

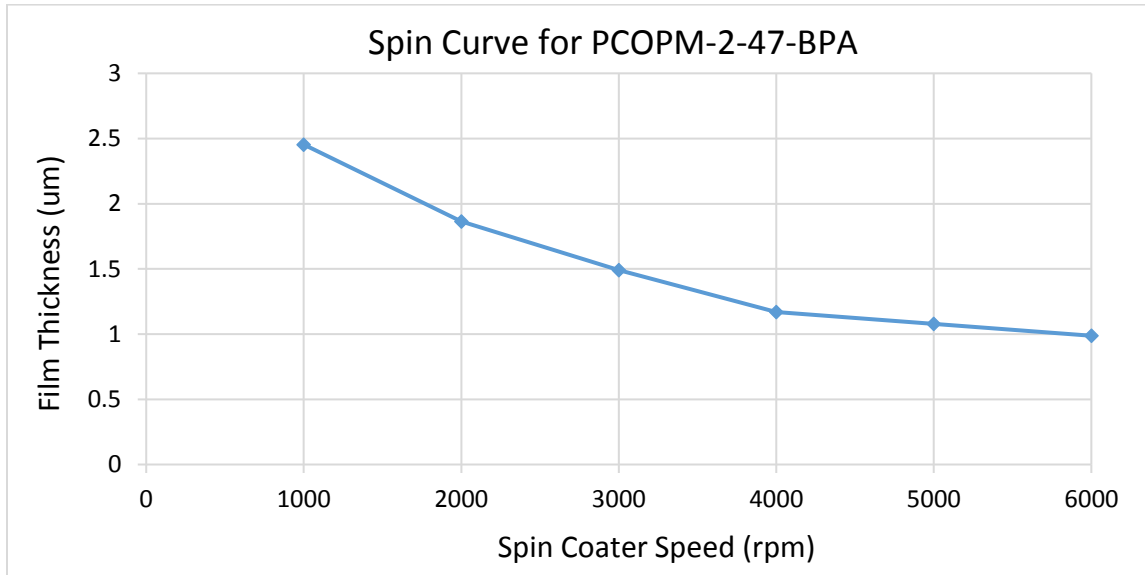
**Recommended Process:** Bisphenol A Diglycerolate Dimethacrylate Nanocomposite

