

PCCP SUPPORTING INFORMATION PARAGRAPH

Table X. The calculated χN and effective solution $\phi\chi N$ values for the two systems at the lowest weight percent of polymer studied.

Sample	M_w	Polystyrene weight fraction, W_{PS}	N	χN	Wt %	$\phi\chi N$
BCP670	676K	0.52	6941	680	7.5	45
BCP850	851K	0.47	8804	862	7.5	58

The value of the interaction parameter χ between the styrene and isoprene was found to be 0.098 (at 273K) calculated using the following equation after Lodge and Huang.
 $-0.0228 + (33/T(K))$

Lodge, T.P., et al., *Phase Behavior of Block Copolymers in a Neutral Solvent*. Macromolecules, 2003. **36**(3): p. 816-822.

Huang, C., et al., *Quantifying the "Neutrality" of Good Solvents for Block Copolymers: Poly(styrene-*b*-isoprene) in Toluene, Benzene, and THF*. Macromolecules, 1998. **31**(26): p. 9384-9386.

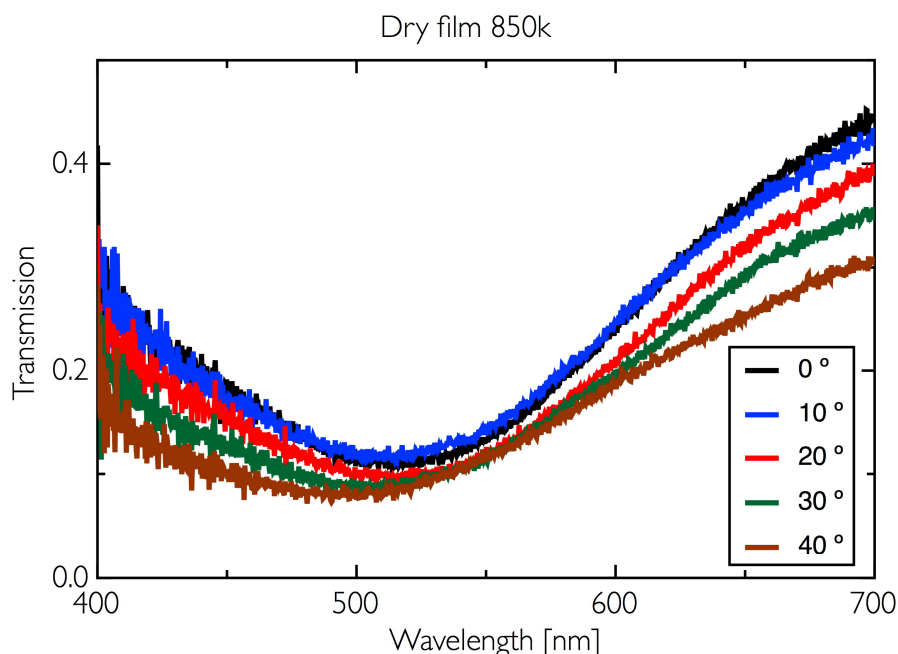


Figure SI 1. The angular dependence of the transmission for a dried film of 10% by weight 850K block copolymer solution cast from o-xylene.

