

Thermodynamic and Self-Assembly Properties of Sodium Bis(2-ethylhexyl) Sulfosuccinate in Polyethylene glycol 200 and Water Mixed Solvent Media

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Table S1. Conductivities at Corresponding Molalities of AOT in PEG 200 + Water Mixtures at Temperature $T = 298.15$ K and Pressure $p = 101.3$ kPa.

m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹
pure water		5 wt% PEG 200		10 wt% PEG 200		20 wt% PEG 200	
0	3.27	0	61.9	0	100.9	0	144.4
0.1687	14.71	0.4349	86.9	1.1582	155.6	1.9160	209
0.5229	38.9	1.1534	127.4	2.9644	241	4.9083	309
0.8008	57.8	1.9431	171.0	4.9588	332	8.2503	409
1.1080	78.6	2.7590	216	6.9521	417	11.6789	504
1.3738	96.5	3.5978	262	8.9118	498	14.9362	592
1.6627	116.0	4.4048	306	10.8433	574	18.6088	687
2.0147	139.4	5.2225	349	12.7723	648	21.8600	770
2.3269	161.3	6.0548	391	14.7094	720	25.0276	847
2.6608	184.1	6.8842	432	16.6026	789	28.2028	924
3.0264	213	7.7261	473	18.5291	857	31.4739	1001
3.3984	239	8.5877	516	20.4835	925	34.6845	1084
3.6541	258	9.4516	556	22.3890	990	37.8342	1161
3.9499	279	10.3330	597	24.3495	1056	41.0420	1238
4.2019	296	11.1892	636	26.2573	1118	44.1566	1284
4.4344	313	12.0082	673	28.0273	1176	46.9505	1344
4.6501	328	12.7972	708	30.0917	1243	49.3086	1393
4.8957	345	13.7803	751				
5.1650	363	14.7774	794				
5.5128	387						
5.7816	405						

Standard uncertainty for temperature and molality are $u(T) = 0.10$ K, $u(m) = 0.0002$ mmol·kg⁻¹, respectively. Relative standard uncertainties for pressure and conductivity are $u_r(p) = 0.05$, $u_r(\kappa) = 0.02$, respectively.

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Table S2. Conductivities at Corresponding Molalities of AOT in PEG 200 + Water Mixtures at Temperature $T = 298.15$ K and Pressure $p = 101.3$ kPa.

m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹
30 wt% PEG 200		40 wt% PEG 200		50 wt% PEG 200		60 wt% PEG 200	
0	148.3	0	131.6	0	104.4	0	72.5
2.2460	201	2.8767	179	3.5421	141.0	2.5167	83.5
5.8180	283	7.3726	251	8.8343	188.1	6.3038	107.6
9.7023	361	12.2139	318	14.6694	237	10.5750	130.6
13.6680	437	17.0415	378	20.6836	290	14.8149	152.5
17.6950	511	21.8759	436	26.5017	341	19.1311	180.0
21.7382	583	26.6457	491	32.2745	388	23.4333	199.0
25.8497	654	31.4743	549	37.9837	422	27.7124	223
30.4664	735	36.2507	602	43.7375	467	32.1724	247
34.7556	803	41.0117	655	49.4362	512	36.5698	269
39.0464	872	45.9069	708	55.2609	552	41.2908	293
43.2559	938	50.7849	761	61.0556	592	45.8452	315
47.6017	1007	55.4760	809	66.6964	627	50.3857	337
52.0326	1083	60.2778	856	72.5380	669	55.2000	357
56.4145	1161	64.8816	904	78.1143	700	59.8799	384
60.4952	1215	69.2371	946	83.3403	737	64.3320	401
64.4076	1279	73.3345	990	88.3576	765	68.5808	423
69.9751	1356	78.7409	1048	94.8898	811	74.2666	444
76.2461	1428	83.5114	1092	102.4794	860	80.5574	474

Standard uncertainty for temperature and molality are $u(T) = 0.10$ K, $u(m) = 0.0002$ mmol·kg⁻¹, respectively. Relative standard uncertainties for pressure and conductivity are $u_r(p) = 0.05$, $u_r(\kappa) = 0.02$, respectively.

