

Supporting Information

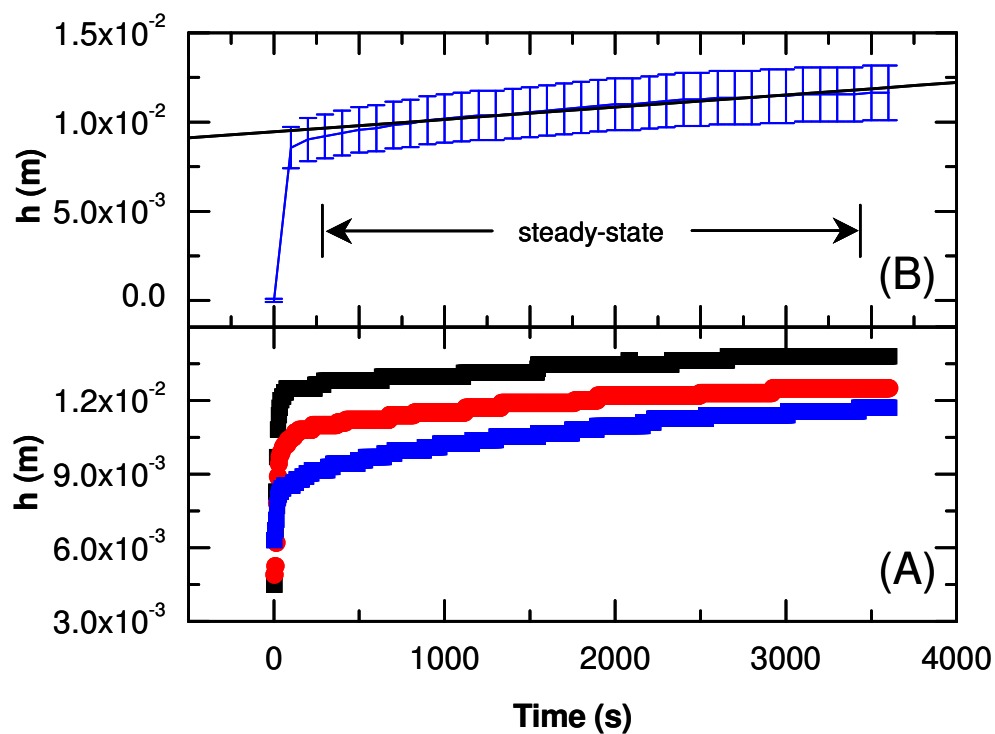


Figure SI1. Wetting rate data for epoxy-curative systems containing 0 wt% (■), 2 wt% (●) and 4 wt% (▲) nanoclay on tow (A) and wetting rate data for 4 wt% nanoclay system in (A) with reduced number of data points, error bars and steady-state limits for linear least-squares fitting (B).

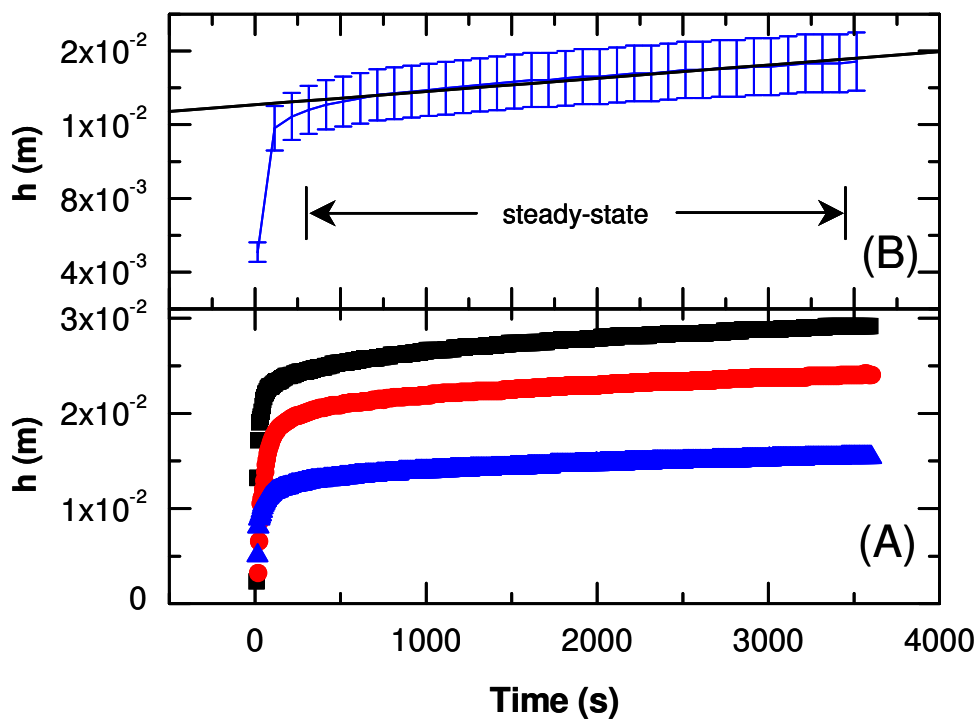


Figure SI2. Wetting rate data for epoxy-curative systems containing 0 wt% (■), 2 wt% (●) and 4 wt% (▲) nanoclay on fabric (A) and wetting rate data for 4 wt% nanoclay system in (A) with reduced number of data points, error bars and steady-state limits for linear least-squares fitting (B).

Table SI1. Summary of density, surface tension and viscosity measurements of various reactive and unreactive epoxy-nanoclay mixtures.

Material System	ρ (g/cm ³)	Surface Tension (mN/m)	μ (Pa·s) *
Epoxy	1.092 ± 0.006	50.9	12.5 ± 0.2
Curative	0.948 [†]	31.4	1.04 × 10 ⁻² [†]
Epoxy-curative	1.027 ± 0.002	38.4	0.767 ± 0.01
Epoxy-curative-2 wt% clay	1.064 ± 0.003	38.9	0.585 ± 0.1
Epoxy-curative-4 wt% clay	1.066 ± 0.003	43.4	10.8 ± 0.2

* Averaged over 10⁻¹ to 10² s⁻¹ shear rates. [†] At 20 °C from Huntsman Inc.

Table SI2. Summary of the density, surface tension and viscosity measurements of silicone oil [†] and silicone oil-nanoclay mixtures.

Wt % clay	μ (Pa·s) [‡]	ρ_{est} (g/cm ³)*
0	4.79 ± 0.03 × 10 ⁻³	0.913
2	7.35 ± 0.9 × 10 ⁻³	0.929
4	6.65 ± 0.5 × 10 ⁻³	0.945

[†] Dow Corning200[®] silicone oil fluid. γ = 19.7 mN/m. [‡] Averaged over 10⁻¹ to 10² s⁻¹ shear rates. * ρ_{est} = (weight fraction clay × 1.71 g/cm³ ^{||}) + (weight fraction silicone oil × 0.913 g/cm³). ^{||} Nanocor Inc.