

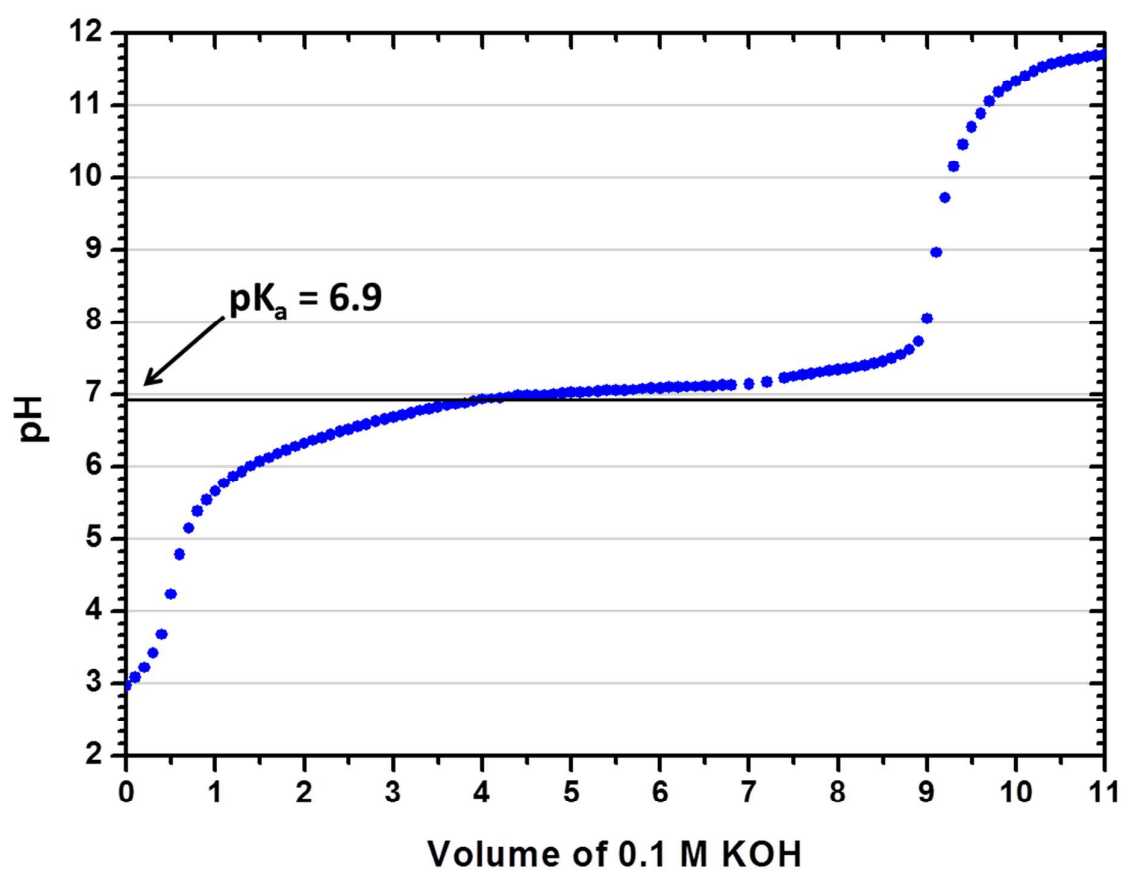
Supporting Information for:

Novel Pickering Emulsifiers based on pH-Responsive

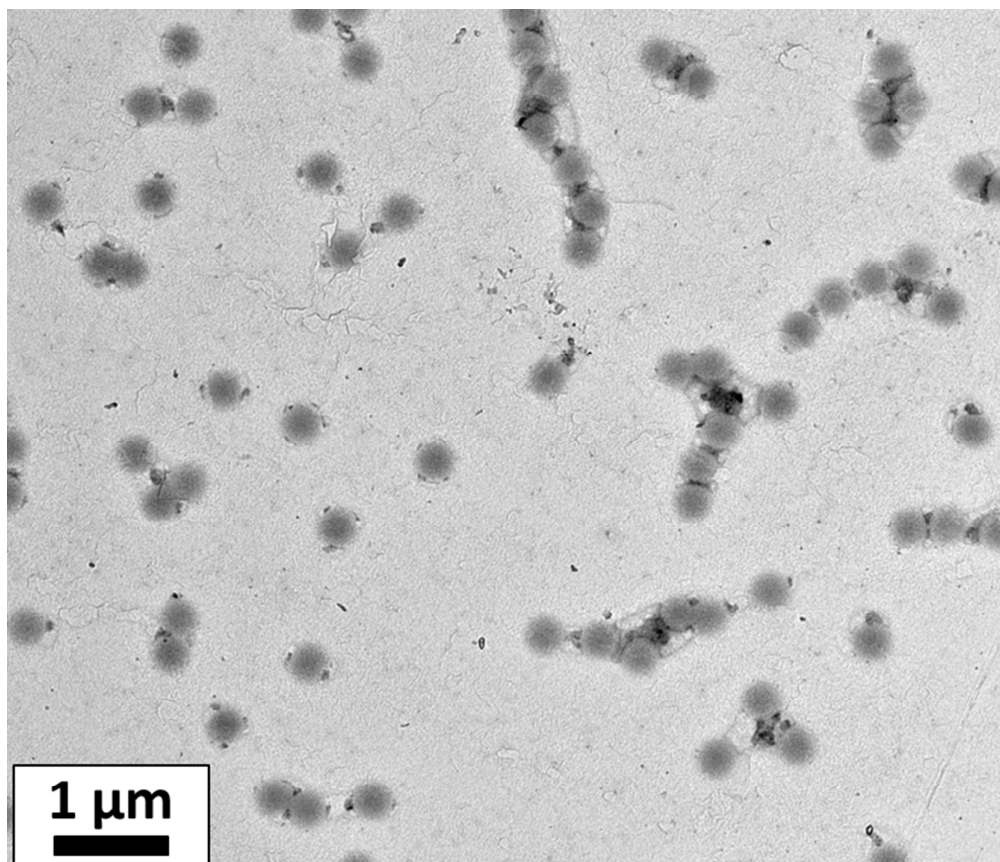
Poly(2-diethylaminoethyl methacrylate) Latexes