Table S3. Conductivities at Corresponding Molalities of AOT in PEG 200 + Water Mixtures at Temperature $T = 298.15$ K and Pressure $p = 101.3$ kPa.

m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹
70 wt% PEG 200		80 wt% PEG 200		90 wt% PEG 200		pure PEG 200	
0	49.5	0	31.4	0	20.1	0	11.27
3.1252	58.3	4.5654	39.1	4.9245	24.2	5.6645	12.75
8.4510	77.4	11.8305	52.0	11.5422	29.1	14.3500	15.41
13.6916	94.0	19.9140	65.8	19.2677	36.4	28.6002	20.8
20.0260	115.3	27.9800	78.2	26.6709	42.5	42.1575	25.5
25.5076	132.4	35.9959	91.4	34.2630	49.3	58.2240	31.3
30.8504	148.8	43.9643	104.5	42.9960	56.3	70.5613	35.5
36.3580	164.6	51.7985	115.8	50.9440	62.8	80.4075	39.3
41.8907	181.0	60.4982	128.7	58.4219	69.3	90.4493	43.6
47.2475	196.0	68.5196	141.0	65.9919	75.8	100.4796	46.8
52.8687	212	76.2046	151.5	73.8845	82.0	110.3908	50.3
58.5993	228	83.7799	161.8	81.9399	88.1	120.8180	53.3
64.3365	246	91.2845	173.0	89.9399	93.7	130.9983	56.5
70.2573	260	98.9198	183.0	98.2704	99.8	140.8220	60.0
76.5954	278	106.0930	192.0	106.3619	105.8	150.2489	63.2
82.2954	293	113.0571	202	114.0895	111.6	162.6998	67.1
87.6024	307	119.5078	210	121.4714	116.7	182.4582	72.8
94.3699	325	127.9287	221	131.0596	123.5	202.1876	78.7
100.9500	343	137.2233	233	144.4875	133.6	217.2127	83.5

Standard uncertainty for temperature and molality are $u(T) = 0.10$ K, $u(m) = 0.0002$ mmol·kg⁻¹, respectively. Relative standard uncertainties for pressure and conductivity are $u_r(p) = 0.05$, $u_r(\kappa) = 0.02$, respectively.

Table S4. Conductivities at Corresponding Molalities of AOT in EG+ Water, PEG 200 + Water and PEG 400 + Water Mixtures at Temperature $T = 298.15$ K and Pressure $p = 101.3$ kPa.

m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹
5 wt% EG		5 wt% PEG 400		10 wt% EG		10 wt% PEG 200	
0	8.32	0	65.2	0	7.00	0	99.1
0.4786	36.8	0.4774	94.3	0.4770	33.3	0.4792	122.9
1.2343	81.5	1.2281	135.6	1.1907	72.1	1.2377	160.2
2.0866	131.1	2.0276	179.0	2.0216	116.7	2.0631	200
2.9006	179.0	2.8383	224	2.8346	160.5	2.8953	241
3.6979	226	3.6263	267	3.6061	202	3.7018	279
4.4937	272	4.4317	310	4.4128	245	4.5029	317
5.3040	317	5.2345	352	5.2286	287	5.3216	353
6.1190	361	6.0415	392	6.0221	326	6.1172	388
6.9329	404	6.8411	431	6.8104	364	6.9023	422
7.7270	444	7.6433	469	7.6109	401	7.6984	455
8.5124	484	8.4562	508	8.3998	437	8.4892	488
9.3033	523	9.2319	544	9.1791	472	9.2848	520
10.0862	560	10.0381	580	9.9800	508	10.0954	552
10.8641	597	10.8094	615	10.7604	541	10.8731	584
11.6009	631	11.5313	646	11.4800	572	11.6093	612
12.2840	663	12.2131	676	12.1619	600	12.2885	638
13.1862	703	13.0991	714	13.1011	639	13.2047	674
13.9860	738	14.0315	754	13.8781	671	14.1141	712

Standard uncertainty for temperature and molality are $u(T) = 0.10$ K, $u(m) = 0.0002$ mmol·kg⁻¹, respectively. Relative standard uncertainties for pressure and conductivity are $u_r(p) = 0.05$, $u_r(\kappa) = 0.02$, respectively.