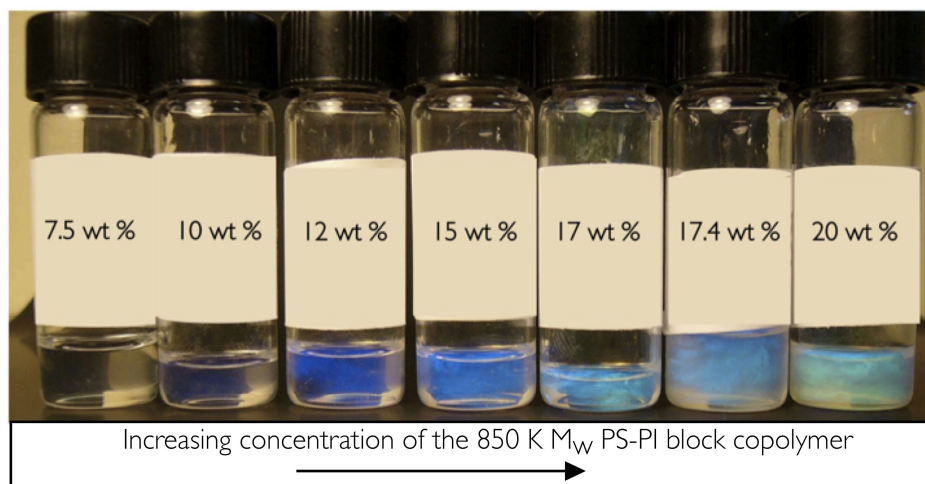


Figure SI 2. The 850K block copolymer solutions used for the oscillatory shear experiment with increasing weight percent of block copolymer from left to right (the solutions are made up in the solvent o-xylene).

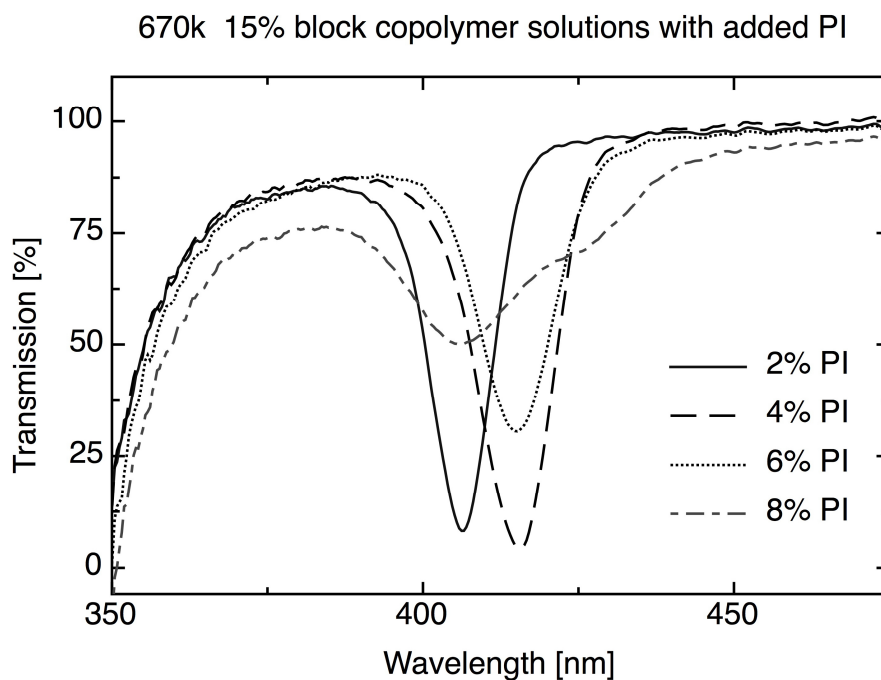


Figure SI 3. The optical transmission data set for the 670K block copolymer o-xylene solution for the addition of added poly(isoprene) homopolymer to a 15% by weight 670K BCP solution.

