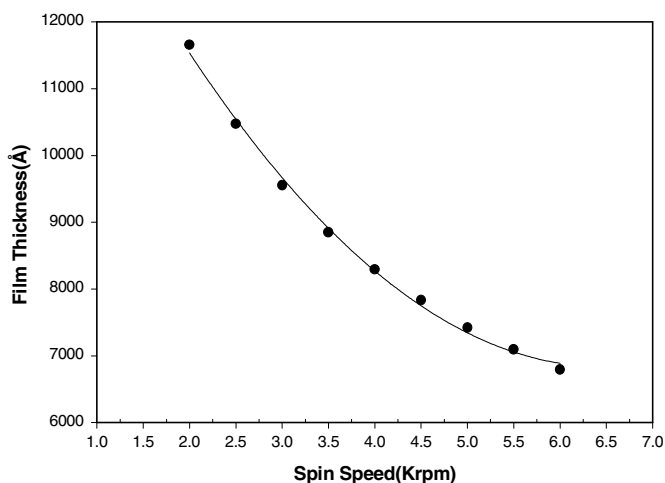


140°C

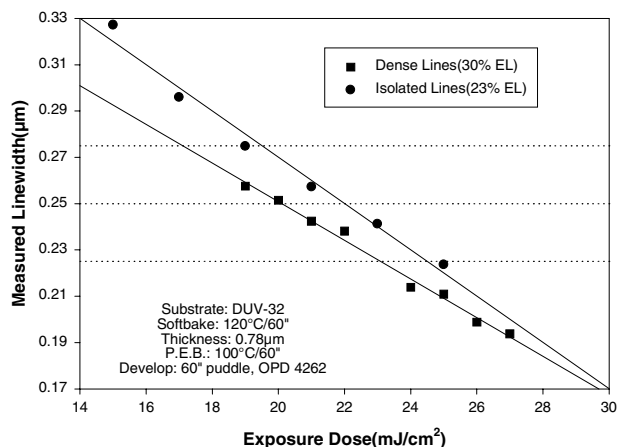


150°C

**Spin Speed Curve
ARCH 8250-10**



**ARCH 8250 Exposure Latitude
0.25µm CD
Top Down Measurements**



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