Table S5. Conductivities at Corresponding Molalities of AOT in EG+ Water, PEG 200 + Water and PEG 400 + Water Mixtures at Temperature $T = 298.15$ K and Pressure $p = 101.3$ kPa.

m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹
10 wt% PEG 400		20 wt% EG		20 wt% PEG 200		20 wt% PEG 400	
0	95.1	0	4.32	0	139.7	0	142.7
0.5031	120.2	0.6020	31.8	0.4834	155.1	0.6068	164.3
1.2421	156.2	1.4879	71.8	1.2288	183.0	1.4904	195.0
2.0782	196.0	2.4705	115.4	2.0884	214	2.4975	230
2.9014	236	3.4667	159.5	2.9309	243	3.4701	263
3.7153	274	4.4372	202	3.7780	273	4.4522	295
4.5273	311	5.3762	242	4.5575	298	5.4208	325
5.3372	347	6.3226	281	5.3505	324	6.3955	354
6.1373	382	7.3002	319	6.1490	349	7.3451	382
6.9235	416	8.2554	355	6.9546	374	8.2812	409
7.7310	449	9.2324	392	7.7723	398	9.2776	437
8.5254	482	10.2067	428	8.5710	422	10.2469	463
9.3130	513	11.1485	461	9.3671	446	11.2211	489
10.1200	545	12.1156	494	10.2336	471	12.1707	515
10.8866	575	13.0475	526	10.9915	493	13.0911	540
11.6130	603	13.9132	556	11.7012	513	14.0809	566
12.3404	630	14.8740	589	12.3835	532	15.0456	592
13.2560	664	15.9532	625	13.2424	556	16.0301	619
14.0596	694	16.8855	658	14.1293	582	16.9466	642

Standard uncertainty for temperature and molality are $u(T) = 0.10$ K, $u(m) = 0.0002$ mmol·kg⁻¹, respectively. Relative standard uncertainties for pressure and conductivity are $u_r(p) = 0.05$, $u_r(\kappa) = 0.02$, respectively.

Table S6. Conductivities at Corresponding Molalities of AOT in EG+ Water, PEG 200 + Water and PEG 400 + Water Mixtures at Temperature $T = 298.15$ K and Pressure $p = 101.3$ kPa.

m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹
30 wt% EG		30 wt% PEG 200		30 wt% PEG 400		40 wt% EG	
0	4.25	0	145.5	0	144.5	0	3.45
0.5842	25.0	0.5786	162.6	0.5963	159.2	0.8085	26.6
1.4799	56.3	1.4603	186.0	1.4758	180.0	2.0202	60.5
2.5065	91.8	2.4510	212	2.4780	204	3.3475	96.9
3.5024	131.2	3.4504	238	3.4492	227	4.6638	138.3
4.4720	165.8	4.4269	262	4.4325	249	5.9559	174.0
5.4524	200	5.3809	285	5.4083	271	7.1929	206
6.4481	233	6.3484	307	6.3710	291	8.4679	238
7.3936	262	7.3086	328	7.3229	311	9.7477	269
8.3327	291	8.2637	348	8.2607	330	10.9824	298
9.2967	320	9.2386	368	9.2290	348	12.2580	327
10.2447	347	10.1937	388	10.1714	367	13.5190	355
11.1836	374	11.1428	407	11.1231	384	14.7751	382
12.1665	401	12.1110	426	12.1017	402	16.0768	410
13.0919	427	13.0447	444	13.0187	418	17.2957	436
14.0182	452	13.9192	461	13.8872	433	18.5393	462
14.8794	475	14.7408	477	14.7199	449	19.6543	485
15.9284	503	15.8289	498	15.8068	468	21.0605	518
16.8399	526	16.9650	519	16.8714	490	22.1693	537

Standard uncertainty for temperature and molality are $u(T) = 0.10$ K, $u(m) = 0.0002$ mmol·kg⁻¹, respectively. Relative standard uncertainties for pressure and conductivity are $u_r(p) = 0.05$, $u_r(\kappa) = 0.02$, respectively.

