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APPENDICES

APPENDIX I

Rheological Data

The measurements were performed by a Fluid Rheometer (Rheometric, RES) using the cone-and-plate geometry with a cone angle of 4^{o} and a diameter of 50 mm. The gap range was 0.051± 1 mm and the temperature was set at 26±1 ^{o}C . In the dynamic strain sweep default test, the experiments were carried out at the frequency of 1.0 rad/s. Initial strain and final strain were equal to 0.1 and 100%, respectively. In these measurements, levels of strain were chosen in order to ensure that all subsequent measurements were made within the linear viscoelastic regime.

In the dynamic frequency sweep default test, initial and final frequency were equal to 100 and 0.1 rad/s, respectively. In the steady rate sweep default test, initial and final rates were equal to 0.01 to 100 s^{-1}. The data mode was time based. Time delay and measurement times were 0.1 and 1 sec, respectively. The direction was clockwise, only one direction per measurement. In these measurements, flow curve was also determined.

Effect of Aging Time

I.1 Emulsion of CTAC/FA = 0.7/3.3% Systems (Figures 3.1a-3.2b)

Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	5800	6370	6990	6420
72	5450	5940	6530	6010
51.8	5170	5610	6170	5690
37.3	4920	5330	5870	5420
26.8	4720	5100	5610	5190
19.3	4510	4880	5370	4990
13.9	4360	4690	5150	4800
10	4130	4480	4930	4600
7.2	3950	4270	4700	4390
5.18	3740	4050	4440	4170
3.73	3530	3830	4210	3970
2.68	3350	3620	4000	3770
1.93	3140	3420	3750	3560
1.39	2990	3200	3550	3390
1	2830	3030	3360	3210
0.72	2680	2890	3200	3040
0.518	2580	2660	3030	2910
0.373	2450	2580	2900	2800
0.268	2370	2490	2800	2670
0.193	2260	2370	2680	2570
0.139	2150	2260	2570	2470
0.1	2130	2200	2530	2400

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.262	0.27	0.269	0.355
72	0.267	0.276	0.276	0.277
51.8	0.262	0.269	0.271	0.269
37.3	0.256	0.262	0.264	0.257
26.8	0.251	0.255	0.26	0.254
19.3	0.25	0.254	0.259	0.248
13.9	0.255	0.256	0.257	0.248
10	0.26	0.262	0.266	0.254
7.2	0.264	0.269	0.27	0.258
5.18	0.27	0.277	0.283	0.268
3.73	0.281	0.281	0.287	0.272
2.68	0.283	0.288	0.291	0.277
1.93	0.289	0.289	0.292	0.278
1.39	0.289	0.296	0.295	0.287
1	0.291	0.301	0.292	0.274
0.72	0.29	0.296	0.287	0.274
0.518	0.274	0.314	0.292	0.278
0.373	0.28	0.298	0.286	0.263
0.268	0.275	0.286	0.281	0.266
0.193	0.279	0.303	0.273	0.261
0.139	0.271	0.302	0.285	0.263
0.1	0.274	0.304	0.272	0.267
%γ	0.3	0.3	0.3	0.3

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	459094	396318	436301	347918
0.0139	320537	308545	311035	262145
0.0193	229989	218113	220405	192355
0.0268	166141	156805	157723	140840
0.0373	121739	113446	113481	103306
0.0518	89284.3	82598.8	82572.8	76277.4
0.072	65891.4	60464.1	60331.9	56311.9
0.1	48957.3	44570	44809.3	41899.8
0.139	36758.3	33434.4	33603.1	31570.9
0.193	27770.3	25251.1	25617.4	23988.1
0.268	21236.8	19514.6	19796	18497.9
0.373	16536	15326	15571	14269
0.518	13066.4	12284.7	12428.9	11313.5
0.72	10512.7	9939.33	10091.6	9095.54
1	8553.23	8163.69	8328.18	7390.43
1.39	7108.05	6820.07	6955.06	6076.68
1.93	5955.98	5729.44	5852.84	5013.44
2.68	4948.21	4830.13	4927.19	4170.28
3.73	4120.1	4043.74	4139.58	3476.39
5.18	3384.92	3258.43	3440.84	2918.36
7.2	2777.33	2723.64	2870.69	2350.54
10	2165.32	2202.53	2348.29	1952.92
13.9	1703.7	1713.44	1878.45	1588.33
19.3	1331.84	1350.59	1453	1238.23
26.8	1040.87	1067.9	1130.42	990.669
37.3	803.936	821.676	875.086	773.157
51.8	628.493	641.78	678.059	615.099
72	490.192	496.898	521.059	484.25
100	382.337	384.878	400.81	378.405

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	4.6E-05	4E-05	4.4E-05	3.5E-05
0.0139	4.5E-05	4.3E-05	4.3E-05	3.7E-05
0.0193	4.4E-05	4.2E-05	4.3E-05	3.7E-05
0.0268	4.5E-05	4.2E-05	4.2E-05	3.8E-05
0.0373	4.5E-05	4.2E-05	4.2E-05	3.8E-05
0.0518	4.6E-05	4.3E-05	4.3E-05	4E-05
0.072	4.7E-05	4.4E-05	4.4E-05	4.1E-05
0.1	4.9E-05	4.5E-05	4.5E-05	4.2E-05
0.139	5.1E-05	4.7E-05	4.7E-05	4.4E-05
0.193	5.4E-05	4.9E-05	5E-05	4.7E-05
0.268	5.7E-05	5.3E-05	5.3E-05	5E-05
0.373	6.2E-05	5.7E-05	5.8E-05	5.3E-05
0.518	6.8E-05	6.4E-05	6.5E-05	5.9E-05
0.72	7.6E-05	7.2E-05	7.3E-05	6.5E-05
1	8.6E-05	8.2E-05	8.3E-05	7.4E-05
1.39	9.9E-05	9.5E-05	9.7E-05	8.5E-05
1.93	0.00012	0.00011	0.00011	9.7E-05
2.68	0.00013	0.00013	0.00013	0.00011
3.73	0.00015	0.00015	0.00015	0.00013
5.18	0.00018	0.00017	0.00018	0.00015
7.2	0.0002	0.0002	0.00021	0.00017
10	0.00022	0.00022	0.00024	0.0002
13.9	0.00024	0.00024	0.00026	0.00022
19.3	0.00026	0.00026	0.00028	0.00024
26.8	0.00028	0.00029	0.0003	0.00027
37.3	0.0003	0.00031	0.00033	0.00029
51.8	0.00033	0.00033	0.00035	0.00032
72	0.00035	0.00036	0.00038	0.00035
100	0.00038	0.00038	0.0004	0.00038

I.2 Emulsion of CTAC/FA/HEC = 0.7/3.3/0.3% Systems (Figures 3.4a-3.5b)

Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	1420	2970	4000	3290
72	1220	2610	3530	2900
51.8	1070	2330	3170	2600
37.3	947	2100	2870	2350
26.8	841	1900	2620	2150
19.3	750	1720	2390	1950
13.9	653	1550	2170	1790
10	574	1400	1980	1630
7.2	505	1260	1790	1500
5.18	440	1140	1620	1370
3.73	394	1030	1470	1250
2.68	346	924	1340	1150
1.93	308	835	1210	1050
1.39	279	760	1110	962
1	237	691	1010	886
0.72	227	637	931	820
0.518	204	582	857	775
0.373	173	541	802	721
0.268	173	501	768	677
0.193		480	705	647
0.139	155	449	684	616
0.1	165	426	656	605

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.707	0.603	0.61	0.618
72	0.739	0.608	0.62	0.626
51.8	0.74	0.608	0.613	0.623
37.3	0.748	0.598	0.607	0.611
26.8	0.757	0.599	0.598	0.604
19.3	0.755	0.595	0.595	0.599
13.9	0.773	0.603	0.598	0.601
10	0.776	0.607	0.601	0.604
7.2	0.791	0.613	0.608	0.599
5.18	0.78	0.616	0.616	0.597
3.73	0.767	0.618	0.615	0.605
2.68	0.796	0.62	0.607	0.603
1.93	0.799	0.628	0.634	0.599
1.39	0.812	0.623	0.624	0.59
1	0.767	0.629	0.608	0.597
0.72	0.775	0.625	0.614	0.59
0.518	0.771	0.624	0.604	0.584
0.373	0.758	0.611	0.602	0.573
0.268	0.726	0.616	0.607	0.594
0.193		0.608	0.633	0.587
0.139	0.723	0.624	0.611	0.587
0.1	0.585	0.637	0.636	0.581
%γ	0.2	0.2	0.2	0.2

