

How to prepare and stabilize very small nanoemulsions

Supporting information

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Numerical values of the fitting parameters for the curves of emulsification by sonication are summarized below:

	y_0 (nm)	A (nm)	τ (s)
Figure 2:	<i>a. effect of amount of Myrj s50</i>		
m = 150mg	52.86 ± 0.23	87.62 ± 0.36	3.47 ± 0.04
m = 228mg	36.10 ± 0.65	70.95 ± 1.12	2.88 ± 0.14
Figure 3:	<i>effect of PEG chain length</i>		
Myrj s40 (40 oxyethylene units)	64.64 ± 0.12	83.46 ± 0.22	2.46 ± 0.02
Myrj s50 (50 oxyethylene units)	53.61 ± 0.23	82.61 ± 0.41	2.82 ± 0.04
Myrj s100 (100 oxyethylene units)	46.68 ± 0.70	74.19 ± 1.29	2.34 ± 0.13
Figure 4:	<i>effect of sample viscosity:</i>		
	<i>a. dispersed phase weight fraction</i>		
$\phi = 0.2$	52.29 ± 1.67	116.67 ± 3.57	1.49 ± 0.14
$\phi = 0.3$	48.69 ± 2.04	122.29 ± 3.16	3.04 ± 0.23
$\phi = 0.4$	53.62 ± 1.65	62.77 ± 2.81	2.46 ± 0.33
	<i>b. continuous phase viscosity</i>		
0 mg glycerol	49.03 ± 3.62	104.17 ± 1.47	3.45 ± 0.49
100 mg glycerol	47.47 ± 1.86	101.43 ± 1.04	3.11 ± 0.25
900 mg glycerol	48.93 ± 0.85	103.20 ± 9.44	2.46 ± 0.11
Figure 5:	<i>a. effect of sonication power</i>		
$P_s = 20\%$	54.99 ± 5.87	111.47 ± 6.02	9.32 ± 1.38
$P_s = 25\%$	48.69 ± 2.04	122.29 ± 3.16	3.04 ± 0.23
$P_s = 40\%$	48.61 ± 2.88	83.45 ± 4.63	2.87 ± 0.46