Table S7. Conductivities at Corresponding Molalities of AOT in EG+ Water, PEG 200 + Water and PEG 400 + Water Mixtures at Temperature $T = 298.15$ K and Pressure $p = 101.3$ kPa.

m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹	m mmol·kg ⁻¹	κ μS·cm ⁻¹
40 wt% PEG 200		40 wt% PEG 400		50 wt% EG		50 wt% PEG 200	
0	126.7	0	125.6	0	2.68	0	98.5
0.6093	138.2	0.6096	135.3	0.6972	19.0	0.6812	107.0
1.5533	155.5	1.5188	148.5	1.7619	43.4	1.7382	119.7
2.5711	173	2.5949	166.2	2.9224	69.4	2.8889	132.9
3.6034	191	3.7453	182.0	4.0832	95.1	4.0624	146.2
4.5628	207	4.8217	198.0	5.2001	119.6	5.2006	158.7
5.5047	223	5.9248	214	6.3172	143.7	6.3145	171
6.4574	239	6.8933	229	7.4217	167.0	7.4278	183
7.4765	255	7.8216	241	8.5319	190.0	8.5700	195
8.4092	269	8.7364	254	9.6574	213	9.6842	207
9.3931	283	9.6947	266	10.7804	234	10.8291	219
10.3535	298	10.6373	278	11.9067	256	11.9363	230
11.2762	311	11.5566	290	13.0198	276	13.0337	240
12.2433	324	12.4729	301	14.1316	295	14.1578	251
13.1598	337	13.3651	312	15.2016	315	15.2409	261
14.0393	350	14.2040	322	16.2274	332	16.2775	271
14.8932	361	15.0016	333	17.2975	350	17.2435	280
15.9487	377	16.0442	347	18.5319	371	18.5010	291
16.9233	390	16.9430	359	19.7131	390	19.7226	302

Standard uncertainty for temperature and molality are $u(T) = 0.10$ K, $u(m) = 0.0002$ mmol·kg⁻¹, respectively. Relative standard uncertainties for pressure and conductivity are $u_r(p) = 0.05$, $u_r(\kappa) = 0.02$, respectively.

Table S8. Conductivities at Corresponding Molalities of AOT in EG+ Water, PEG 200 + Water and PEG 400 + Water Mixtures at Temperature $T = 298.15$ K and Pressure $p = 101.3$ kPa.

m mmol·kg ⁻¹	κ μS·cm ⁻¹
50 wt% PEG 400	
0	93.7
0.5692	100.8
1.4816	109.4
2.4604	118.2
3.5848	128.0
4.6157	137.4
5.6025	145.7
6.5587	153.6
7.5955	162.4
8.5564	171.0
9.4870	178.0
10.4177	186.0
11.3262	193.0
12.2676	201
13.1967	208
14.0586	214
14.8676	221
15.9070	229
16.3157	232

Standard uncertainty for temperature and molality are $u(T) = 0.10$ K, $u(m) = 0.0002$ mmol·kg⁻¹, respectively. Relative standard uncertainties for pressure and conductivity are $u_r(p) = 0.05$, $u_r(\kappa) = 0.02$, respectively.

Table S9. Observed Enthalpy Change at Corresponding Molalities of AOT in PEG 200 + Water Mixtures at Temperature $T = 298.15$ K and Pressure $p = 101.3$ kPa.