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	51474.6	136707	195099	152056
0.0139	48526.4	128558	162843	134652
0.0193	43885.7	107710	133895	110838
0.0268	39891.4	90491.3	113377	92273.1
0.0373	37955.4	77695.4	97556.2	78424.7
0.0518	36379.1	66231.1	82865.4	67494.6
0.072	33744.2	55993.6	70101.8	57729.5
0.1	29473.1	47267.2	58599	48501.4
0.139	24935.7	39558.4	48233.1	40335
0.193	20720.4	32826.8	39683.4	33378.7
0.268	17113	27007.7	32557.5	27549.8
0.373	14007.6	22122.6	26608.3	22578.9
0.518	11463.3	18143.5	21694.9	18527
0.72	9367.68	14786.9	17638.8	15127.4
1	7624.18	11991.4	14289.7	12276
1.39	6241.39	9557.43	11496.2	9840.5
1.93	5091.11	7698.14	8930.23	7874.87
2.68	4148.34	6172.79	7155.35	6275.11
3.73	3374.77	4909.97	5720.55	4973.32
5.18	2760.49	3816.47	4577.03	3947.51
7.2	2261.35	3063.08	3665.81	3154.57
10	1854.28	2437.82	2857.46	2435.92
13.9	1518.44	1963.85	2293.18	1924.11
19.3	1230.68	1586.91	1855.43	1552.1
26.8	1012.32	1282.46	1497.81	1266.83
37.3	827.996	1027.66	1193.17	1030.17
51.8	675.208	825.151	959.306	837.307
72	545.388	663.997	762.686	664.857
100	441.025	531.894	603.095	536.344

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	5.2E-06	1.4E-05	2E-05	1.5E-05
0.0139	6.8E-06	1.8E-05	2.3E-05	1.9E-05
0.0193	8.5E-06	2.1E-05	2.6E-05	2.1E-05
0.0268	1.1E-05	2.4E-05	3E-05	2.5E-05
0.0373	1.4E-05	2.9E-05	3.6E-05	2.9E-05
0.0518	1.9E-05	3.4E-05	4.3E-05	3.5E-05
0.072	2.4E-05	4E-05	5E-05	4.2E-05
0.1	2.9E-05	4.7E-05	5.9E-05	4.9E-05
0.139	3.5E-05	5.5E-05	6.7E-05	5.6E-05
0.193	4E-05	6.3E-05	7.7E-05	6.5E-05
0.268	4.6E-05	7.3E-05	8.7E-05	7.4E-05
0.373	5.2E-05	8.3E-05	9.9E-05	8.4E-05
0.518	5.9E-05	9.4E-05	0.00011	9.6E-05
0.72	6.8E-05	0.00011	0.00013	0.00011
1	7.6E-05	0.00012	0.00014	0.00012
1.39	8.7E-05	0.00013	0.00016	0.00014
1.93	9.8E-05	0.00015	0.00017	0.00015
2.68	0.00011	0.00017	0.00019	0.00017
3.73	0.00013	0.00018	0.00021	0.00019
5.18	0.00014	0.0002	0.00024	0.0002
7.2	0.00016	0.00022	0.00026	0.00023
10	0.00019	0.00024	0.00029	0.00024
13.9	0.00021	0.00027	0.00032	0.00027
19.3	0.00024	0.00031	0.00036	0.0003
26.8	0.00027	0.00035	0.0004	0.00034
37.3	0.00031	0.00038	0.00044	0.00038
51.8	0.00035	0.00043	0.0005	0.00044
72	0.00039	0.00048	0.00055	0.00048
100	0.00044	0.00053	0.0006	0.00054

I.3 Emulsion of CTAC/FA/modifiedHEC = 0.7/3.3/0.7% Systems (Figures 3.7a-3.8)

Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	14700	48100	52100	60100
72	13900	39600	42500	47900
51.8	13200	34200	36500	40700
37.3	12500	30900	32900	36300
26.8	11800	28500	30400	33500
19.3	11200	26800	28400	31300
13.9	10500	25200	26700	29400
10	9860	23800	25000	27700
7.2	9190	22300	23300	25900
5.18	8550	20900	21600	24100
3.73	7940	19400	20000	22300
2.68	7320	17900	18400	20600
1.93	6700	16500	16900	18900
1.39	6140	15200	15500	17200
1	5600	13900	14100	15800
0.72	5110	12700	12900	14400
0.518	4640	11500	11800	13000
0.373	4220	10500	10700	11900
0.268	3840	9490	9750	10800
0.193	3480	8630	8870	9810
0.139	3180	7830	8090	8920
0.1	2910	7140	7350	8180

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.452	0.431	0.402	0.269
72	0.545	0.512	0.484	0.288
51.8	0.545	0.509	0.495	0.3
37.3	0.512	0.478	0.471	0.311
26.8	0.476	0.444	0.445	0.322
19.3	0.446	0.418	0.425	0.336
13.9	0.429	0.402	0.413	0.348
10	0.422	0.397	0.41	0.364
7.2	0.422	0.397	0.412	0.38
5.18	0.425	0.403	0.42	0.396
3.73	0.433	0.41	0.428	0.411
2.68	0.441	0.424	0.439	0.426
1.93	0.453	0.433	0.449	0.437
1.39	0.464	0.446	0.459	0.45
1	0.475	0.455	0.473	0.464
0.72	0.485	0.468	0.483	0.479
0.518	0.498	0.479	0.495	0.491
0.373	0.507	0.497	0.506	0.501
0.268	0.517	0.502	0.515	0.51
0.193	0.527	0.516	0.525	0.522
0.139	0.538	0.526	0.531	0.529
0.1	0.544	0.533	0.541	0.533
%γ	2.20	2.20	2.20	2.20

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	1787390	1.1E+07	1.1E+07	1.2E+07
0.0139	3452040	1.3E+07	1.1E+07	1.4E+07
0.0193	4172370	1.2E+07	1.1E+07	1.1E+07
0.0268	4377100	4855920	3924860	3486460
0.0373	1610750	1388330	1723920	2303640
0.0518	1058100	837796	1007100	1414550
0.072	714279	546294	639642	874913
0.1	473089	373354	416552	577720
0.139	288280	265344	293808	399065
0.193	171279	195537	213626	278592
0.268	117772	149363	160540	191766
0.373	87087.1	117320	123345	118979
0.518	65334.2	94753.6	97030.9	88818.5
0.72	52949.5	77592.4	77585.5	70435.5
1	41791.5	64725.4	62689.5	57007.8
1.39	32020.9	54867	51122.6	46297.8
1.93	27023.5	46877.1	41632.7	34415.2
2.68	21814.9	39790.5	33951.3	24257
3.73	16103.3	32593.2	27502.5	19588.5
5.18	12246.9	21578.4	22330.6	16185.1
7.2	9645.65	17856.8	17851	13104.2
10	7831.96	14560.7	11301.4	10496.9
13.9	6634.25	11324.8	8548.8	8106.65
19.3	4899.47	8492.97	6362.4	5833.77
26.8	3665.4	5931.84	3775.1	3955.97
37.3	2410.46	4286.13	1929.71	2194.24
51.8	1848.73	2991.91	1163.19	1009.76
72	1263.72	2069.89	848.232	713.847
100	875.375	1034.28	551.915	333.427

I.4 Emulsion of BTAC/FA = 0.7/3.3% Systems (Figures 3.10a-3.11b)

