

BASIC DATA OF CHAPTER 2

Table 16. Experimental and theoretical CMC, surface pressure at CMC (π_{CMC}), surface adsorption excess (Γ_{max}), area minimum (A_{min}), Gibbs free energy of micellization (ΔG_{MIC}^0), adsorption (ΔG_{ads}^0) and fraction of counter ion binding (β) of mixed surfactant systems at 298K.

α_{AAS}	<i>CMC/mM</i>					Theo. (CMC_{cal})	$\pi_{\text{CMC}}/$ mNm^{-1}	$10^6\Gamma_{\text{max}}/$ mol m^{-2}	$A_{\text{min}}/$ nm^2 molecule^{-1}	$(-\Delta G_{\text{mic}}^0/$ kJ.mol^{-1}	$(-\Delta G_{\text{ads}}^0/$ kJ.mol^{-1}	β
	Surface Tension	Cond.	Fluo. Spectro.	UV-VIS Abs.	Expt. Average (CMC_{av})							
HTAB- sodium <i>N</i>-dodecylaminomalonate												
1.0	44.82	50.87	53.85	55.12	51.20	36.4	34.4	1.86	0.88	27.59	66.88	0.52
0.8	0.15	0.15	0.16	0.14	0.15	0.75	40.9	1.68	0.98	43.68	68.88	0.35
0.6	0.09	0.09	0.10	0.08	0.09	0.73	40.9	1.67	0.99	41.47	67.54	0.23
0.5	0.06	0.06	0.11	0.06	0.07	0.72	42.2	1.85	0.89	46.68	68.33	0.37
0.4	0.06	0.06	0.08	0.04	0.06	0.71	43.1	1.52	1.09	53.24	81.57	0.53
0.2	0.04	0.04	0.05	0.03	0.04	0.7	41.5	1.57	1.05	55.45	81.87	0.58
0.0	0.72	0.73	0.75	0.72	0.73	0.69	32.6	0.90	1.84	49.58	85.81	0.77
HTAB-sodium <i>N</i>-dodecylaminoaspartate												
1.0	54.18	46.83	41.23	42.87	46.30	55.19	32.4	2.38	0.69	26.53	62.36	0.55
0.8	0.15	0.13	0.14	0.14	0.14	3.28	39.4	1.75	0.94	41.65	64.18	0.33
0.6	0.09	0.08	0.07	0.08	0.08	1.69	39.8	1.83	0.90	42.95	64.19	0.31
0.5	0.04	0.05	0.08	0.07	0.06	1.36	40.6	1.70	0.97	46.73	69.52	0.40
0.4	0.04	0.05	0.04	0.06	0.05	1.13	41.6	1.38	1.20	47.29	75.71	0.39
0.2	0.04	0.04	0.04	0.03	0.04	0.76	40.2	1.39	1.18	55.74	84.39	0.60
HTAB-sodium <i>N</i>-dodecylaminoglutamate												
1.0	33.81	36.67	40.28	35.03	36.45	45.89	31.2	2.30	0.71	28.12	56.81	0.60
0.8	0.17	0.15	0.07	0.09	0.12	0.74	37.5	1.50	1.07	41.43	66.22	0.28
0.6	0.06	0.08	0.06	0.07	0.07	0.73	39.6	1.72	0.96	45.83	69.98	0.35
0.5	0.05	0.06	0.04	0.05	0.05	0.72	39.5	1.59	1.04	46.48	71.36	0.35
0.4	0.04	0.05	0.04	0.04	0.04	0.71	40.3	1.30	1.27	59.00	90.04	0.69
0.2	0.03	0.04	0.03	0.03	0.03	0.70	39.2	1.27	1.30	57.71	88.61	0.65