m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹	m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹	m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹	m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹
pure water		5 wt% PEG 200		10 wt% PEG 200		20 wt% PEG 200	
$m_{\text{(AOT, initial concentration)}}$ 12.0726 mmol·kg ⁻¹		$m_{\text{(AOT, initial concentration)}}$ 26.0337 mmol·kg ⁻¹		$m_{\text{(AOT, initial concentration)}}$ 39.9895 mmol·kg ⁻¹		$m_{\text{(AOT, initial concentration)}}$ 25.0061 mmol·kg ⁻¹	
0.3516	-2.9592	0.7569	0.4416	1.1629	4.1672	0.7276	7.5165
0.6833	-2.8868	1.4711	0.6903	2.2600	5.5004	1.4140	8.6757
0.9968	-2.7421	2.1460	0.9080	3.2969	4.0343	2.0627	9.9448
1.2935	-2.5756	2.7848	1.1706	4.2783	2.7305	2.6767	8.6021
1.5747	-2.3512	3.3903	1.5631	5.2085	1.9837	3.2587	7.4625
1.8416	-2.0942	3.9651	1.2749	6.0915	1.6040	3.8112	5.6182
2.0952	-1.7830	4.5114	1.1436	6.9308	1.3297	4.3363	3.8273
2.3366	-1.3560	5.0313	0.8881	7.7296	1.1568	4.8361	3.1734
2.5666	-1.0737	5.5267	0.6457	8.4906	1.0239	5.3122	2.2934
2.7860	-0.7986	5.9992	0.5031	9.2166	0.8846	5.7664	1.6539
2.9955	-0.6177	6.4505	0.4111	9.9099	0.7559	6.2002	1.3915
3.1957	-0.4512	6.8818	0.3609	10.5726	0.6694	6.6148	1.2912
3.3873	-0.3354	7.2946	0.3116	11.2068	0.5534	7.0116	1.1086
3.5708	-0.2449	7.6900	0.2407	11.8141	0.4437	7.3916	0.8048
3.7467	-0.1761	8.0690	0.1960	12.3964	0.3066	7.7559	0.5574
3.9154	-0.1472	8.4326	0.1544	12.9551	0.2475	8.1054	0.5051
4.0775	-0.1399	8.7819	0.1020	13.4916	0.2138	8.4411	0.4103
4.2332	-0.1255	9.1175	0.0665	14.0073	0.1948	8.7637	0.3667
4.3830	-0.1110	9.4403	0.0419	14.5032	0.1652	9.0740	0.3724
4.5272	-0.1327	9.7511	0.0265	14.9806	0.1020	9.3727	0.3345
4.6661	-0.1291	10.0504	0.0203	15.4404	0.0640	9.6604	0.2208
4.7999	-0.0966	10.3389	0.0188	15.8837	0.0302	9.9377	0.1640
4.9290	-0.1001	10.6171	0.0171	16.3112	0.0070	10.2052	0.0977
5.0536	-0.1001	10.8857	0.0080	16.7238	0.0218	10.4633	0.1450
5.1740	-0.1218	11.1451	0.0064	17.1222	0.0302	10.7126	0.1166
5.2902	-0.1472	11.3957	0.0141	17.5073	0.0260	10.9535	0.0977
5.4027	-0.1761	11.6380	0.0111	17.8800	0.0176	11.1865	0.0805
5.5114	-0.1906	11.8725	0.0110	18.2400	0.0049	11.4118	0.0408
5.6167	-0.1942	12.0994	0.0080	18.5884	0.0260	11.6299	0.0503
5.7186	-0.1834	12.3192	0.0126	18.9260	0.0134	11.8412	0.0503
5.8174	-0.1834	12.5321	0.0064	19.2531	0.0239	12.0458	0.0124
		12.7385	0.0034	19.5703	0.0070	12.2443	0.0219
		12.9387	0.0064	19.8778	0.0028	12.4367	0.0692
		13.1330	0.0034	20.1763	0.0091	12.6234	0.0219
		13.3216	0.0034	20.4660	0.0218	12.8047	0.0313

Standard uncertainty for temperature and molality are $u(T) = 0.10$ K, $u(m) = 0.0002$ mmol·kg⁻¹, respectively. Relative standard uncertainties for pressure and observed enthalpy change are $u_r(p) = 0.05$, $u_r(\Delta H_{\text{obs}}) = 0.02$, respectively.

The initial concentrated AOT solutions added to the solvent were prepared with the same solvent as the third row, whose concentrations were shown in the fourth row of this table.

Table S10. Observed Enthalpy Change at Corresponding Molalities of AOT in PEG 200 + Water Mixtures at Temperature $T = 298.15$ K and Pressure $p = 101.3$ kPa.