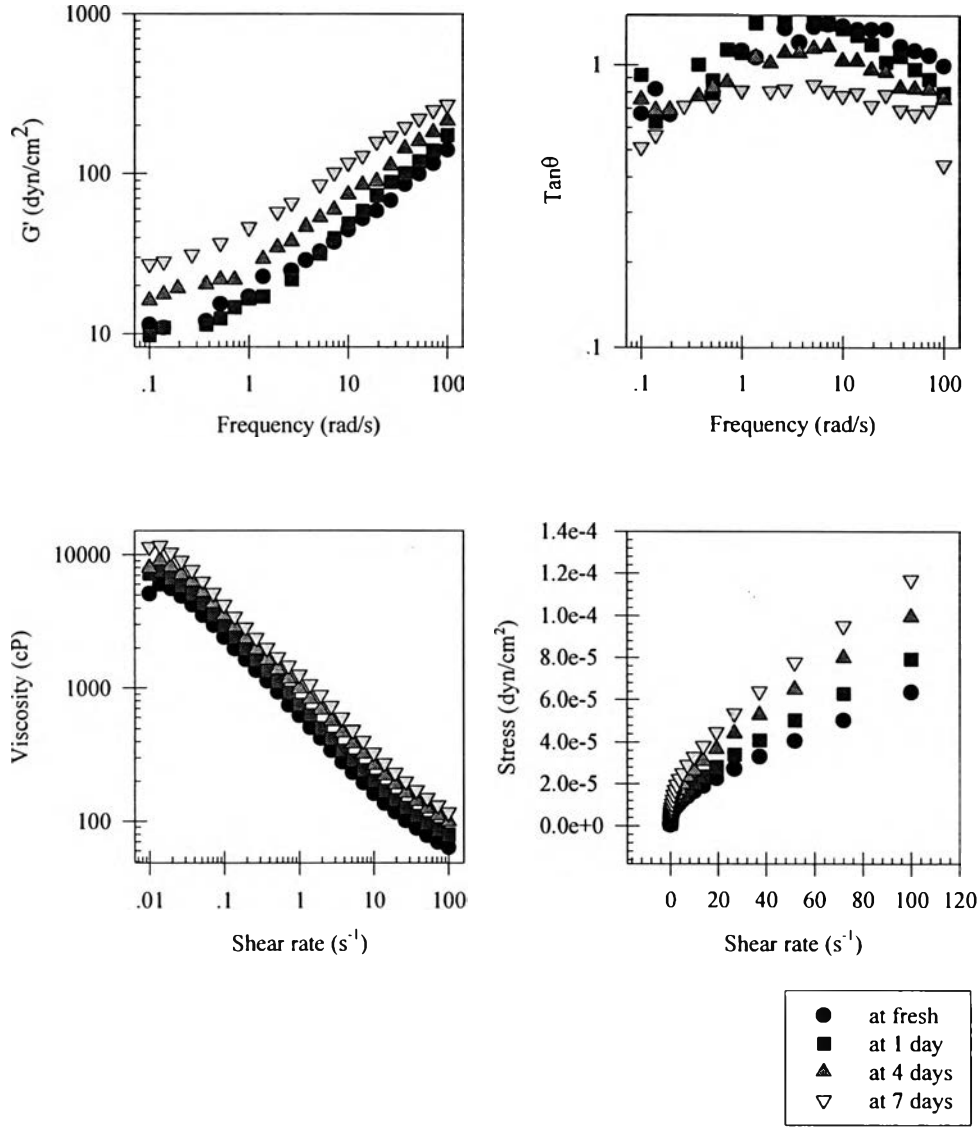
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	17500	19500	22500	23600
72	16000	17700	20300	21100
51.8	14800	16300	18700	19200
37.3	13900	15200	17300	17900
26.8	13100	14400	16300	16800
19.3	12500	13700	15500	16000
13.9	12000	13200	14800	15300
10	11500	12600	14200	14600
7.2	11000	12100	13700	14100
5.18	10500	11700	13200	13600
3.73	10100	11100	12700	13000
2.68	9700	10800	12200	12600
1.93	9210	10300	11800	11900
1.39	8820	9750	11300	11500
1	8380	9350	10800	11000
0.72	7960	8860	10300	10400
0.518	7590	8410	9680	9870
0.373	7150	7990	9290	9380
0.268	6760	7560	8820	8880
0.193	6390	7160	8390	8360
0.139	6070	6790	7960	8010
0.1	5710	6430	7590	7530

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.266	0.256	0.25	0.3511
72	0.309	0.294	0.291	0.278
51.8	0.311	0.298	0.294	0.282
37.3	0.297	0.29	0.281	0.275
26.8	0.283	0.278	0.269	0.264
19.3	0.265	0.263	0.254	0.253
13.9	0.253	0.252	0.244	0.246
10	0.244	0.246	0.232	0.241
7.2	0.239	0.238	0.222	0.237
5.18	0.232	0.238	0.224	0.23
3.73	0.226	0.242	0.222	0.244
2.68	0.232	0.235	0.225	0.24
1.93	0.241	0.254	0.235	0.247
1.39	0.256	0.252	0.241	0.257
1	0.257	0.277	0.253	0.268
0.72	0.277	0.28	0.262	0.284
0.518	0.287	0.296	0.286	0.287
0.373	0.297	0.3	0.289	0.296
0.268	0.309	0.31	0.298	0.306
0.193	0.311	0.311	0.311	0.32
0.139	0.316	0.32	0.317	0.312
0.1	0.326	0.326	0.311	
%γ	0.4	0.4	0.4	0.4

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	716741	1008780	1000910	632529
0.0139	410278	585210	598769	376256
0.0193	281165	400271	409816	259631
0.0268	198735	280503	290287	184209
0.0373	143198	199633	207846	131854
0.0518	104463	143940	149508	97015.5
0.072	77548.2	104923	109581	72605.6
0.1	58449.5	77631.5	80742.1	55081.6
0.139	44378.1	58118.7	61054.6	42277.1
0.193	34537.8	44002.5	46693.3	33337.6
0.268	27482.5	33663.9	36401.2	26811.4
0.373	22190.1	26535	28306.8	21790.7
0.518	18322.7	21131.1	22814.1	17970.6
0.72	15419.2	15999.8	17930.3	14171.6
1	12680.9	12365.1	13715.7	11249.5
1.39	9841.08	9957.74	10924.3	9102.61
1.93	8184.48	8159.98	8878.16	7584.22
2.68	6896.35	6801.25	7333.4	6410.26
3.73	5880.98	5746.46	6009.06	5436.26
5.18	5098.75	4972.48	5095.26	4631.73
7.2	4443.69	4321.22	4357.93	3991.32
10	3838.09	3727.51	3761.14	3434.24
13.9	3241.56	3227.22	3064.34	2768.53
19.3	2562.64	2452.55	2313.55	2092.96
26.8	1847.33	1910.44	1719.01	1534.04
37.3	1419.62	1431.69	1287.54	1166.57
51.8	1111.64	1116.14	1008.74	915.808
72	874.232	875.686	791.719	723.796
100	689.848	688.614	623.995	572.843

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	7.2E-05	0.0001	0.0001	6.3E-05
0.0139	5.7E-05	8.1E-05	8.3E-05	5.2E-05
0.0193	5.4E-05	7.7E-05	7.9E-05	5E-05
0.0268	5.3E-05	7.5E-05	7.8E-05	5E-05
0.0373	5.3E-05	7.5E-05	7.8E-05	4.9E-05
0.0518	5.4E-05	7.5E-05	7.8E-05	5E-05
0.072	5.6E-05	7.6E-05	7.9E-05	5.2E-05
0.1	5.9E-05	7.8E-05	8.1E-05	5.5E-05
0.139	6.2E-05	8.1E-05	8.5E-05	5.9E-05
0.193	6.7E-05	8.5E-05	9E-05	6.4E-05
0.268	7.4E-05	9E-05	9.8E-05	7.2E-05
0.373	8.3E-05	9.9E-05	0.00011	8.1E-05
0.518	9.5E-05	0.00011	0.00012	9.3E-05
0.72	0.00011	0.00012	0.00013	0.0001
1	0.00013	0.00012	0.00014	0.00011
1.39	0.00014	0.00014	0.00015	0.00013
1.93	0.00016	0.00016	0.00017	0.00015
2.68	0.00019	0.00018	0.0002	0.00017
3.73	0.00022	0.00021	0.00022	0.0002
5.18	0.00026	0.00026	0.00026	0.00024
7.2	0.00032	0.00031	0.00031	0.00029
10	0.00038	0.00037	0.00038	0.00034
13.9	0.00045	0.00045	0.00043	0.00039
19.3	0.0005	0.00047	0.00045	0.0004
26.8	0.0005	0.00051	0.00046	0.00041
37.3	0.00053	0.00053	0.00048	0.00044
51.8	0.00058	0.00058	0.00052	0.00047
72	0.00063	0.00063	0.00057	0.00052
100	0.00069	0.00069	0.00062	0.00057

