

Supplementary information

Concentration of free DDAB (c_1^{free}), free DTAB (c_2^{free}), surfactant present in aggregates (c_{agg}) and mole fraction of DDAB in aggregates as calculated from the Poisson-Boltzmann theory and the activity coefficients in eqns (19) and (20) at different overall surfactant concentrations (c_t) for a given value y of the mole fraction of DDAB in solution. The corresponding tables for other y -values may be found in the supporting information.

y	c_t /mM	x	c_{agg} /mM	c_1^{free} /mM	c_2^{free} /mM	
0.350	200.00	0.3720	188.19	11.805	$7.8 \cdot 10^{-4}$	Micelles
0.350	160.00	0.3777	148.26	11.743	$8.0 \cdot 10^{-4}$	Micelles
0.350	120.00	0.3876	108.36	11.636	$8.2 \cdot 10^{-4}$	Micelles
0.350	100.00	0.3957	88.451	11.548	$8.5 \cdot 10^{-4}$	Micelles
0.350	80.00	0.4082	68.588	11.411	$8.8 \cdot 10^{-4}$	Micelles
0.350	60.00	0.4338	48.412	11.588	$2.7 \cdot 10^{-4}$	Bilayers

y	c_t /mM	x	c_{agg} /mM	c_1^{free} /mM	c_2^{free} /mM	
0.300	120.00	0.3340	107.79	12.208	$6.8 \cdot 10^{-4}$	Micelles
0.300	60.00	0.3734	48.210	11.790	$7.9 \cdot 10^{-4}$	Micelles
0.300	40.00	0.4238	28.310	11.690	$2.6 \cdot 10^{-4}$	Bilayers
0.300	30.00	0.4771	18.864	11.136	$3.1 \cdot 10^{-4}$	Bilayers
0.300	20.00	0.5910	10.151	9.8486	$4.3 \cdot 10^{-4}$	Bilayers
0.300	15.00	0.6941	6.4822	8.5172	$5.9 \cdot 10^{-4}$	Bilayers
0.300	10.00	0.8284	3.6201	6.3789	$9.4 \cdot 10^{-4}$	Bilayers
0.300	7.50	0.8951	2.5123	4.9864	$1.3 \cdot 10^{-3}$	Bilayers
0.300	5.00	0.9506	1.5768	3.4222	$2.0 \cdot 10^{-3}$	Bilayers
0.300	2.50	0.9872	0.7556	1.7403	$4.1 \cdot 10^{-3}$	Bilayers

y	c_t /mM	x	c_{agg} /mM	c_1^{free} /mM	c_2^{free} /mM	
0.250	120.00	0.2798	107.23	12.766	$5.5 \cdot 10^{-4}$	Micelles
0.250	60.00	0.3151	47.595	12.405	$6.4 \cdot 10^{-4}$	Micelles
0.250	40.00	0.3567	28.031	11.968	$7.4 \cdot 10^{-4}$	Micelles
0.250	30.00	0.4122	18.193	11.807	$2.5 \cdot 10^{-4}$	Bilayers
0.250	20.00	0.5297	9.4387	10.561	$3.6 \cdot 10^{-4}$	Bilayers
0.250	15.00	0.6445	5.8177	9.1818	$5.1 \cdot 10^{-4}$	Bilayers
0.250	10.00	0.8005	3.1220	6.8772	$8.4 \cdot 10^{-4}$	Bilayers
0.250	7.50	0.8785	2.1326	5.3663	$1.2 \cdot 10^{-3}$	Bilayers
0.250	5.00	0.9430	1.3237	3.6745	$1.9 \cdot 10^{-3}$	Bilayers
0.250	2.50	0.9853	0.6305	1.8657	$3.8 \cdot 10^{-3}$	Bilayers

y	c_t/mM	x	c_{agg}/mM	c_1^{free}/mM	c_2^{free}/mM	
0.200	120.00	0.2250	106.69	13.313	$4.3 \cdot 10^{-4}$	Micelles
0.200	60.00	0.2554	46.988	13.012	$5.0 \cdot 10^{-4}$	Micelles
0.200	40.00	0.2924	27.362	12.638	$5.8 \cdot 10^{-4}$	Micelles
0.200	30.00	0.3367	17.820	12.180	$6.9 \cdot 10^{-4}$	Micelles
0.200	20.00	0.4604	8.6874	11.312	$2.9 \cdot 10^{-4}$	Bilayers
0.200	15.00	0.5873	5.1066	9.8930	$4.3 \cdot 10^{-4}$	Bilayers
0.200	10.00	0.7691	2.5996	7.3996	$7.5 \cdot 10^{-4}$	Bilayers
0.200	7.50	0.8602	1.7425	5.7565	$1.1 \cdot 10^{-3}$	Bilayers
0.200	5.00	0.9348	1.0681	3.9302	$1.7 \cdot 10^{-3}$	Bilayers
0.200	2.50	0.9832	0.5049	1.9915	$3.6 \cdot 10^{-3}$	Bilayers