m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹	m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹	m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹	m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹
30 wt% PEG 200		40 wt% PEG 200		50 wt% PEG 200		60 wt% PEG 200	
$m_{\text{(AOT, initial concentration)}}$ 30.0768 mmol·kg ⁻¹		$m_{\text{(AOT, initial concentration)}}$ 19.9744 mmol·kg ⁻¹		$m_{\text{(AOT, initial concentration)}}$ 25.0895 mmol·kg ⁻¹		$m_{\text{(AOT, initial concentration)}}$ 210.4905 mmol·kg ⁻¹	
0.8747	10.953	0.5807	11.857	0.7296	9.8690	6.1165	3.5634
1.6700	13.421	1.1286	12.035	1.4180	10.044	11.8868	3.5500
2.4799	13.051	1.6464	12.172	2.0685	10.215	17.3394	3.5053
3.2181	12.219	2.1365	12.413	2.6842	10.495	22.5000	3.4035
3.9178	11.107	2.6010	12.532	3.2679	10.534	27.3913	3.3553
4.5820	9.2197	3.0420	12.316	3.8219	10.670	32.0339	3.2196
5.2133	6.9886	3.4611	12.122	4.3485	10.523	36.4463	3.0659
5.8141	5.8919	3.8600	11.480	4.8496	10.371	40.6452	2.7337
6.3866	4.3779	4.2400	10.764	5.3271	10.151	44.6457	2.3837
6.9326	3.3942	4.6025	9.5235	5.7826	9.6574	48.46154	2.1261
7.4541	2.3732	4.9487	4.0796	6.2175	8.9618	52.1053	1.9575
7.9526	1.7488	5.2797	3.0831	6.6333	8.4078	55.5882	1.8450
8.4296	1.3599	5.5964	2.2764	7.0312	7.8970	58.9209	1.6764
8.8864	1.1228	5.8997	1.6194	7.4123	7.2084	62.1127	1.5566
9.3244	0.7965	6.1905	0.8962	7.7776	6.6974	65.1724	1.4430
9.7447	0.6320	6.4695	0.3779	8.1281	6.2786	68.1081	1.2713
10.1482	0.5572	6.7374	0.0535	8.4647	5.8048	70.9271	1.1813
10.5361	0.4525	6.9949	0.0490	8.7883	5.6185	73.6364	1.0849
10.9092	0.3478	7.2426	0.0312	9.0994	5.1783	76.2420	0.9498
11.2682	0.2580	7.4809	0.0535	9.3989	4.6140	78.7500	0.8074
11.6141	0.1782	7.7106	0.0446	9.6874	4.2212	81.1656	0.7482
11.9475	0.0835	7.9319	0.0446	9.9655	3.8864	83.4940	0.5946
12.2691	0.1035	8.1454	0.0446	10.2337	3.7102	85.7396	0.5215
12.5794	0.0935	8.3514	0.0357	10.4926	3.2972	87.9070	0.4340
12.8791	0.0686	8.5504	0.0490	10.7426	3.0155	90.0000	0.3800
13.1688	0.1134	8.7427	0.0446	10.9842	2.7506	92.0225	0.2902
13.4488	0.1384	8.9286	0.0357	11.2178	2.6513	93.9779	0.2273
13.7197	0.2190	9.1085	0.0223	11.4437	2.4170	95.8696	0.1400
13.9820	0.1882	9.2826	0.0401	11.6625	2.2608	97.7005	0.0606
14.2359	0.1486	9.4512	0.0446	11.8743	1.9886	99.4737	-0.0224
14.4820	0.0536	9.6145	0.0535	12.0795	1.7320	101.1917	-0.0447
14.7205	0.0187	9.7729	0.0580	12.2785	1.4055	102.8571	-0.0697
14.9519	0.0386	9.9265	0.0178	12.4715	1.2659	104.4724	-0.0706
15.1764	0.0586	10.0755	0.0401	12.6587	1.2748	106.0396	-0.0608
15.3943	0.0137	10.2202	0.0334	12.8405	1.2287	107.5610	-0.0653

Standard uncertainty for temperature and molality are $u(T) = 0.10$ K, $u(m) = 0.0002$ mmol·kg⁻¹, respectively. Relative standard uncertainties for pressure and observed enthalpy change are $u_r(p) = 0.05$, $u_r(\Delta H_{\text{obs}}) = 0.02$, respectively.

The initial concentrated AOT solutions added to the solvent were prepared with the same solvent as the third row, whose concentrations were shown in the fourth row of this table.

Table S11. Observed Enthalpy Change at Corresponding Molalities of AOT in PEG 200 + Water Mixtures at Temperature $T = 298.15$ K and Pressure $p = 101.3$ kPa.