I.5 Emulsion of CTAC/FA = 0.7/2.3% Systems



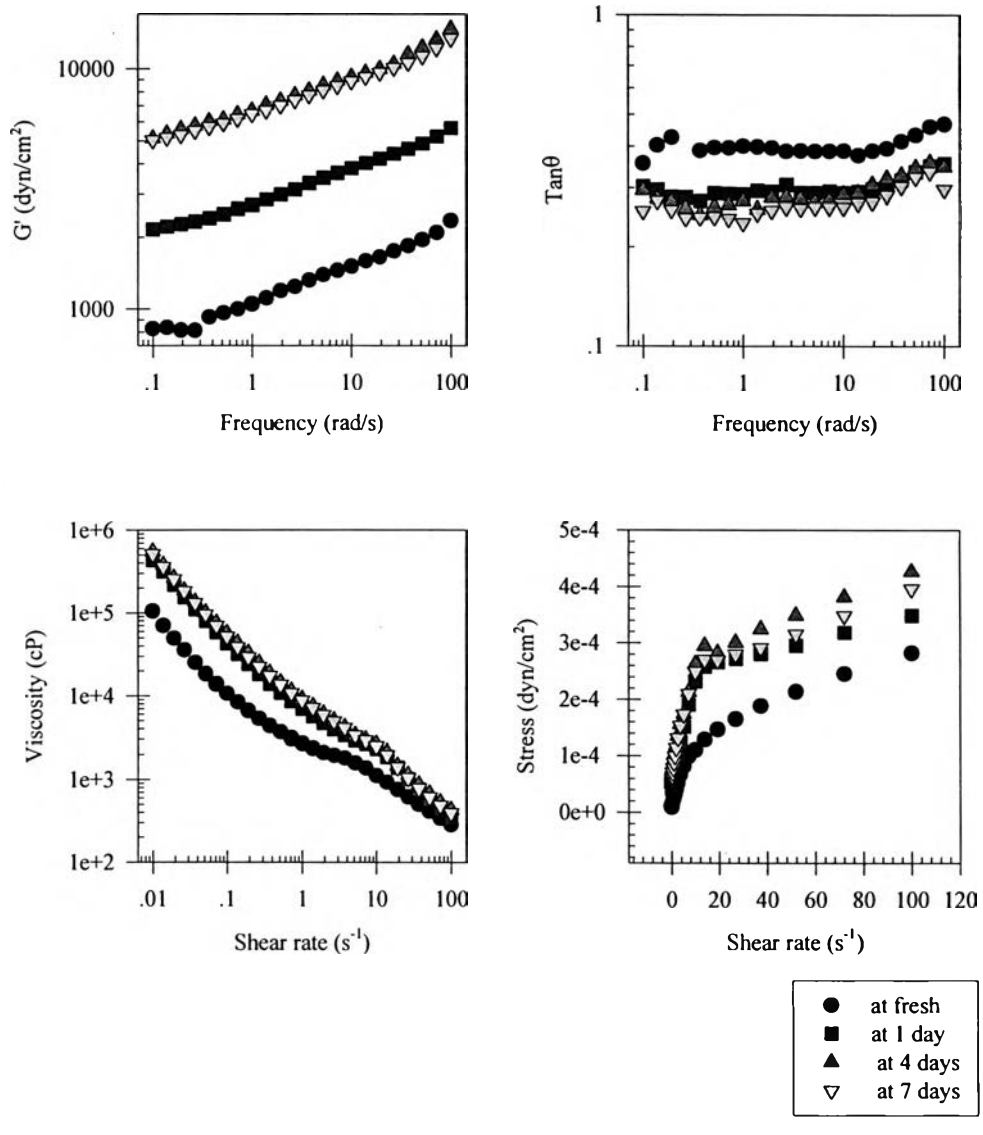
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	140	174	214	270
72	116	139	181	249
51.8	99.1	119	159	221
37.3	85.6	99.9	143	196
26.8	67.6	88	112	172
19.3	58.1	72.8	89	158
13.9	51.7	58	84.4	129
10	44.5	48.4	73.6	116
7.2	37.5	39.3	59.1	101
5.18	32.6	31.5	52.7	84.9
3.73	28.8		46.3	
2.68	24.8	21.7	37.7	65.1
1.93			34.6	57.2
1.39	22.7	17	29.3	
1	17	16.5		46
0.72		14.6	21.7	
0.518	15.3	12.4	21.8	36.9
0.373	12	11.4	20.3	
0.268				31.4
0.193			19.2	
0.139	10.9	10.9	17.6	28.3
0.1	11.4	9.74	16.1	27.2

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.989	0.79	0.754	0.443
72	1.08	0.887	0.813	0.692
51.8	1.12	0.962	0.82	0.67
37.3	1.16	1.07	0.827	0.692
26.8	1.33	1.02	0.939	0.784
19.3	1.33	1.18	0.958	0.718
13.9	1.33	1.27	1.03	0.795
10	1.37	1.34	1.03	0.776
7.2	1.39	1.39	1.16	0.809
5.18	1.36	1.41	1.14	0.849
3.73	1.2		1.1	
2.68	1.34	1.4	1.1	0.819
1.93			1.01	0.806
1.39	1.06	1.4	1.06	
1	1.12	1.1		0.81
0.72		1.13	0.865	
0.518	0.784	0.877	0.831	0.722
0.373		1	0.772	
0.268				0.716
0.193	0.666		0.692	
0.139	0.819	0.628	0.689	0.564
0.1	0.671	0.919	0.752	0.51
%γ	0.8	0.4	0.3	0.2

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	5083.58	7163.65	7971.31	11465.9
0.0139	5997.7	7531.57	9028.86	11704.6
0.0193	5565.99	6656.21	8118.39	10334.7
0.0268	4889.77	5889.54	7119.02	9019.27
0.0373	4213.4	5058.34	6289.87	7643.56
0.0518	3503.08	4260.71	5277.98	6290.15
0.072	2938.75	3533.24	4369.65	5168.93
0.1	2400.34	2914.87	3529.72	4221.52
0.139	1973.56	2389.14	2879.96	3445.3
0.193	1633.45	1964.74	2357.09	2850.06
0.268	1358.21	1626.4	1949.05	2377.26
0.373	1120.64	1336.61	1636.13	1999.5
0.518	927.4	1112.65	1385.85	1706.68
0.72	744.634	918.384	1176.77	1467.59
1	617.929	750.62	993.911	1259.62
1.39	510.041	625.262	827.262	1063.87
1.93	420.343	499.27	685.168	888.202
2.68	343.217	420.266	565.286	731.882
3.73	277.905	341.28	466.808	600.482
5.18	232.372	287.813	386.571	484.744
7.2	193.661	242.714	323.745	403.309
10	161.908	202.641	265.057	329.451
13.9	135.965	169.327	221.443	273.507
19.3	116.621	145.199	189.116	231.903
26.8	101.151	126.249	163.849	199.676
37.3	88.1848	109.652	141.363	171.375
51.8	78.0821	97.1108	124.693	150.019
72	69.7753	87.0654	110.803	132.076
100	63.4415	79.1997	99.2894	116.795

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	5.1E-07	7.17E-07	7.98E-07	1.15E-06
0.0139	8.34E-07	1.05E-06	1.26E-06	1.63E-06
0.0193	1.08E-06	1.29E-06	1.57E-06	2E-06
0.0268	1.31E-06	1.58E-06	1.91E-06	2.42E-06
0.0373	1.57E-06	1.89E-06	2.35E-06	2.85E-06
0.0518	1.82E-06	2.21E-06	2.74E-06	3.27E-06
0.072	2.12E-06	2.55E-06	3.15E-06	3.72E-06
0.1	2.4E-06	2.92E-06	3.54E-06	4.23E-06
0.139	2.75E-06	3.33E-06	4.02E-06	4.8E-06
0.193	3.15E-06	3.81E-06	4.56E-06	5.52E-06
0.268	3.66E-06	4.38E-06	5.22E-06	6.39E-06
0.373	4.17E-06	4.98E-06	6.12E-06	7.47E-06
0.518	4.8E-06	5.76E-06	7.2E-06	8.85E-06
0.72	5.37E-06	6.63E-06	8.49E-06	1.06E-05
1	6.18E-06	7.5E-06	9.96E-06	1.26E-05
1.39	7.08E-06	8.7E-06	1.15E-05	1.48E-05
1.93	8.13E-06	9.66E-06	1.32E-05	1.72E-05
2.68	9.21E-06	1.13E-05	1.52E-05	1.97E-05
3.73	1.04E-05	1.28E-05	1.74E-05	2.24E-05
5.18	1.21E-05	1.49E-05	2E-05	2.51E-05
7.2	1.4E-05	1.75E-05	2.33E-05	2.91E-05
10	1.62E-05	2.03E-05	2.65E-05	0.000033
13.9	1.89E-05	2.36E-05	3.09E-05	3.81E-05
19.3	2.25E-05	2.81E-05	3.66E-05	4.47E-05
26.8	2.72E-05	3.39E-05	4.41E-05	5.37E-05
37.3	0.000033	4.08E-05	5.28E-05	6.39E-05
51.8	4.05E-05	5.04E-05	6.48E-05	7.77E-05
72	5.04E-05	6.27E-05	7.98E-05	9.51E-05
100	6.36E-05	7.92E-05	9.93E-05	0.000117

