SUPPLEMENTARY MATERIAL TO

Complexation of molybdenum(VI) with methyliminodiacetic acid in different water + methanol solutions

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TABLE S-I. Corrected absorbance, A_c, data for the Mo(VI) + MIDA system at $T = 298$ K, pH 6.00, $I = 0.10$ mol.dm^{-3} NaCl, and 0 % methanol

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0	0.0000	0.0000	0.0000
0.05	0.0878	0.0833	0.0752
0.1	0.1419	0.1373	0.1257
0.2	0.2336	0.2313	0.2149
0.4	0.3763	0.3710	0.3442
0.5	0.4031	0.3952	0.3661
0.6	0.4024	0.3905	0.3605
0.8	0.2474	0.2429	0.2278
0.9	0.1430	0.1341	0.1254
0.95	0.0702	0.0655	0.0639
1	0.0000	0.0000	0.0000

TABLE S-II. Corrected absorbance, A_c, data for the Mo(VI) + MIDA system at $T = 298$ K, pH 6.00, $I = 0.10$ mol.dm^{-3} NaCl, and 5 % methanol

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0	0.0000	0.0000	0.0000
0.05	0.0956	0.0932	0.0869
0.1	0.1602	0.1584	0.1477
0.2	0.2770	0.2754	0.2563
0.4	0.4489	0.4452	0.4129
0.5	0.4876	0.4808	0.4447
0.6	0.4684	0.4614	0.4259
0.8	0.2885	0.2908	0.2715
0.9	0.1612	0.1588	0.1461

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TABLE S-II. Continued

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0.95	0.0723	0.0764	0.0727
1	0.0000	0.0000	0.0000

TABLE S-III. Corrected absorbance, A_c, data for the Mo(VI) + MIDA system at T = 298 K, pH 6.00, I = 0.10 mol.dm^{-3} NaCl, and 10 % methanol

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0	0.0000	0.0000	0.0000
0.05	0.1050	0.1024	0.0964
0.1	0.1739	0.1716	0.1607
0.2	0.2969	0.2961	0.2773
0.4	0.4705	0.4686	0.4363
0.5	0.5158	0.5098	0.4725
0.6	0.5026	0.4971	0.4604
0.8	0.3057	0.3105	0.2916
0.9	0.1720	0.1714	0.1592
0.95	0.0818	0.0860	0.0822
1	0.0000	0.0000	0.0000

TABLE S-IV. Corrected absorbance, A_c, data for the Mo(VI) + MIDA system at T = 298 K, pH 6.00, I = 0.10 mol.dm^{-3} NaCl, and 15 % methanol

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0	0.0000	0.0000	0.0000
0.05	0.1136	0.1135	0.1092
0.1	0.1783	0.1832	0.1756
0.2	0.3304	0.3375	0.3187
0.4	0.5192	0.5375	0.5084
0.5	0.5605	0.5802	0.5488
0.6	0.5191	0.5453	0.5193
0.8	0.3500	0.3792	0.3568
0.9	0.1942	0.2219	0.2099
0.95	0.0678	0.0978	0.0914
1	0.0000	0.0000	0.0000

TABLE S-V. Corrected absorbance, A_c, data for the Mo(VI) + MIDA system at T = 298 K, pH 6.00, I = 0.10 mol.dm^{-3} NaCl, and 20 % methanol

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0	0.0000	0.0000	0.0000
0.05	0.1334	0.1282	0.1215
0.1	0.1941	0.1941	0.1851
0.2	0.3587	0.3576	0.3365

TABLE S-V. Continued

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0.4	0.5912	0.5891	0.5500
0.5	0.6450	0.6400	0.5952
0.6	0.6019	0.5981	0.5558
0.8	0.3696	0.3761	0.3535
0.9	0.1966	0.1983	0.1849
0.95	0.0880	0.0893	0.0887
1	0.0000	0.0000	0.0000

TABLE S-VI. Corrected absorbance, A_c, data for the Mo(VI) + MIDA system at $T = 298$ K, pH 6.00, $I = 0.10$ mol.dm^{-3} NaCl, and 25 % methanol

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0	0.0000	0.0000	0.0000
0.05	0.1397	0.1370	0.1328
0.1	0.2223	0.2213	0.2120
0.2	0.3828	0.3847	0.3650
0.4	0.6469	0.6477	0.6078
0.5	0.6943	0.6958	0.6526
0.6	0.6654	0.6678	0.6248
0.8	0.4102	0.4113	0.3838
0.9	0.2091	0.2162	0.2051
0.95	0.0961	0.1031	0.1000
1	0.0000	0.0000	0.0000

TABLE S-VII. Corrected absorbance, A_c, data for the Mo(VI) + MIDA system at $T = 298$ K, pH 6.00, $I = 0.10$ mol.dm^{-3} NaCl, and 30 % methanol

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0	0.0000	0.0000	0.0000
0.05	0.1511	0.1465	0.1405
0.1	0.2487	0.2396	0.2229
0.2	0.4270	0.4111	0.3754
0.4	0.7265	0.6923	0.6212
0.5	0.8156	0.7702	0.6864
0.6	0.7984	0.7463	0.6595
0.8	0.5344	0.4948	0.4238
0.9	0.2224	0.2140	0.1904
0.95	0.1114	0.1109	0.1006
1	0.0000	0.0000	0.0000

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TABLE S-VIII. Corrected absorbance, A_c, data for the Mo(VI) + MIDA system at $T = 298$ K, pH 6.00, $I = 0.10$ mol.dm^{-3} NaCl, and 35 % methanol

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0	0.0000	0.0000	0.0000
0.05	0.1430	0.1363	0.1290
0.1	0.2449	0.2312	0.2070
0.2	0.4176	0.3897	0.3416
0.4	0.7221	0.6667	0.5759
0.5	0.8148	0.7466	0.6420
0.6	0.7834	0.7125	0.6086
0.8	0.5256	0.4619	0.3876
0.9	0.2229	0.2056	0.1754
0.95	0.1166	0.1086	0.0933
1	0.0000	0.0000	0.0000

TABLE S-IX. Corrected absorbance, A_c, data for the Mo(VI) + MIDA system at $T = 298$ K, pH 6.00, $I = 0.10$ mol.dm^{-3} NaCl, and 40 % methanol

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0	0.0000	0.0000	0.0000
0.05	0.1619	0.1613	0.1612
0.1	0.2335	0.2386	0.2355
0.2	0.4214	0.4297	0.4142
0.4	0.7308	0.7443	0.7076
0.5	0.8348	0.8433	0.7974
0.6	0.7778	0.7906	0.7487
0.8	0.4342	0.4534	0.4342
0.9	0.2175	0.2264	0.2161
0.95	0.1079	0.1180	0.1147
1	0.0000	0.0000	0.0000

TABLE S-X. Corrected absorbance, A_c, data for the Mo(VI) + MIDA system at $T = 298$ K, pH 6.00, $I = 0.10$ mol.dm^{-3} NaCl, and 45 % methanol

Mole fraction of molybdenum(VI)	λ / nm		
	260	265	270
0	0.0000	0.0000	0.0000
0.05	0.1926	0.1886	0.1867
0.1	0.2682	0.2678	0.2613
0.2	0.4981	0.4929	0.4672
0.4	0.8200	0.8191	0.7701
0.5	0.9352	0.9289	0.8701
0.6	0.8732	0.8666	0.8088
0.8	0.4281	0.4472	0.4249
0.9	0.2248	0.2311	0.2173
0.95	0.1039	0.1152	0.1125
1	0.0000	0.0000	0.0000