
Article:
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Supporting Information for:

A highly anisotropic and hydrolytically degradable Pickering emulsifier for oil-in-water emulsions

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Table S1. Volume-average droplet diameter, D[4,3]**,** and associated span (which is a measure of the width of the droplet size distribution such that span **=** $\frac{D(90)-D(10)}{D(50)}$) for Pickering emulsions prepared at 20 °C via high-shear homogenization at 13,500 rpm for 2 min using 20% v/v squalane and an aqueous dispersion of $PLLA_{17}$-$PDMAC_{400}$ platelets at varying concentrations (0.001 to 1.0 % w/w).

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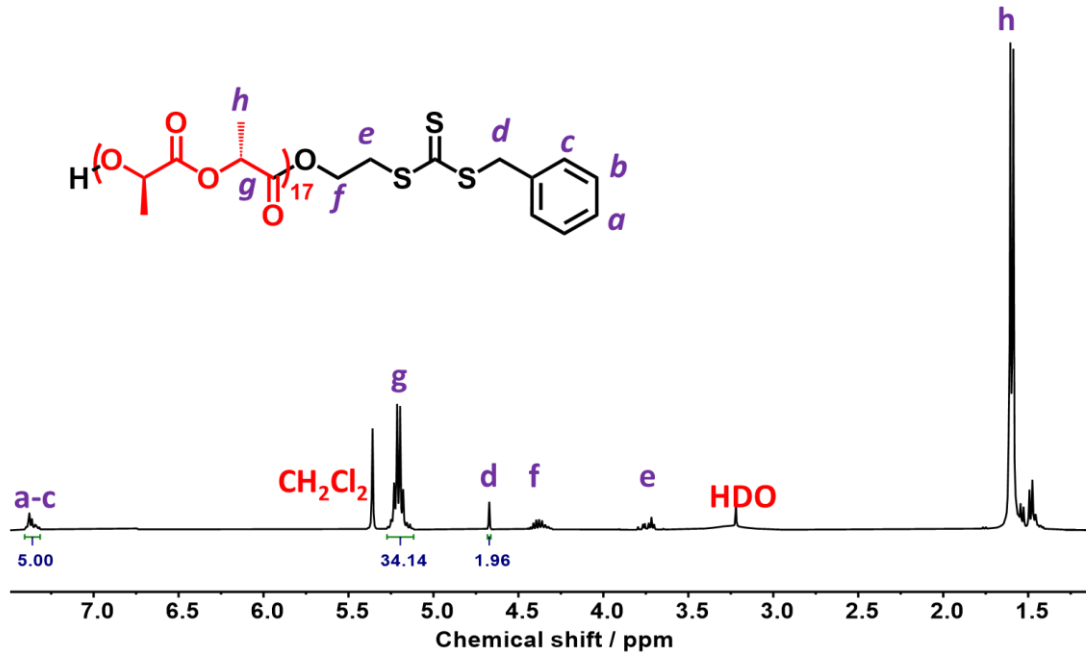
Table S2. Volume-average droplet diameter, D[4,3]**,** and associated span (which is a measure of the width of the droplet size distribution such that span **=** $\frac{D(90)-D(10)}{D(50)}$) for Pickering emulsions prepared at 20 °C via high-shear homogenization at 5,000 to 25,000 rpm for 2 min using a 0.025 % w/w aqueous dispersion of $PLLA_{17}$-$PDMAC_{400}$ platelets and 20% v/v squalane.

Figure S6. Laser diffraction particle size distribution recorded for a dilute aqueous dispersion of $PLLA_{17}$-$PDMAC_{400}$ platelets.