I.6 Emulsion of CTAC/FA = 0.7/4.0% Systems



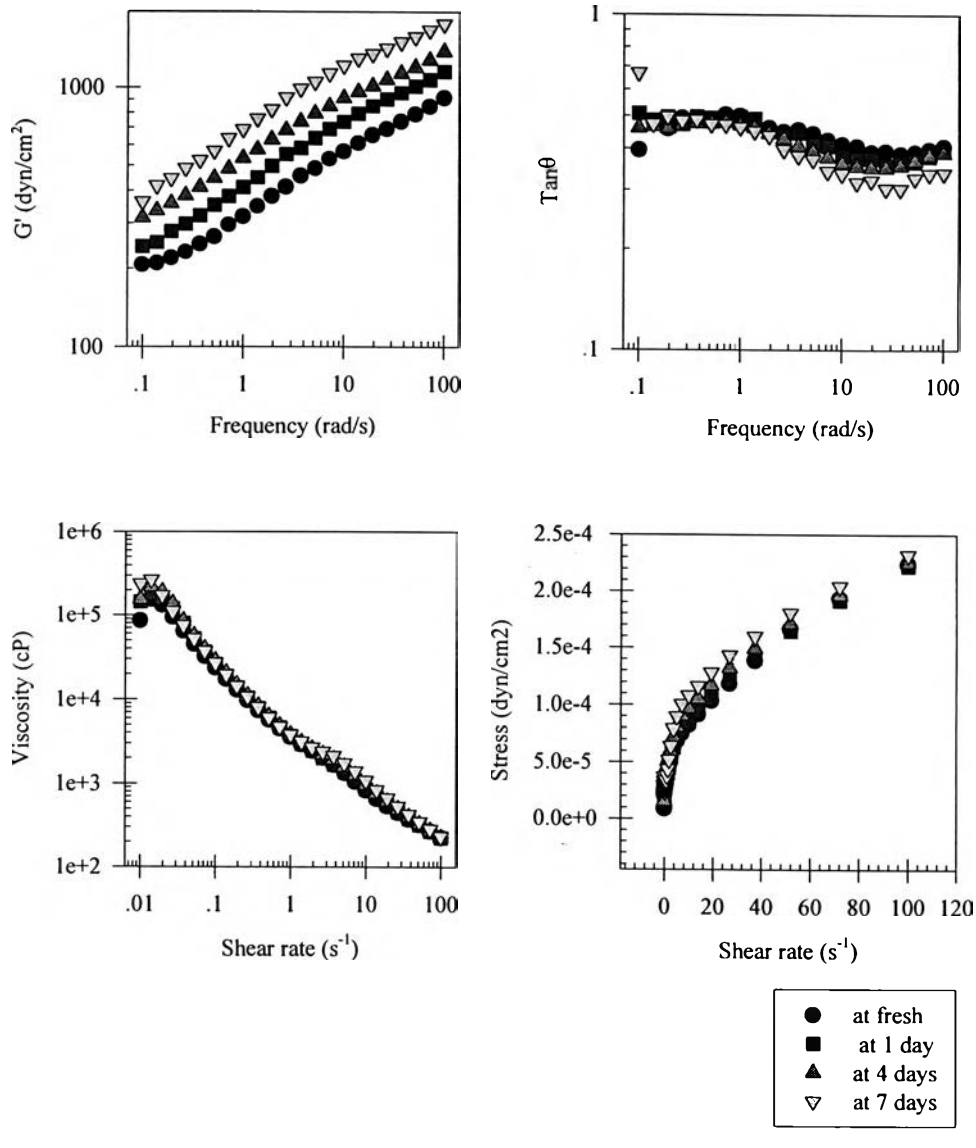
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	2340	5660	14700	13400
72	2090	5220	13300	12200
51.8	1950	4880	12300	11300
37.3	1840	4630	11500	10600
26.8	1750	4410	10500	10100
19.3	1650	4210	9990	9550
13.9	1590	4030	9620	9250
10	1510	3840	9240	8860
7.2	1450	3670	8910	8470
5.18	1390	3500	8530	8120
3.73	1320	3330	8090	7750
2.68	1240	3140	7730	7390
1.93	1190	2990	7340	7020
1.39	1110	2850	7070	6690
1	1050	2710	6660	6460
0.72	998	2610	6450	6170
0.518	961	2480	6130	5910
0.373	922	2390	6020	5710
0.268	811	2320	5780	5500
0.193	814	2260	5580	5280
0.139	835	2210	5350	5150
0.1	825	2150	5110	5020

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.467	0.355	0.346	0.297
72	0.458	0.349	0.357	0.335
51.8	0.433	0.335	0.344	0.323
37.3	0.414	0.317	0.327	0.303
26.8	0.394	0.303	0.32	0.285
19.3	0.387	0.298	0.306	0.273
13.9	0.375	0.292	0.29	0.27
10	0.387	0.29	0.287	0.263
7.2	0.386	0.293	0.276	0.263
5.18	0.386	0.29	0.272	0.263
3.73	0.387	0.29	0.278	0.261
2.68	0.386	0.306	0.282	0.263
1.93	0.395	0.292	0.28	0.257
1.39	0.398	0.294	0.259	0.252
1	0.4	0.287	0.274	0.236
0.72	0.395	0.288	0.267	0.243
0.518	0.396	0.289	0.263	0.246
0.373	0.388	0.274	0.249	0.245
0.268		0.281	0.261	0.244
0.193	0.425	0.282	0.273	0.258
0.139	0.403	0.296	0.278	0.274
0.1	0.355	0.303	0.295	0.256
%γ	0.3	0.3	0.2	0.2

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	104724	430805	550291	515624
0.0139	70173	315891	379985	360241
0.0193	48925	218705	265179	256796
0.0268	35613	154009	187072	183619
0.0373	25009	109401	136537	131491
0.0518	18402	79298	100850	95680
0.072	13906	58055	75382	70059
0.1	10671	42799	56898	51859
0.139	8386.9	31803	43232	38774
0.193	6601.5	24006	32779	29279
0.268	5307.7	18205	24723	22418
0.373	4342.2	13933	18774	17379
0.518	3637.2	10847	14532	13641
0.72	3082.9	8582.9	11450	10838
1	2650.3	6898.7	9124.5	8743.7
1.39	2321	5630.2	7424	7140.9
1.93	2087.7	4664.1	6064.8	5880.4
2.68	1921.6	3918.1	5015.5	4890.8
3.73	1787.9	3330.6	4171.3	4094
5.18	1570	2923.7	3348.6	3335.7
7.2	1360.6	2639.1	2954.6	2913.7
10	1101.1	2315.9	2615.2	2486.6
13.9	920.7	1854.9	2115.2	1941.2
19.3	755.23	1375.6	1457.6	1393
26.8	613.37	1010.9	1122.5	1039.7
37.3	502.96	751.06	864.33	780.02
51.8	412.22	569.48	672.38	610.4
72	339.65	440.05	527.8	484.89
100	281.37	346.18	426.97	394.16

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	1.05E-05	4.32E-05	5.52E-05	5.16E-05
0.0139	9.75E-06	4.38E-05	5.28E-05	5.01E-05
0.0193	9.45E-06	4.23E-05	5.13E-05	4.95E-05
0.0268	9.57E-06	4.14E-05	5.01E-05	4.92E-05
0.0373	9.33E-06	4.08E-05	0.000051	4.92E-05
0.0518	9.54E-06	4.11E-05	5.22E-05	4.95E-05
0.072	1E-05	4.17E-05	5.43E-05	5.04E-05
0.1	1.07E-05	4.29E-05	0.000057	5.19E-05
0.139	1.17E-05	4.41E-05	0.00006	0.000054
0.193	1.28E-05	4.65E-05	6.33E-05	5.67E-05
0.268	1.43E-05	4.89E-05	6.63E-05	6.03E-05
0.373	1.62E-05	5.19E-05	7.02E-05	6.48E-05
0.518	1.89E-05	5.61E-05	7.53E-05	7.08E-05
0.72	2.22E-05	6.18E-05	8.25E-05	0.000078
1	2.65E-05	0.000069	9.12E-05	8.76E-05
1.39	3.24E-05	7.83E-05	0.000103	9.93E-05
1.93	4.02E-05	0.00009	0.000117	0.000114
2.68	5.16E-05	0.000105	0.000135	0.000131
3.73	6.66E-05	0.000124	0.000156	0.000153
5.18	8.13E-05	0.000152	0.000174	0.000173
7.2	9.81E-05	0.00019	0.000213	0.00021
10	0.00011	0.000232	0.000262	0.000249
13.9	0.000128	0.000258	0.000294	0.00027
19.3	0.000146	0.000266	0.000282	0.000269
26.8	0.000165	0.000272	0.0003	0.000279
37.3	0.000188	0.00028	0.000324	0.000291
51.8	0.000214	0.000295	0.000348	0.000315
72	0.000245	0.000318	0.000381	0.000348
100	0.000282	0.000348	0.000426	0.000396

