

Cospeen[®]-1225G

Overview

Cospeen-1225G is methyl-siloxane-based organic spin-on-glass coating solution for advanced micro-electronic devices. It fills the narrowest gaps and significantly planarizes the underlying topography. This product is ideal for partial-etchback scheme for subtractive Al 1.0 - 0.35 μ m device generations. By careful in-house purification of the raw materials, Cospeen-1200 achieves the purest quality and the lowest cost-of-ownership. No additional tool set-up required - customers can use using existing tool set and liquid delivery system. Switch right away and enjoy the cost benefit.

Applications

- Partial / total etch back process for interlayer or pre-metal dielectrics
- Planarizing overcoat for passivation

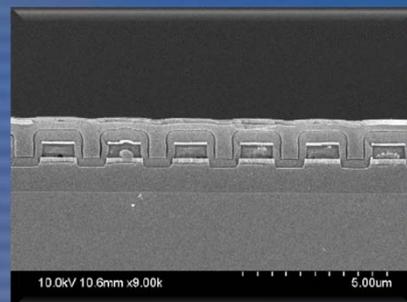
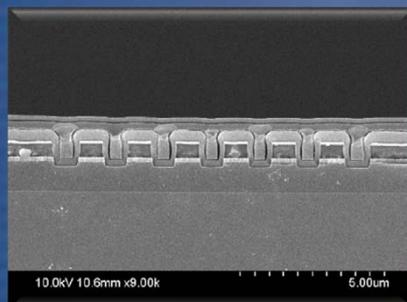
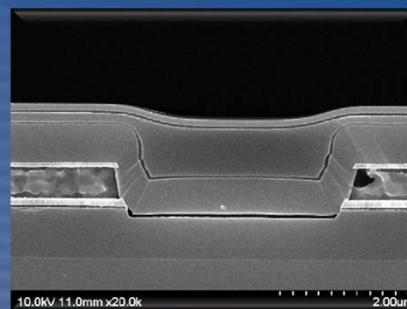
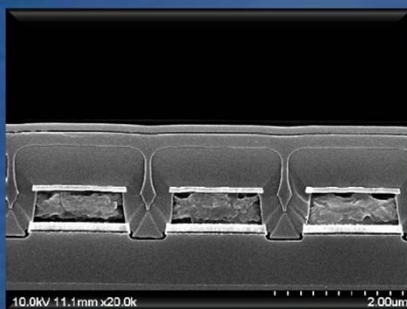
Benefits

- Ultra high purity
- Ultra-low particle count
- High thickness uniformity
- Low cost-of-ownership
- Safe solvent system¹⁾

¹⁾ MSDS available upon request

Features

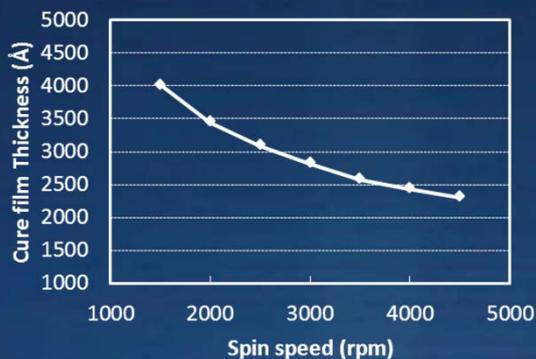
- Gap filling < 0.10 μ m
- Planarization > .90% at 1 μ m feature
- Coating thickness 2300 Å - 4000 Å per coat
- Bake temperature / time 80°C / 2 min - 230°C / 4 min
- Cure temperature / time 450°C / 30 min in N₂



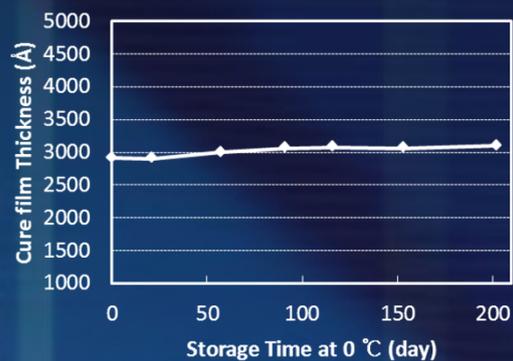
Film Properties Post Curing

Dielectric Constant at 1 MHz	2.99
Leakage Current (A/cm ² @ 0.5 MV/cm)	3.8 X 10 ⁻⁹
Breakdown Voltage (MV/cm)	4.95
Refractive Index (633 nm)	1.37

Spin Speed Curve



Thickness with Shelf Life



Company Profile

NEPES Corporation's Nano - Materials Biz. Unit has succeeded in developing Nano materials for semi-conductor and TFT-LCD manufacturing and stably supplied it to both domestic and international semiconductor, TFT-LCD companies. In addition, as a result of continuous R&D investment in Nano Materials development, we have succeeded in independent development of Nano-dispersion, Interlayer Dielectrics (ILD) and Ultra High Purification (UHP) such as electrolyte for Li rechargeable batteries with quality-premium products through its unique quality control program.

NEPES Corporation has demonstrated a new possibility by successful localization of the electronic chemical material manufacturing and exporting clean-room construction since 1990. Through the years, we have established the most advanced Flip-Chip Bumping Foundry and contributed to reinforce the image of Korea as the IT leader in the world with expanding its core competences into the environment, energy and bio-technology.

We, all 350 employees of NEPES Corporation, are dedicating ourselves for customer satisfaction through superior product qualities and real-time interface with customers.

NEPES Corporation

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