m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹	m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹	m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹	m mmol·kg ⁻¹	ΔH_{obs} kJ·mol ⁻¹
70 wt% PEG 200		80 wt% PEG 200		90 wt% PEG 200		pure PEG 200	
$m(\text{AOT, initial concentration})$ 199.6870 mmol·kg ⁻¹		$m(\text{AOT, initial concentration})$ 159.3957 mmol·kg ⁻¹		$m(\text{AOT, initial concentration})$ 209.8896 mmol·kg ⁻¹		$m(\text{AOT, initial concentration})$ 349.9186 mmol·kg ⁻¹	
5.8068	10.841	4.6311	-7.0826	6.1034	-2.4124	10.1753	-1.3340
11.2854	5.8655	9.0000	-6.9377	11.8619	-2.3528	19.7756	-1.1941
16.4629	3.3508	13.1284	-6.7734	17.3039	-2.3046	28.8483	-1.0929
21.3635	2.6736	17.0357	-6.5880	22.4547	-2.2220	37.4356	-0.9267
26.0088	2.2870	20.7391	-6.4131	27.3373	-2.1624	45.5756	-0.7721
30.4181	2.0285	24.2542	-6.2753	31.9719	-2.0637	53.3022	-0.6170
34.6092	1.6607	27.5950	-6.1375	36.3770	-1.9697	60.6462	-0.5030
38.5977	1.3791	30.7742	-5.8938	40.5692	-1.9100	67.6354	-0.4233
42.3980	1.0253	33.8031	-5.6164	44.5637	-1.7942	74.2948	-0.3511
46.0232	0.8875	36.6923	-5.1996	48.3740	-1.6176	80.6472	-0.2767
49.4850	0.70543	39.4511	-4.8830	52.0127	-1.49334	86.7134	-0.2183
52.7943	0.5772	42.0882	-4.4151	55.4910	-1.3862	92.5123	-0.1983
55.9609	0.5246	44.6115	-3.9128	58.8194	-1.2041	98.06122	-0.1943
58.9939	0.4013	47.0282	-3.3258	62.0072	-1.0508	103.3759	-0.1939
61.9015	0.2615	49.3448	-2.8620	65.0634	-0.9102	108.4710	-0.1860
64.6913	0.1727	51.5676	-2.5593	67.9957	-0.7594	113.3597	-0.1821
67.3705	0.1882	53.7020	-2.2084	70.8117	-0.6015	118.0544	-0.1746
69.9453	0.0565	55.7532	-1.9811	73.5181	-0.5458	122.5663	-0.1664
72.4219	-0.0341	57.7261	-1.7924	76.1212	-0.5318	126.9061	-0.1573
74.8057	-0.0671	59.6250	-1.6289	78.6267	-0.5216	131.0832	-0.1523
77.1018	-0.0713	61.4540	-1.5006	81.0401	-0.5114	135.1068	-0.1491
79.3150	-0.0507	63.2169	-1.4059	83.3664	-0.5021	138.9850	-0.1456
81.4498	-0.0671	64.9172	-1.2784	85.6102	-0.4928	142.7258	-0.1338
83.5101	-0.0753	66.5581	-1.2696	87.7757	-0.4863	146.3361	-0.1327
85.4999	-0.0835	68.1429	-1.2004	89.8671	-0.4761	149.8228	-0.1232
87.4226	-0.0100	69.6742	-1.1241	91.8881	-0.4715	153.1920	-0.1163
89.2817	-0.0762	71.1547	-1.1052	93.8421	-0.4603	156.4497	-0.1154
91.0802	-0.0918	72.5870	-1.0818	95.7325	-0.4538	159.6013	-0.1065
92.8210	-0.0918	73.9733	-1.0235	97.5623	-0.4529	162.6518	-0.1050
94.5070	-0.0882	75.3158	-0.9744	99.3343	-0.4408	165.6061	-0.1063
96.1405	-0.0649	76.6166	-0.9405	101.0513	-0.4436	168.4686	-0.1146
97.7241	-0.0455	77.8775	-0.9564	102.7158	-0.4371	171.2435	-0.1260
99.2600	-0.0671	79.1005	-0.9254	104.3301	-0.4371	173.9349	-0.1261
100.7503	-0.0918	80.2871	-0.9191	105.8965	-0.4353	176.5464	-0.1291
102.1970	-0.0589	81.4390	-0.8792	107.4172	-0.4306	179.0815	-0.1309

Standard uncertainty for temperature and molality are $u(T) = 0.10$ K, $u(m) = 0.0002$ mmol·kg⁻¹, respectively. Relative standard uncertainties for pressure and observed enthalpy change are $u_r(p) = 0.05$, $u_r(\Delta H_{\text{obs}}) = 0.02$, respectively.

The initial concentrated AOT solutions added to the solvent were prepared with the same solvent as the third row, whose concentrations were shown in the fourth row of this table.