I.7 Emulsion of CTAC/FA = 1.05/2.3% Systems



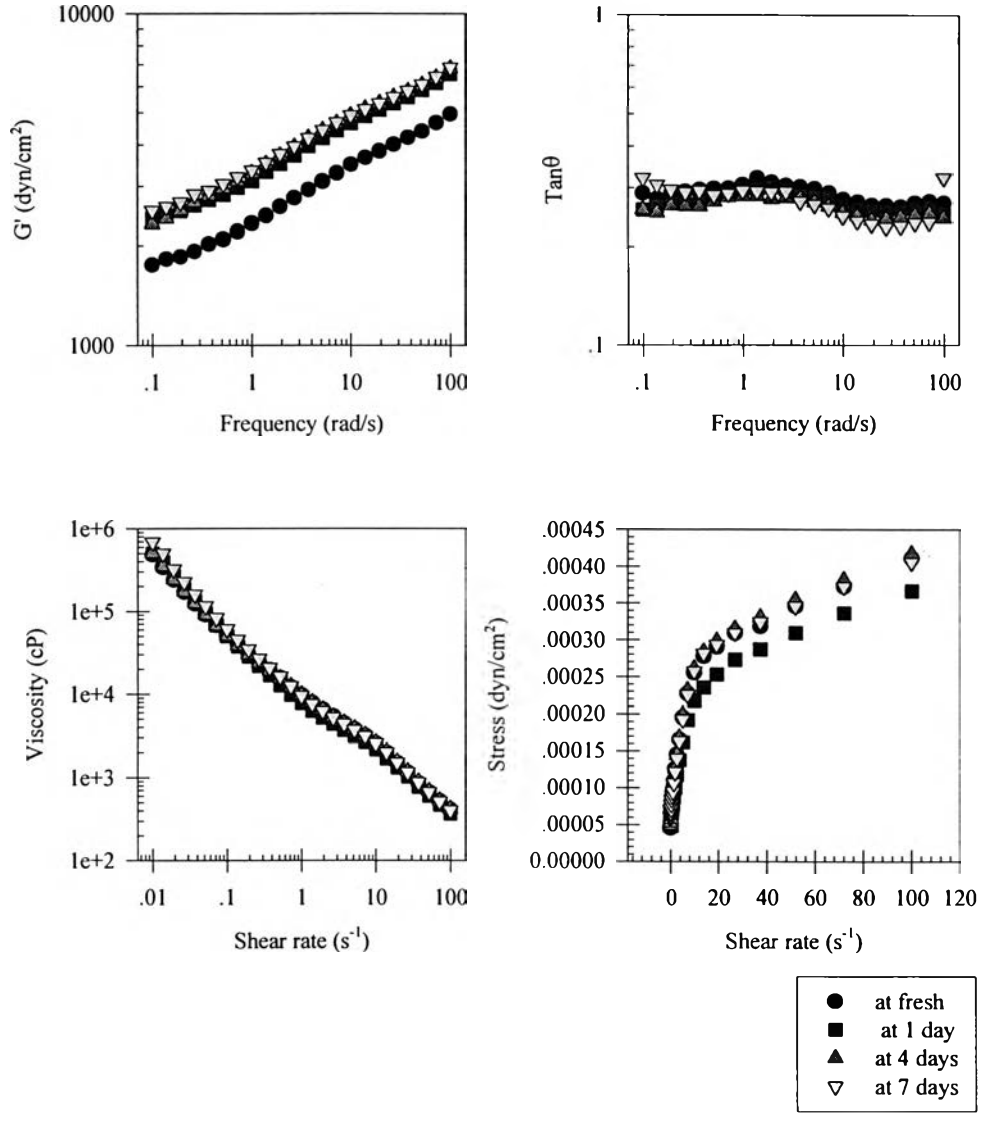
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	914	1150	1370	1750
72	846	1070	1270	1660
51.8	790	1010	1190	1560
37.3	740	952	1130	1490
26.8	692	901	1070	1410
19.3	656	847	1010	1340
13.9	610	791	960	1290
10	567	736	909	1210
7.2	530	691	846	1130
5.18	487	638	791	1050
3.73	456	584	736	988
2.68	414	552	683	914
1.93	381	497	629	823
1.39	348	449	575	757
1	318	412	533	689
0.72	295	380	484	636
0.518	266	352	446	569
0.373	249	320	412	524
0.268	232	297	382	488
0.193	220	278	357	445
0.139	210	252	334	417
0.1	207	243	314	362

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.405	0.395	0.387	0.338
72	0.397	0.378	0.38	0.336
51.8	0.39	0.364	0.366	0.326
37.3	0.385	0.363	0.354	0.303
26.8	0.392	0.356	0.348	0.304
19.3	0.39	0.372	0.349	0.321
13.9	0.405	0.372	0.352	0.317
10	0.411	0.379	0.359	0.336
7.2	0.423	0.406	0.375	0.342
5.18	0.442	0.41	0.391	0.371
3.73	0.455	0.444	0.406	0.38
2.68	0.449	0.437	0.426	0.397
1.93	0.461	0.45	0.442	0.436
1.39	0.466	0.49	0.46	0.45
1	0.5	0.497	0.468	0.462
0.72	0.504	0.488	0.477	0.47
0.518	0.483	0.492	0.473	0.471
0.373	0.493	0.497	0.474	0.486
0.268	0.492	0.471	0.467	0.483
0.193	0.457	0.496	0.457	0.497
0.139	0.48	0.485	0.464	0.472
0.1	0.395	0.508	0.459	0.67
%γ	0.4	0.3	0.6	0.2

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	85527	142802	153761	237883
0.0139	151664	180325	219330	264430
0.0193	130718	159696	190022	171862
0.0268	93104	119217	136357	109672
0.0373	63607	79326	84433	74254
0.0518	44813	52087	56041	51843
0.072	32371	36226	39477	37009
0.1	23559	25885	28391	26734
0.139	17311	18791	20528	19490
0.193	12895	13844	14956	14336
0.268	9729.2	10327	11032	10656
0.373	7411	7786.3	8324.1	7994.8
0.518	5708.3	5951.3	6328.3	6050
0.72	4459.5	4620.5	4857.8	4702.1
1	3561.4	3637.1	3810.4	3761.3
1.39	2908.6	2935.8	3079.7	3125.2
1.93	2421.7	2427.5	2562.5	2676.4
2.68	2028.8	1996.8	2215.1	2377.1
3.73	1662.7	1674.3	1925.2	2125.9
5.18	1324.9	1372.6	1564.9	1726.4
7.2	1046.9	1093.4	1254.9	1391.4
10	824.59	849.74	965.52	1078.8
13.9	657.16	676.44	755.08	835.65
19.3	533.32	548.75	604.64	662.32
26.8	441.4	452.19	491.14	532.97
37.3	371.8	375.96	399.55	427.53
51.8	320.51	316.41	329.08	347.58
72	268.51	265.12	271.97	283.48
100	224.01	221.66	224.69	231.98

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	8.55E-06	1.43E-05	1.54E-05	2.38E-05
0.0139	2.11E-05	2.51E-05	3.06E-05	3.69E-05
0.0193	2.53E-05	3.09E-05	3.66E-05	3.33E-05
0.0268	2.5E-05	3.21E-05	3.66E-05	2.95E-05
0.0373	2.37E-05	2.96E-05	3.15E-05	2.77E-05
0.0518	2.33E-05	0.000027	2.91E-05	2.69E-05
0.072	2.33E-05	2.61E-05	2.84E-05	2.67E-05
0.1	2.36E-05	2.59E-05	2.84E-05	2.68E-05
0.139	2.41E-05	2.61E-05	2.86E-05	2.71E-05
0.193	2.49E-05	2.68E-05	2.89E-05	2.77E-05
0.268	2.61E-05	2.77E-05	2.96E-05	2.86E-05
0.373	2.77E-05	2.91E-05	3.12E-05	2.98E-05
0.518	2.96E-05	3.09E-05	3.27E-05	3.15E-05
0.72	3.21E-05	3.33E-05	3.51E-05	3.39E-05
1	3.57E-05	3.63E-05	3.81E-05	3.78E-05
1.39	4.05E-05	4.08E-05	4.29E-05	4.35E-05
1.93	4.68E-05	4.68E-05	4.95E-05	5.16E-05
2.68	5.46E-05	5.37E-05	5.94E-05	6.39E-05
3.73	6.21E-05	6.24E-05	7.17E-05	7.92E-05
5.18	6.87E-05	7.11E-05	0.000081	8.94E-05
7.2	7.53E-05	7.89E-05	9.03E-05	0.0001
10	8.25E-05	8.52E-05	9.66E-05	0.000108
13.9	9.15E-05	9.42E-05	0.000105	0.000116
19.3	0.000103	0.000106	0.000117	0.000128
26.8	0.000119	0.000122	0.000132	0.000143
37.3	0.000139	0.00014	0.000149	0.00016
51.8	0.000166	0.000164	0.000171	0.00018
72	0.000194	0.000191	0.000196	0.000204
100	0.000224	0.000222	0.000225	0.000232

