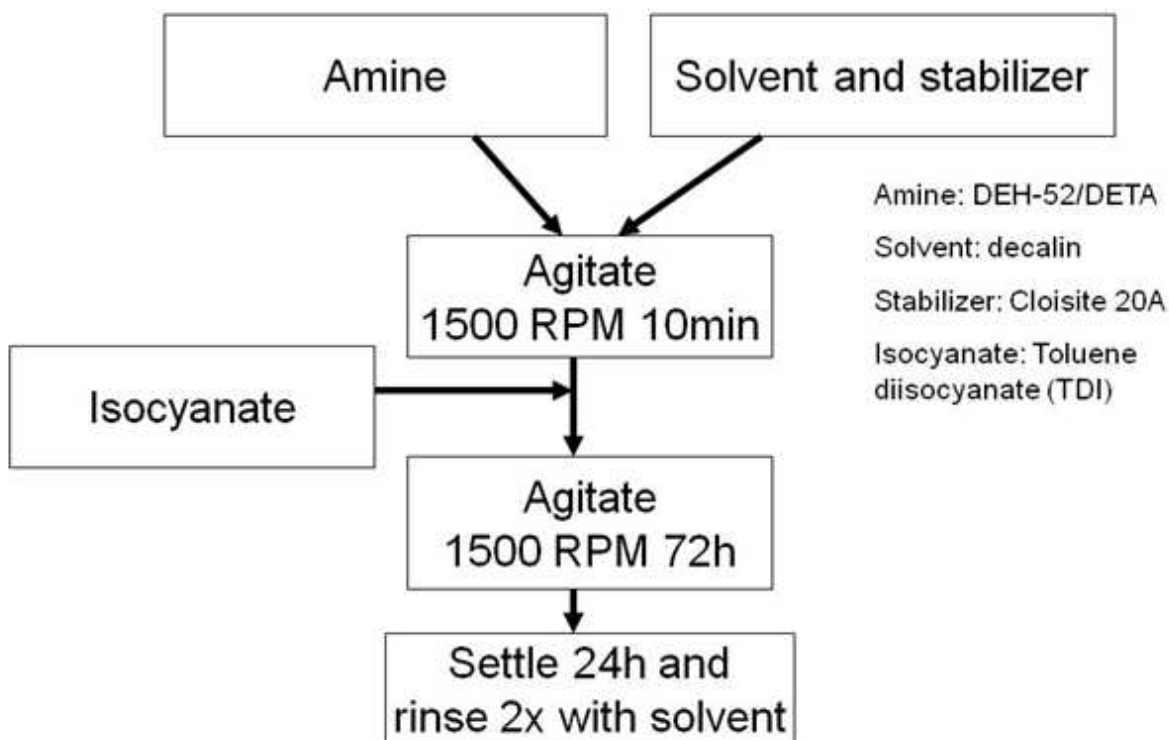


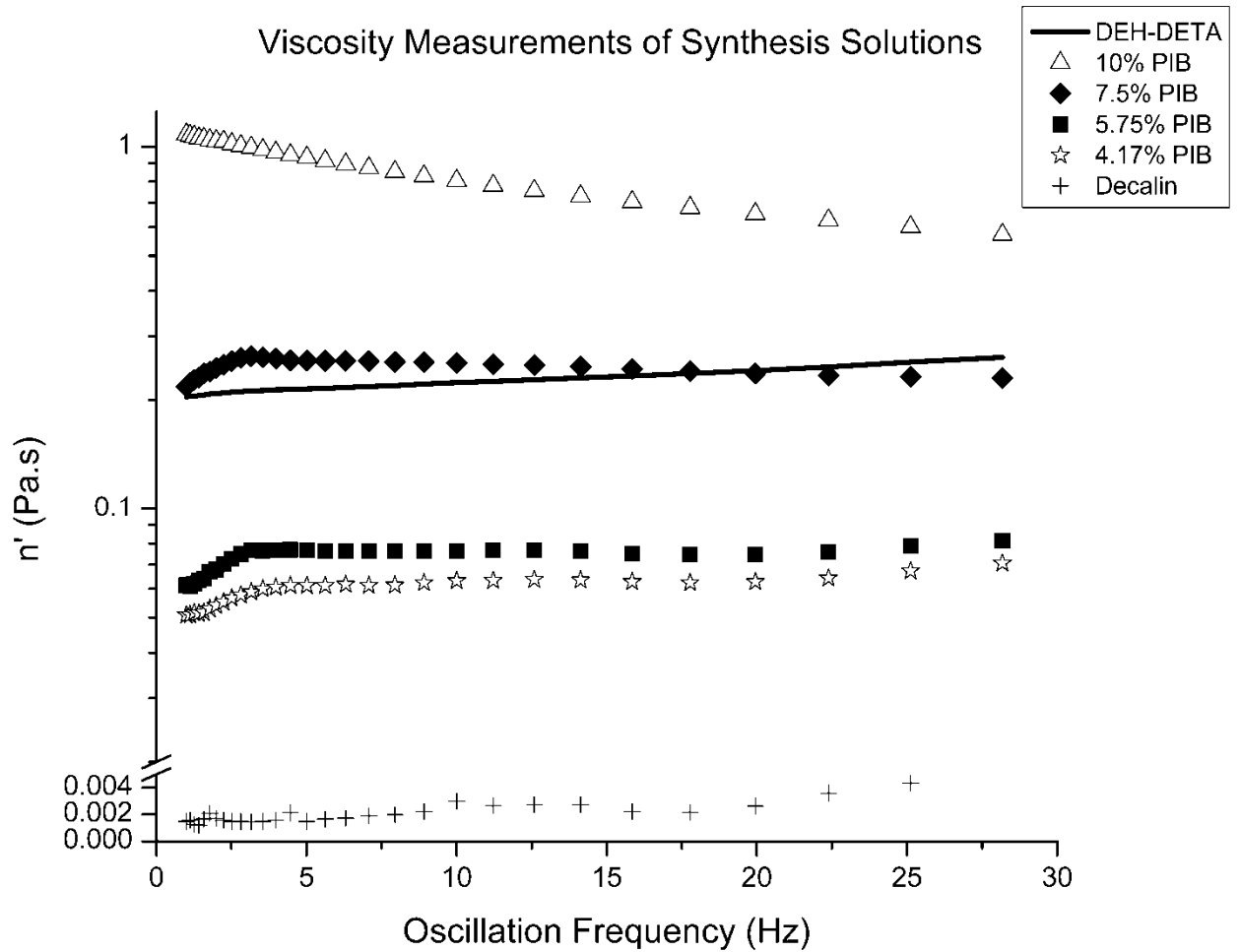
Supporting Information

SI.1 Synthetic Process Flowchart



SI.2 Rheological measurements of synthesis solutions.

Black markers indicate viscosities of continuous phase that were conducive to forming microcapsules. Microcapsules were not formed from continuous phases indicated by the white markers. Data sets are % PIB by mass in the continuous phase.

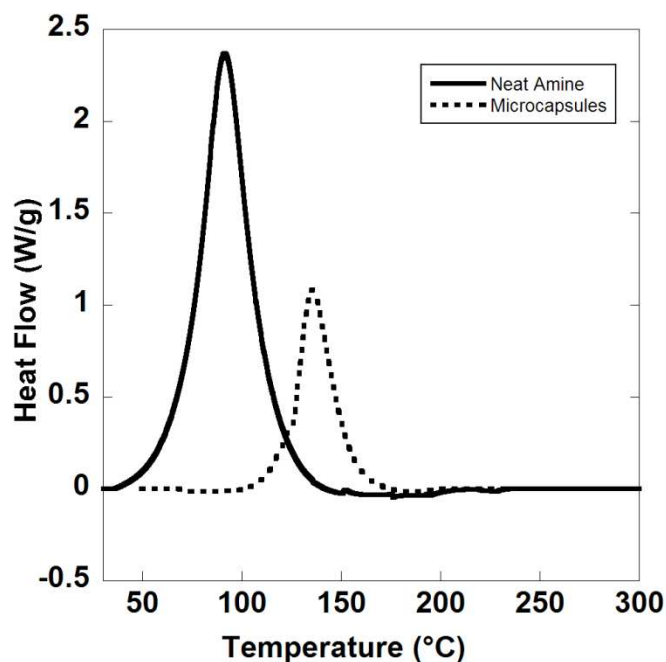


SI.3 Summary of experiments performed

Table SI.3. Experimental conditions and capsule quality

Experiment	[NH ₂]/[NCO] (eq:eq)	[nanoclay] %	[PIB] %	Agitation Rate (RPM)	Capsule Quality
1	6:1	0.4	3.3	1500	Spherical
2	6:1	0	3.3	1500	Unable to be formed.
3	6:1	0.4	0	1500	Unable to be formed.
4	6:1	0.4	1.6	1500	Unable to be formed.
5	6:1	0.4	2.5	1500	Ovoid, many adhesions, weaker shell wall
6	6:1	0.4	3.3	1750	Spherical, few adhesions
7	12:1	0.4	3.3	1500	Very weak shell wall, unable to isolate and collect

SI.4 Representative DSC thermograms



The reported heat of polymerization (ΔH) was 463 J/g for neat amine, and 97 J/g for microcapsules.