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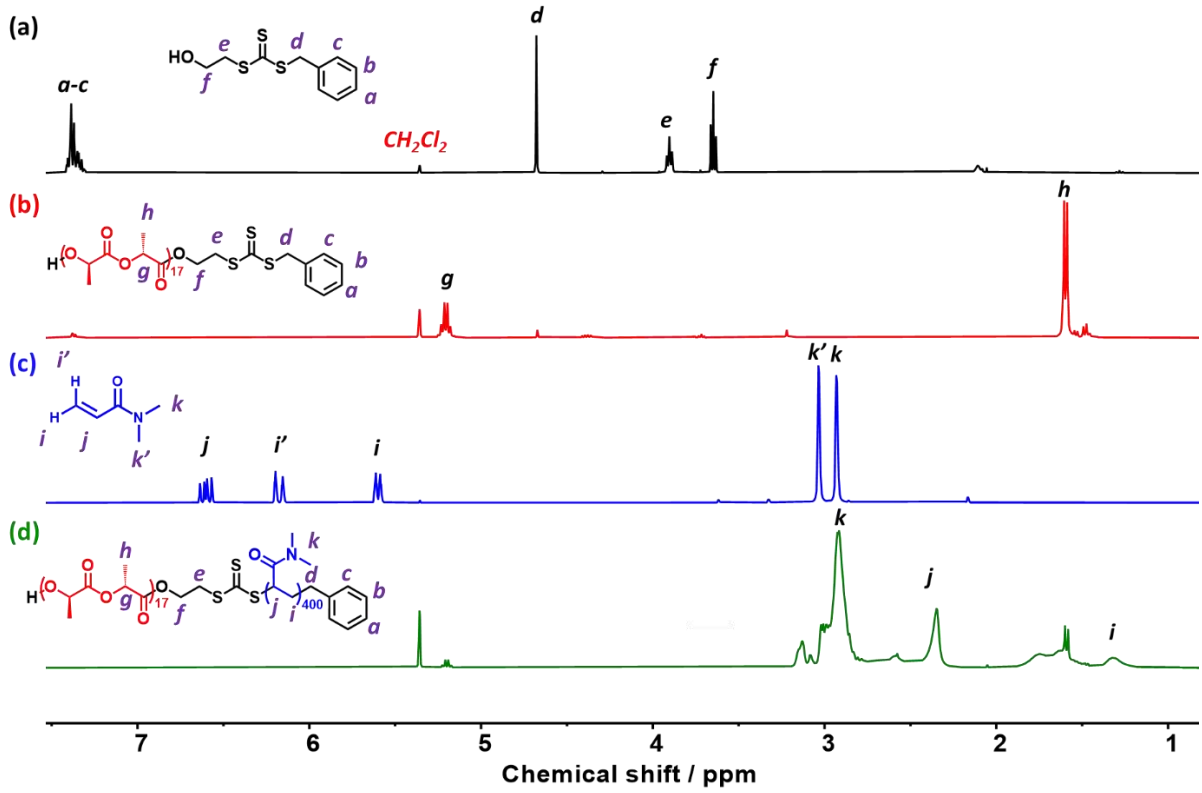

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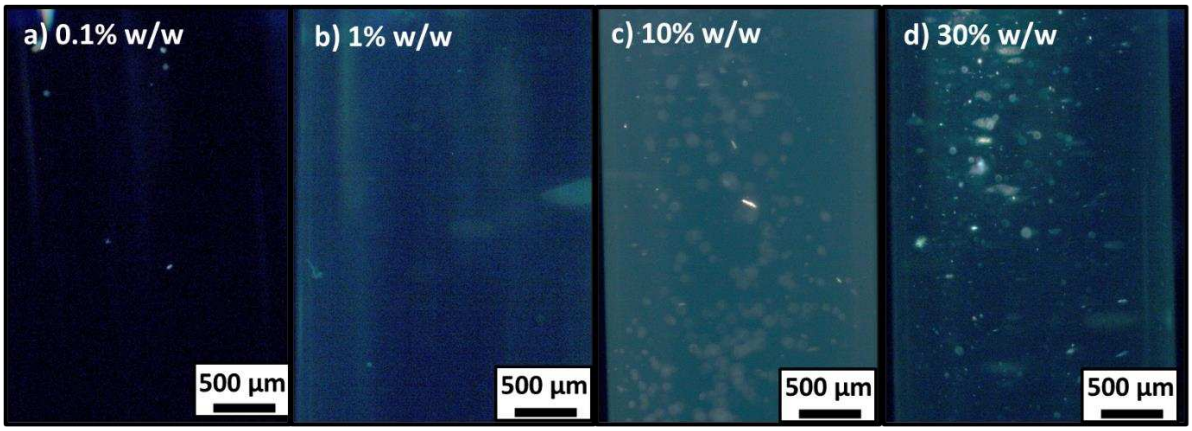