I.8 Emulsion of CTAC/FA = 1.05/3.3% Systems



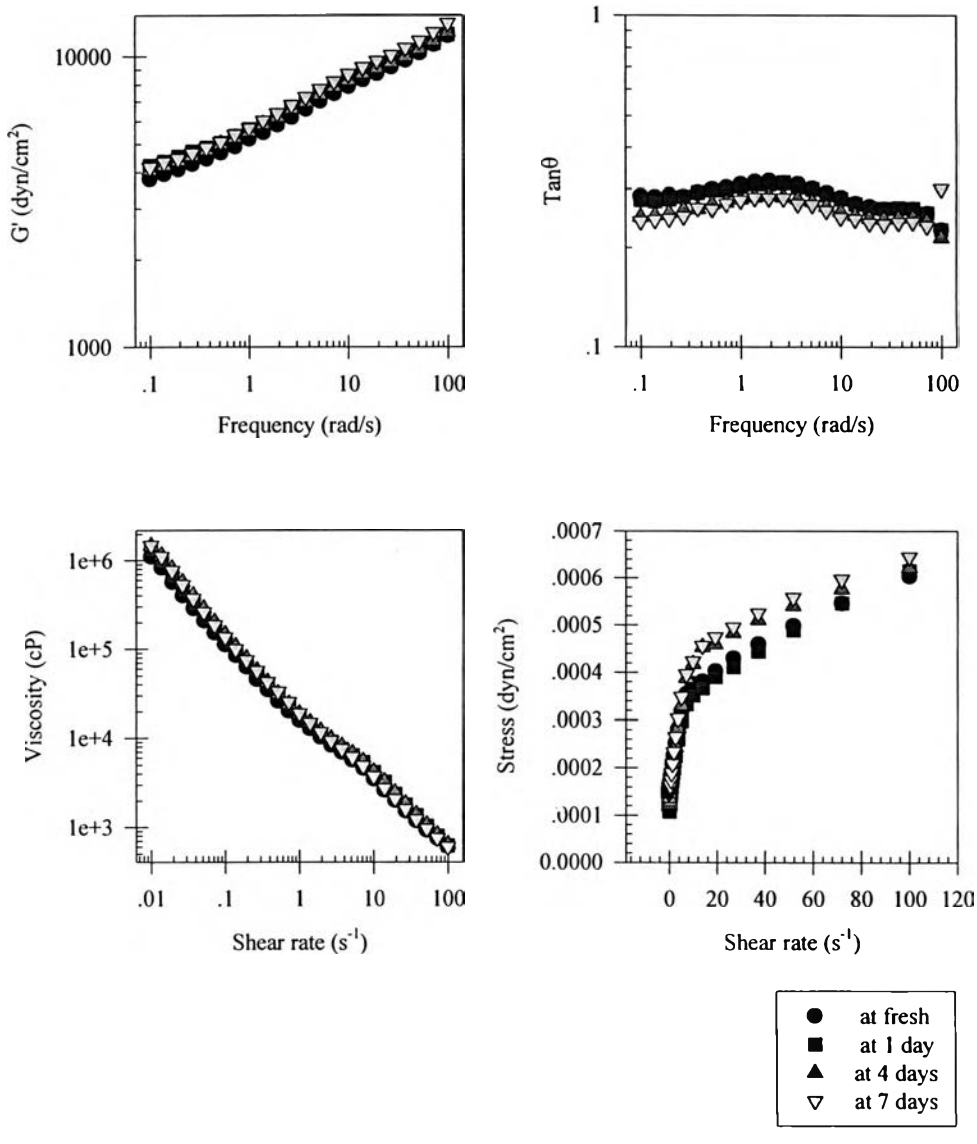
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	4950	6540	6810	6860
72	4660	6150	6390	6440
51.8	4400	5850	6070	6100
37.3	4200	5570	5800	5830
26.8	4010	5330	5570	5580
19.3	3830	5100	5340	5350
13.9	3660	4880	5140	5130
10	3490	4640	4900	4920
7.2	3290	4420	4650	4680
5.18	3110	4190	4420	4440
3.73	2930	3960	4190	4190
2.68	2770	3710	3940	3960
1.93	2610	3500	3710	3760
1.39	2450	3320	3500	3540
1	2330	3110	3280	3350
0.72	2200	2970	3110	3200
0.518	2090	2830	2960	3050
0.373	2020	2730	2810	2910
0.268	1920	2630	2690	2840
0.193	1850	2530	2540	2690
0.139	1820	2450	2400	2610
0.1	1750	2410	2320	2540

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.27	0.254	0.244	0.322
72	0.273	0.263	0.252	0.237
51.8	0.27	0.262	0.249	0.236
37.3	0.263	0.26	0.245	0.231
26.8	0.265	0.255	0.242	0.229
19.3	0.266	0.258	0.24	0.234
13.9	0.272	0.261	0.248	0.239
10	0.277	0.267	0.253	0.247
7.2	0.29	0.281	0.264	0.261
5.18	0.298	0.283	0.272	0.267
3.73	0.302	0.285	0.279	0.273
2.68	0.305	0.298	0.28	0.292
1.93	0.312	0.302	0.278	0.291
1.39	0.321	0.299	0.284	0.293
1	0.306	0.3	0.284	0.294
0.72	0.299	0.29	0.282	0.288
0.518	0.298	0.287	0.273	0.285
0.373	0.296	0.278	0.264	0.294
0.268	0.292	0.268	0.265	0.291
0.193	0.288	0.27	0.266	0.296
0.139	0.278	0.264	0.253	0.306
0.1	0.289	0.258	0.258	0.321
%γ	0.3	0.3	0.3	0.3

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	483150	503852	510632	688710
0.0139	342236	394216	351467	503255
0.0193	238021	265673	242697	323080
0.0268	169485	185351	172512	225617
0.0373	123233	130461	125173	159829
0.0518	90137	93281	91154	114641
0.072	67317	67733	67126	83432
0.1	50590	49741	50160	60744
0.139	38860	37139	38484	45364
0.193	30352	28203	29898	34651
0.268	23969	21794	23651	26710
0.373	19347	16782	18972	20789
0.518	15555	12751	15506	16212
0.72	12141	9804.2	12429	12427
1	9670.7	7726	9805.6	9471.8
1.39	7860.2	6250.9	7922.6	7629.6
1.93	6485.8	5172.1	6511.2	6250.7
2.68	5400.5	4364.9	5351.7	5208.9
3.73	4427.3	3681.2	4501.9	4381.1
5.18	3761.2	3117.8	3832.2	3712.9
7.2	3147.4	2659.9	3205	3128.5
10	2551.5	2174.3	2602.1	2568
13.9	1992	1691.2	2037.9	2022.1
19.3	1500.6	1306.7	1543.4	1515.9
26.8	1145	1015.8	1176.6	1152.4
37.3	855.2	768.76	886.66	867.99
51.8	664.3	598.33	680.4	664.52
72	516.7	464.75	528.37	514.26
100	409.98	365.92	416.51	403.41

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	4.83E-05	5.04E-05	5.10E-05	6.90E-05
0.0139	4.77E-05	5.49E-05	4.89E-05	6.99E-05
0.0193	4.59E-05	5.13E-05	4.68E-05	6.24E-05
0.0268	4.56E-05	4.98E-05	4.62E-05	6.06E-05
0.0373	4.59E-05	4.86E-05	4.68E-05	5.97E-05
0.0518	4.68E-05	4.83E-05	4.74E-05	5.94E-05
0.072	4.86E-05	4.89E-05	4.83E-05	6.00E-05
0.1	5.07E-05	4.98E-05	5.01E-05	6.09E-05
0.139	5.40E-05	5.16E-05	5.34E-05	6.30E-05
0.193	5.88E-05	5.46E-05	5.79E-05	6.69E-05
0.268	6.45E-05	5.85E-05	6.36E-05	7.17E-05
0.373	7.23E-05	6.27E-05	7.08E-05	7.77E-05
0.518	8.07E-05	6.60E-05	8.04E-05	8.40E-05
0.72	8.76E-05	7.05E-05	8.94E-05	8.94E-05
1	9.69E-05	7.74E-05	9.81E-05	9.48E-05
1.39	1.09E-04	8.70E-05	1.10E-04	1.06E-04
1.93	1.25E-04	9.99E-05	1.26E-04	1.21E-04
2.68	1.45E-04	1.17E-04	1.44E-04	1.40E-04
3.73	1.65E-04	1.37E-04	1.68E-04	1.64E-04
5.18	1.95E-04	1.62E-04	1.99E-04	1.93E-04
7.2	2.27E-04	1.92E-04	2.31E-04	2.25E-04
10	2.55E-04	2.18E-04	2.60E-04	2.57E-04
13.9	2.77E-04	2.35E-04	2.84E-04	2.81E-04
19.3	2.90E-04	2.53E-04	2.98E-04	2.93E-04
26.8	3.09E-04	2.73E-04	3.15E-04	3.09E-04
37.3	3.18E-04	2.87E-04	3.30E-04	3.24E-04
51.8	3.45E-04	3.09E-04	3.54E-04	3.45E-04
72	3.72E-04	3.36E-04	3.81E-04	3.72E-04
100	4.11E-04	3.66E-04	4.17E-04	4.05E-04