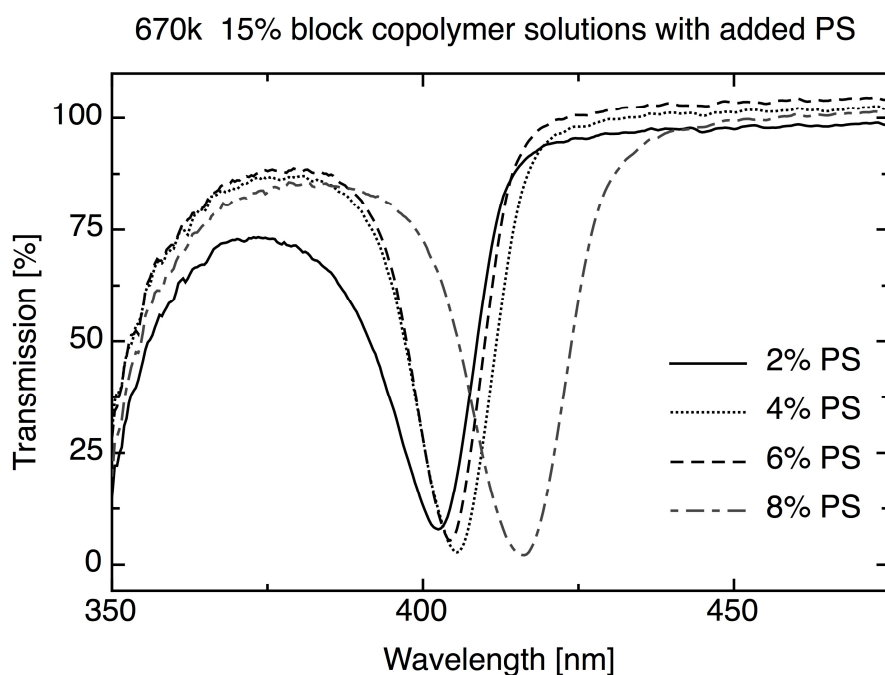


Figure SI 4. A data set for the 670K block copolymer o-xylene solution for the addition of added poly(styrene) homopolymer to a 15% by weight 670k BCP solution.

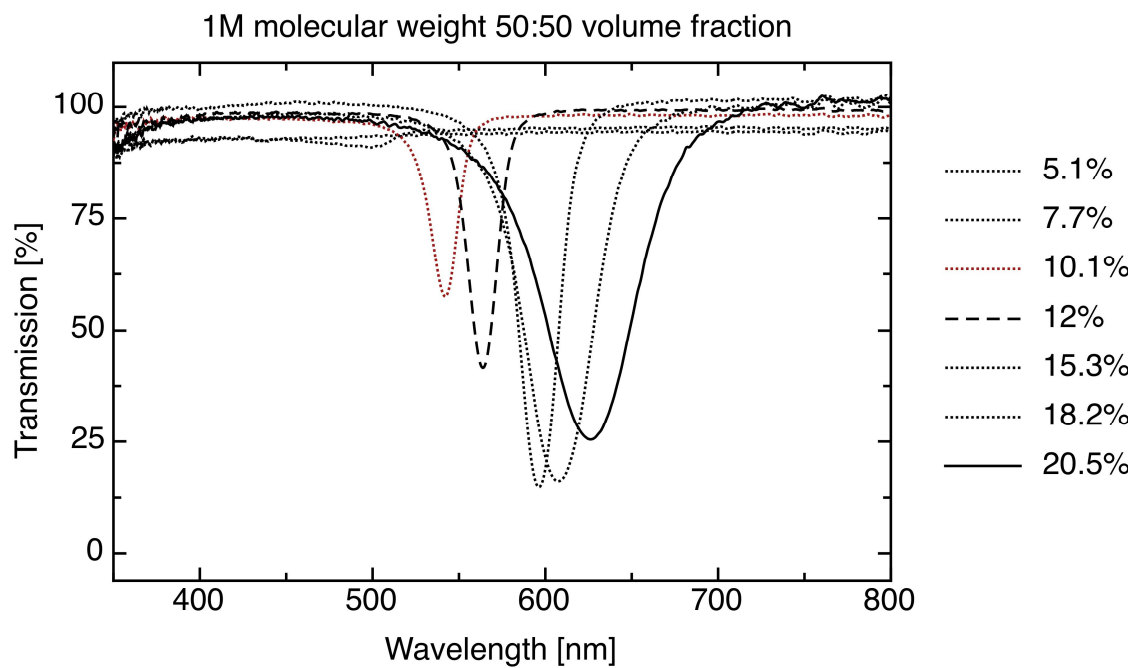


Figure SI 5. The transmission data for the 1 million molecular weight block copolymer o-xylene solutions mentioned in the manuscript, for increasing BCP solution concentration.