**Nanocrystal:** ZrO<sub>2</sub> – PM (90wt% loading in monomers)

**Monomers:** Bisphenol A Diglycerolate Dimethacrylate

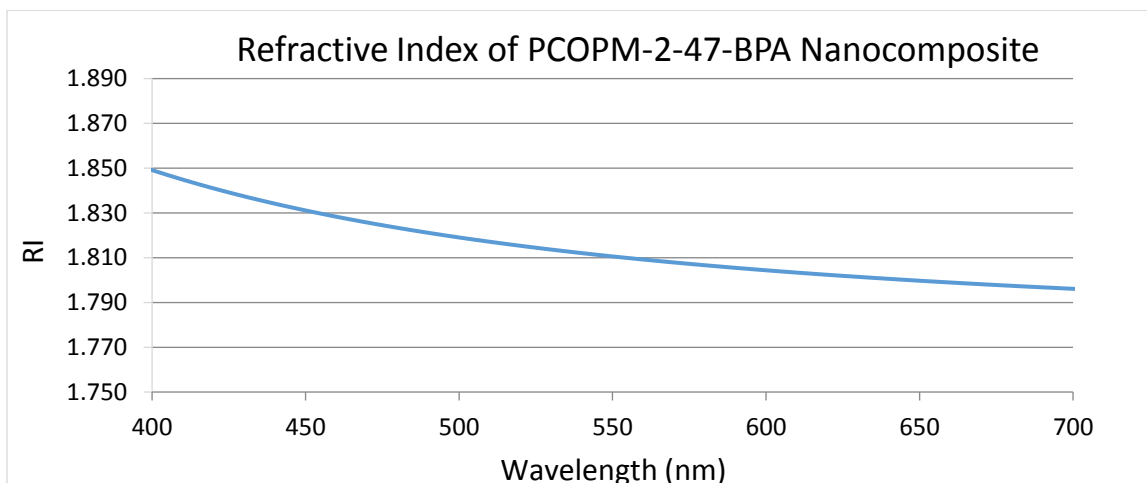
**Solvent:** PGMEA

**Photoinitiator:** UV curing agent is included



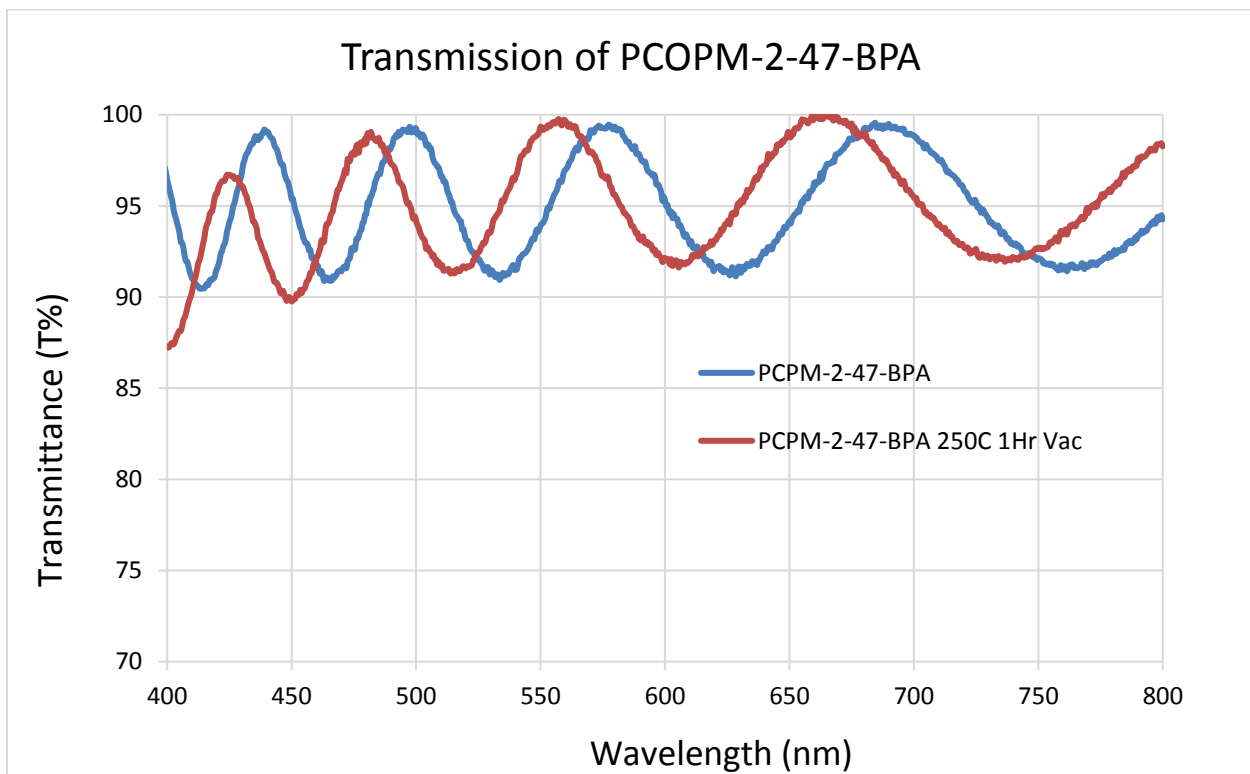
1. Spin film of PCOPR-2-47-BPA to desired thickness
2. Pre-bake: 100°C for 1 to 2 minutes in air
3. 60 to 120 second cure using Dymax EC-5000 system with a mercury “H” bulb (50mW/cm<sup>2</sup>)
4. Post-bake: 100-130°C for 10 minutes in air

Results may vary with different UV curing systems.



%T	>95
RI @ 633nm	1.801
Abbe Number	36

**High Temperature Stability:** the blue curve is the transmittance of the freshly made film while the orange curve is the transmittance of the film after 1 hour 250 °C baking under vacuum. The consistency of transmittance demonstrates the high temperature stability of PCOPM-2-47-BPA.



**Chemical Resistance:** the following table shows that PCOPM-2-47-BPA resists all the common wet-processes during OLED panel fabrication. Adhesion to glass substrate is tested by scotch tape with no cross-hatching and a green check mark indicates passing performance.

	HCl/H <sub>2</sub> O (1:3) 5 min	HCl/H <sub>2</sub> O (1:1) 5 min	KOH (0.5wt%) 5 min	KOH (1wt%) 5 min	KOH (5wt%) 5 min	Acetone/ Sonicate 5 min	IPA/ Sonicate 5 min	DI Water 5 min
PCOPM-2-47-BPA	√	×	×	×	×	√	√	√