y	c_t/mM	x	c_{agg}/mM	c_1^{free}/mM	c_2^{free}/mM	
0.150	120.00	0.1696	106.15	13.848	$3.2 \cdot 10^{-4}$	Micelles
0.150	60.00	0.1940	46.385	13.614	$3.7 \cdot 10^{-4}$	Micelles
0.150	40.00	0.2248	26.685	13.314	$4.3 \cdot 10^{-4}$	Micelles
0.150	30.00	0.2636	17.070	12.929	$5.2 \cdot 10^{-4}$	Micelles
0.150	20.00	0.3680	8.1516	11.848	$7.7 \cdot 10^{-4}$	Micelles
0.150	15.00	0.5198	4.3282	10.672	$3.5 \cdot 10^{-4}$	Bilayers
0.150	10.00	0.7232	2.0452	7.9542	$6.7 \cdot 10^{-4}$	Bilayers
0.150	7.50	0.8399	1.3385	6.1605	$9.8 \cdot 10^{-4}$	Bilayers
0.150	5.00	0.9259	0.8083	4.1902	$1.6 \cdot 10^{-3}$	Bilayers
0.150	2.50	0.9811	0.3789	2.1177	$3.3 \cdot 10^{-3}$	Bilayers

y	c_t/mM	x	c_{agg}/mM	c_1^{free}/mM	c_2^{free}/mM	
0.100	120.00	0.1136	105.63	14.375	$2.1 \cdot 10^{-4}$	Micelles
0.100	60.00	0.1310	45.787	14.213	$2.4 \cdot 10^{-4}$	Micelles
0.100	40.00	0.1538	26.002	13.998	$2.8 \cdot 10^{-4}$	Micelles
0.100	30.00	0.1841	16.290	13.710	$3.5 \cdot 10^{-4}$	Micelles
0.100	20.00	0.2773	7.2081	12.791	$5.5 \cdot 10^{-4}$	Micelles
0.100	15.00	0.4362	3.4365	11.563	$2.7 \cdot 10^{-4}$	Bilayers
0.100	10.00	0.6915	1.4454	8.5540	$5.8 \cdot 10^{-4}$	Bilayers
0.100	7.50	0.8173	0.9162	6.5829	$9.0 \cdot 10^{-4}$	Bilayers
0.100	5.00	0.9163	0.5439	4.4546	$1.5 \cdot 10^{-3}$	Bilayers
0.100	2.50	0.9787	0.2522	2.2447	$3.1 \cdot 10^{-3}$	Bilayers

y	c_t/mM	x	c_{agg}/mM	c_1^{free}/mM	c_2^{free}/mM	
0.050	120.00	0.0571	105.11	14.891	$1.0 \cdot 10^{-4}$	Micelles
0.050	60.00	0.0664	45.193	14.807	$1.2 \cdot 10^{-4}$	Micelles
0.050	40.00	0.0790	25.307	14.693	$1.4 \cdot 10^{-4}$	Micelles
0.050	30.00	0.0970	15.472	14.528	$1.7 \cdot 10^{-4}$	Micelles
0.050	20.00	0.1639	6.0972	13.903	$3.0 \cdot 10^{-4}$	Micelles
0.050	15.00	0.3031	2.4710	12.528	$6.1 \cdot 10^{-4}$	Micelles
0.050	10.00	0.6415	0.7790	9.2205	$5.0 \cdot 10^{-4}$	Bilayers
0.050	7.50	0.7918	0.4727	7.0264	$8.1 \cdot 10^{-4}$	Bilayers
0.050	5.00	0.9059	0.2742	4.7244	$1.4 \cdot 10^{-3}$	Bilayers
0.050	2.50	0.9762	0.1250	2.3721	$3.0 \cdot 10^{-3}$	Bilayers