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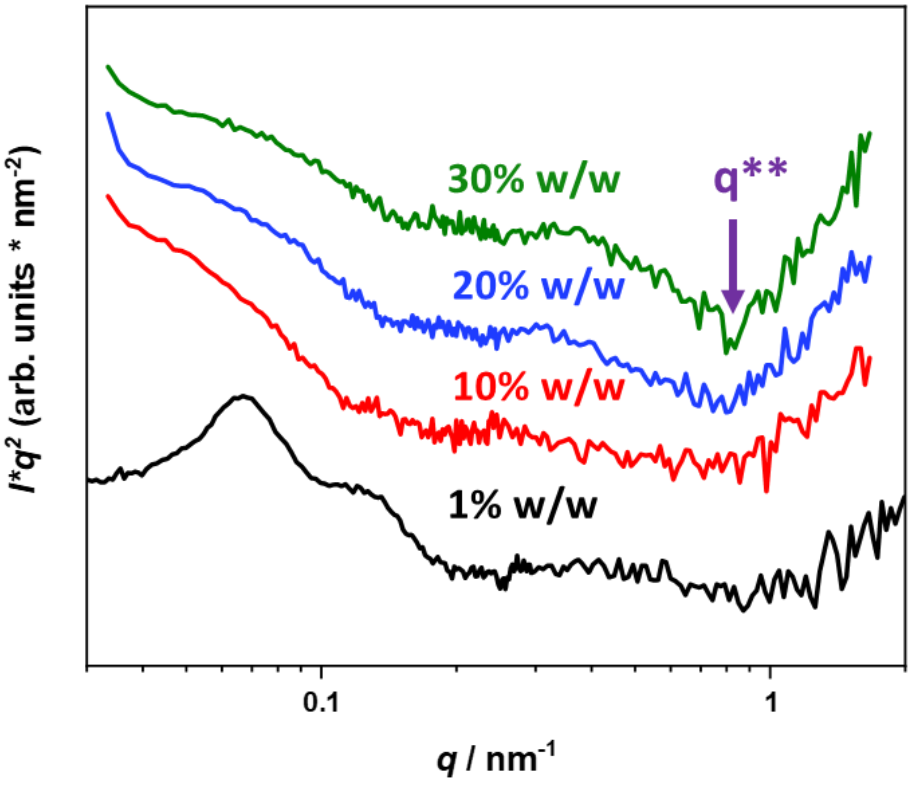

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$PLLA_{17}$-$PDMAC_{400}$ concentration / % w/w	Volume-average droplet diameter, D[4,3] / µm	Span
0.0010	125	1.4
0.0050	85	1.1
0.010	67	0.77
0.025	43	0.75
0.030	41	1.0
0.050	40	1.2
0.080	43	1.2
0.10	40	1.1
1.0	42	1.1

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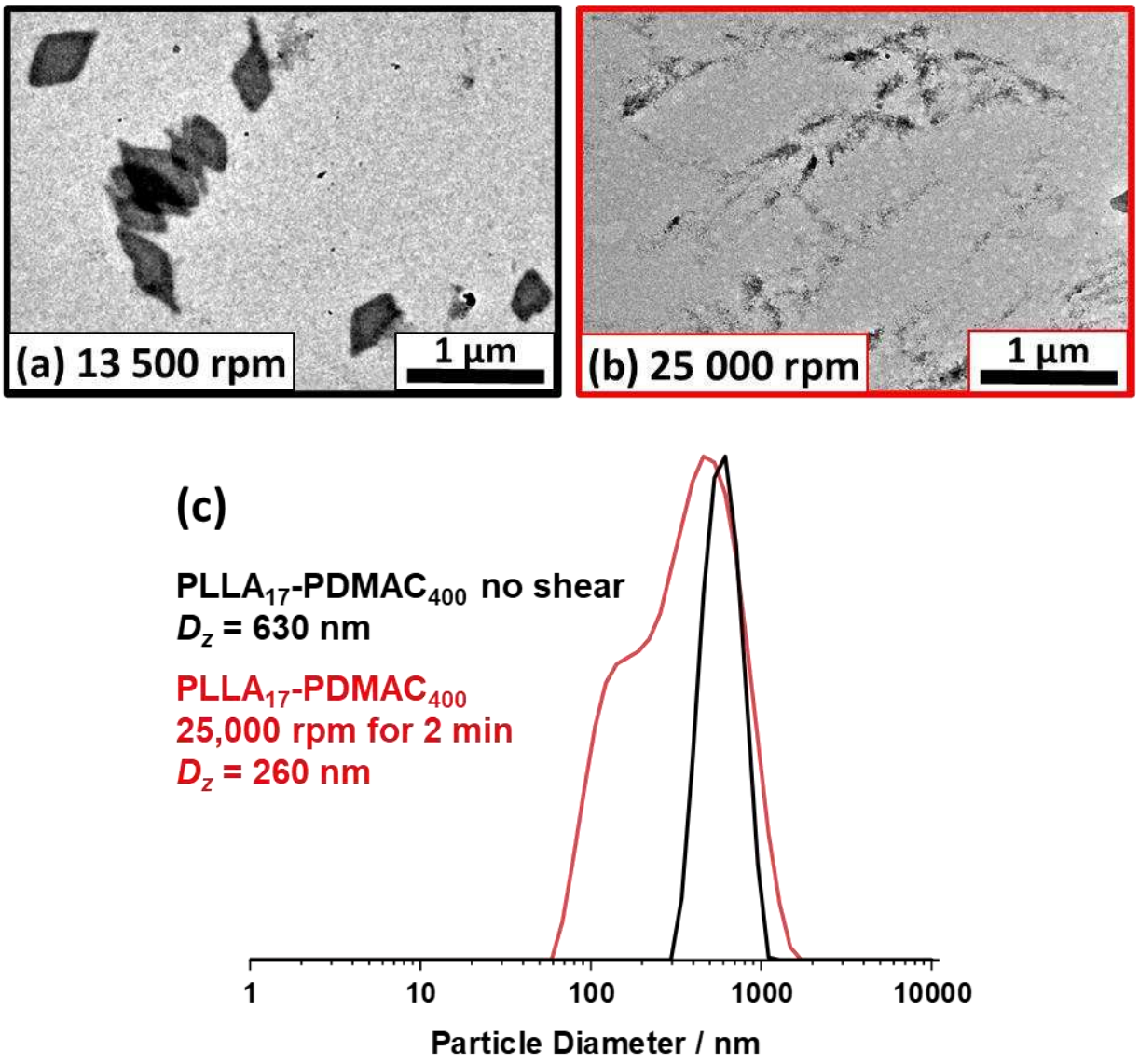