*A. J. Morse, D. Dupin, S. P. Armes\*, K. L. Thompson, L. A. Fielding, P. Mills, R. Swart.*

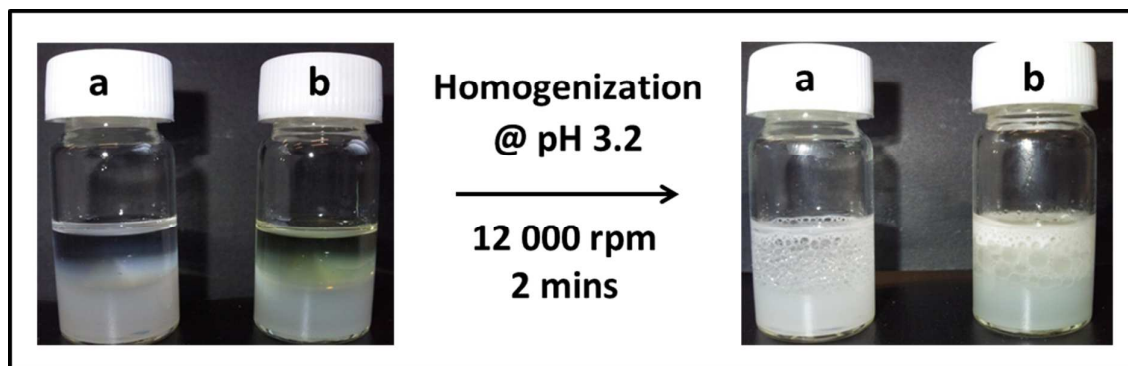
**Figure S1.** Acid titration curves for (●) 0.8 mol % DVB cross-linked PEGMA-PDEA latex (entry 1, Table 1).



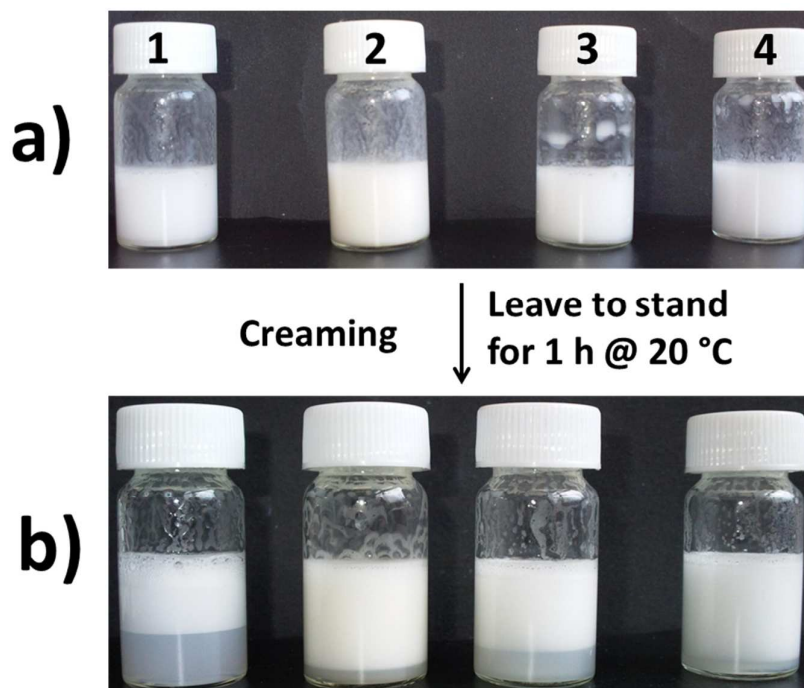
**Figure S2.** Transmission electron microscopy image obtained for 0.8 mol % DVB cross-linked PEGMA-PDEA latex (entry 4, Table 1).



**Figure S3.** Digital photographs obtained for PEGMA-PDEA latex (pH 3.2, 2.0 mL) plus 2.0 mL of; (a) *n*-dodecane and (b) sunflower oil before and after homogenization.



**Figure S4.** Digital photographs of: (a) PEGMA-PDEA stabilized oil-in-water emulsions after homogenization at 12,000 rpm for 2 mins, (b) subsequent creaming of the less dense oil droplets 1 h after homogenization. The four oils used in these experiments were: (1) *n*-dodecane, (2) sunflower oil, (3) isononyl isononanoate, and (4) isopropyl myristate.



**Figure S5.** Variation of zeta potential with pH cycles showing the hysteresis of the particles following a pH-induced latex-to-microgel transition between pH ~4.8 and ~7.9 for 0.8 mol % DVB cross-linked PEGMA-PDEA latex (entry 1, Table 1) using CO<sub>2</sub>/N<sub>2</sub> purging for 30 min.