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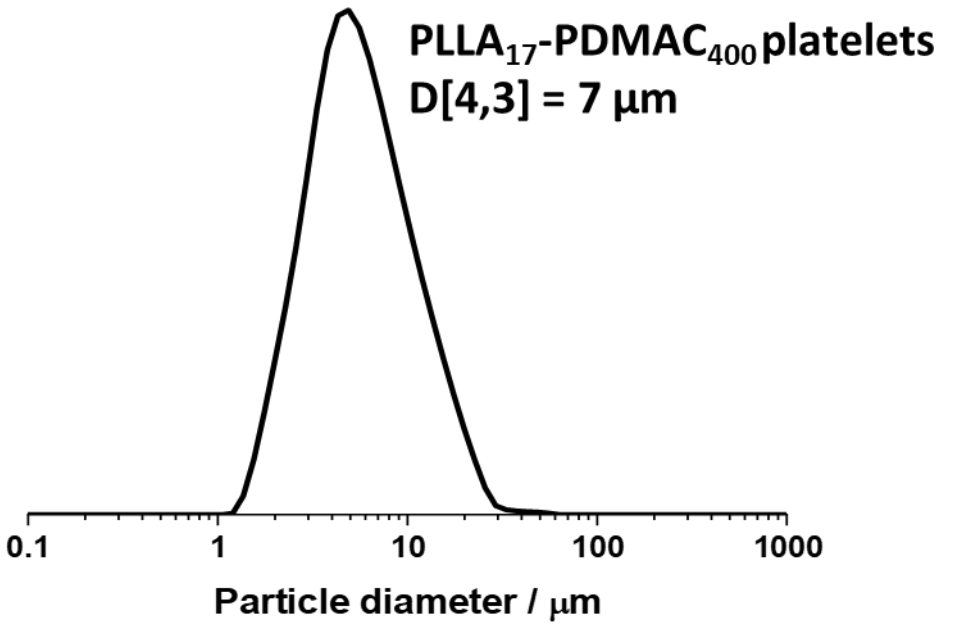
Shear rate / rpm	Volume-average droplet diameter, D[4,3] / μm	Span
Hand shaken	175	0.81
5 000	140	0.60
7 500	99	0.73
10 000	68	0.83
13 500	43	0.75
15 000	45	0.83
20 000	42	1.0
22 500	42	0.89
25 000	29	0.79

Table S2. Volume-average droplet diameter, D[4,3], and associated span (which is a measure of the width of the droplet size distribution such that span = $\frac{D(90)-D(10)}{D(50)}$) for Pickering emulsions prepared at 20 °C via high-shear homogenization at 5,000 to 25,000 rpm for 2 min using a 0.025 % w/w aqueous dispersion of $PLLA_{17}$-$PDMAC_{400}$ platelets and 20% v/v squalane.



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