I.9 Emulsion of CTAC/FA = 1.05/4.0% Systems



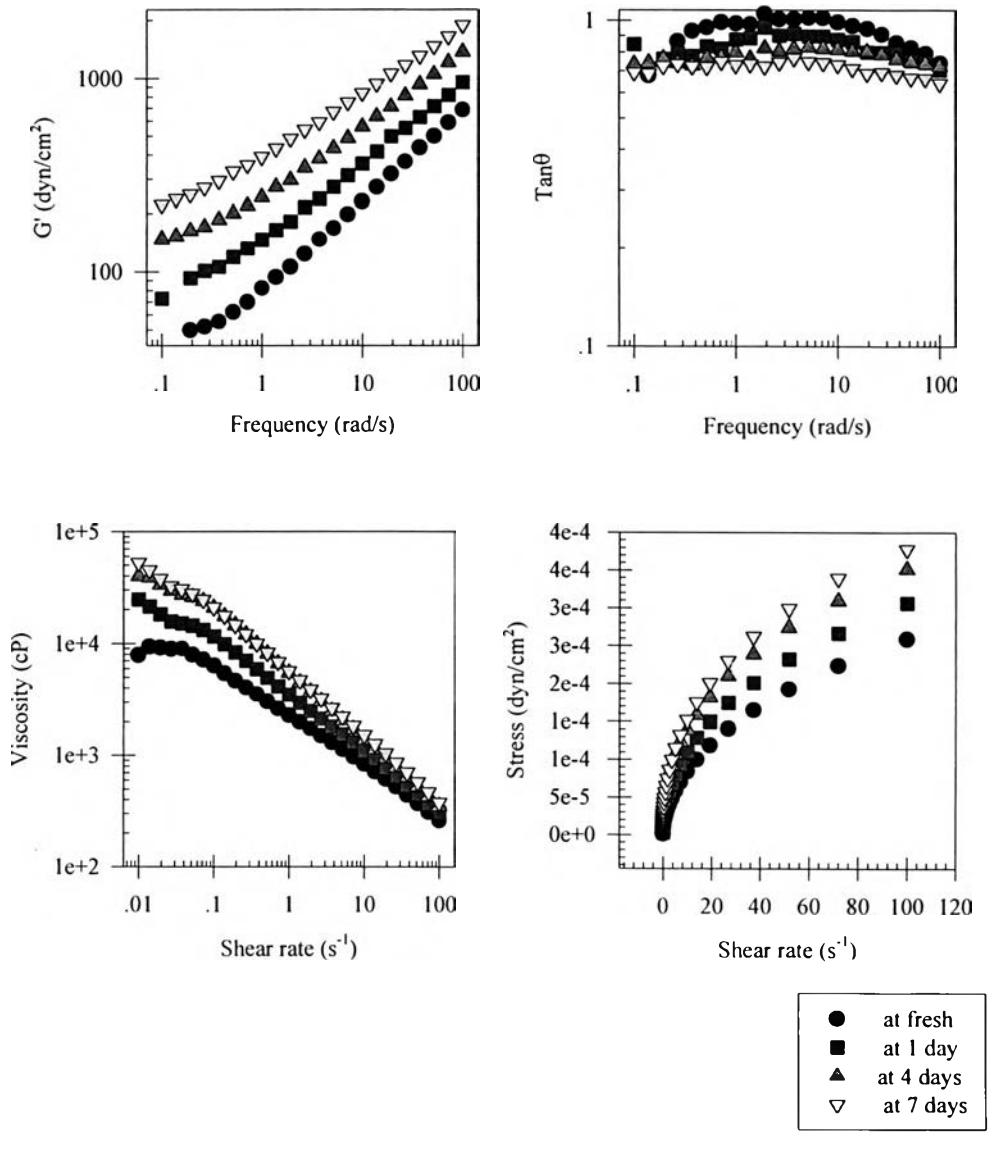
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	11800	11900	12100	13000
72	11000	11100	11300	12100
51.8	10300	10500	10600	11300
37.3	9700	9930	10000	10700
26.8	9220	9520	9550	10100
19.3	8770	9100	9130	9670
13.9	8350	8690	8720	9200
10	7910	8320	8300	8720
7.2	7470	7890	7880	8230
5.18	7040	7490	7430	7740
3.73	6610	7060	7010	7290
2.68	6200	6730	6630	6830
1.93	5830	6280	6210	6410
1.39	5480	5940	5870	6050
1	5210	5640	5540	5690
0.72	4900	5340	5270	5400
0.518	4670	5050	5010	5100
0.373	4450	4860	4770	4870
0.268	4270	4710	4560	4660
0.193	4090	4520	4380	4460
0.139	3940	4360	4230	4330
0.1	3790	4210	4070	4160

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.226	0.226	0.214	0.3
72	0.253	0.254	0.24	0.232
51.8	0.261	0.262	0.246	0.239
37.3	0.261	0.263	0.245	0.238
26.8	0.261	0.262	0.243	0.235
19.3	0.265	0.263	0.244	0.237
13.9	0.271	0.27	0.249	0.243
10	0.282	0.28	0.256	0.246
7.2	0.291	0.288	0.265	0.258
5.18	0.3	0.299	0.274	0.269
3.73	0.31	0.304	0.279	0.27
2.68	0.312	0.313	0.283	0.281
1.93	0.317	0.31	0.286	0.281
1.39	0.315	0.31	0.283	0.282
1	0.31	0.305	0.279	0.277
0.72	0.303	0.297	0.273	0.271
0.518	0.299	0.297	0.27	0.261
0.373	0.292	0.292	0.261	0.263
0.268	0.284	0.284	0.26	0.248
0.193	0.287	0.279	0.254	0.244
0.139	0.283	0.275	0.25	0.242
0.1	0.285	0.278	0.247	0.24
%γ	0.8	0.6	0.6	0.3

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	1100130	1336310	1469060	1490920
0.0139	827062	987775	1151450	1109460
0.0193	566042	666981	809593	763621
0.0268	399719	459452	572527	532422
0.0373	286831	322026	406221	369236
0.0518	208321	228227	288148	259834
0.072	152324	164314	203067	186381
0.1	113087	119834	147177	135622
0.139	84671	88613.5	107450	99426
0.193	63458.2	66626.3	78925.6	74684.1
0.268	46245.8	50802.4	57408.7	56597.9
0.373	34790.5	39354.6	42577.6	42787
0.518	26103.3	29923.2	31561	33256.5
0.72	20303.8	22078.7	24189.8	25474
1	15958.8	16841.7	18823.4	19008.5
1.39	12802.8	13444	14940.6	14879.9
1.93	10272	10928.1	12057.1	11672
2.68	8359.6	9041.87	9868.58	9346.31
3.73	6938	7562.78	8118.28	7540.05
5.18	5744.16	6393.15	6728.27	6131.27
7.2	4608	5350.88	5498.99	4895.46
10	3500.26	4172.96	4218.42	3732.8
13.9	2631.59	3248.45	3267.87	2748.79
19.3	2014.96	2372.53	2446	2087.42
26.8	1525.63	1801.55	1848.76	1600.46
37.3	1189.65	1366.57	1403.39	1229.13
51.8	943.709	1039.79	1074.91	961.919
72	756.966	798.662	829.603	758.812
100	614.343	620.367	644.237	603.102

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	1.49E-04	1.10E-04	1.34E-04	1.47E-04
0.0139	1.54E-04	1.15E-04	1.37E-04	1.60E-04
0.0193	1.48E-04	1.10E-04	1.29E-04	1.57E-04
0.0268	1.43E-04	1.07E-04	1.23E-04	1.54E-04
0.0373	1.38E-04	1.07E-04	1.20E-04	1.52E-04
0.0518	1.35E-04	1.08E-04	1.18E-04	1.49E-04
0.072	1.34E-04	1.10E-04	1.19E-04	1.46E-04
0.1	1.36E-04	1.13E-04	1.20E-04	1.47E-04
0.139	1.38E-04	1.18E-04	1.23E-04	1.49E-04
0.193	1.44E-04	1.23E-04	1.29E-04	1.52E-04
0.268	1.52E-04	1.24E-04	1.37E-04	1.54E-04
0.373	1.60E-04	1.30E-04	1.47E-04	1.59E-04
0.518	1.73E-04	1.35E-04	1.55E-04	1.64E-04
0.72	1.84E-04	1.46E-04	1.59E-04	1.74E-04
1	1.90E-04	1.60E-04	1.69E-04	1.88E-04
1.39	2.07E-04	1.78E-04	1.87E-04	2.08E-04
1.93	2.26E-04	1.99E-04	2.11E-04	2.33E-04
2.68	2.51E-04	2.24E-04	2.43E-04	2.65E-04
3.73	2.81E-04	2.59E-04	2.82E-04	3.03E-04
5.18	3.18E-04	2.98E-04	3.30E-04	3.48E-04
7.2	3.54E-04	3.33E-04	3.87E-04	3.96E-04
10	3.75E-04	3.51E-04	4.17E-04	4.23E-04
13.9	3.81E-04	3.66E-04	4.53E-04	4.56E-04
19.3	4.02E-04	3.90E-04	4.59E-04	4.74E-04
26.8	4.29E-04	4.11E-04	4.83E-04	4.95E-04
37.3	4.59E-04	4.44E-04	5.10E-04	5.25E-04
51.8	4.98E-04	4.89E-04	5.40E-04	5.58E-04
72	5.46E-04	5.46E-04	5.76E-04	5.97E-04
100	6.03E-04	6.15E-04	6.21E-04	6.45E-04

I.10 Emulsion of CTAC/FA/HEC = 0.7/2.3/0.3% Systems



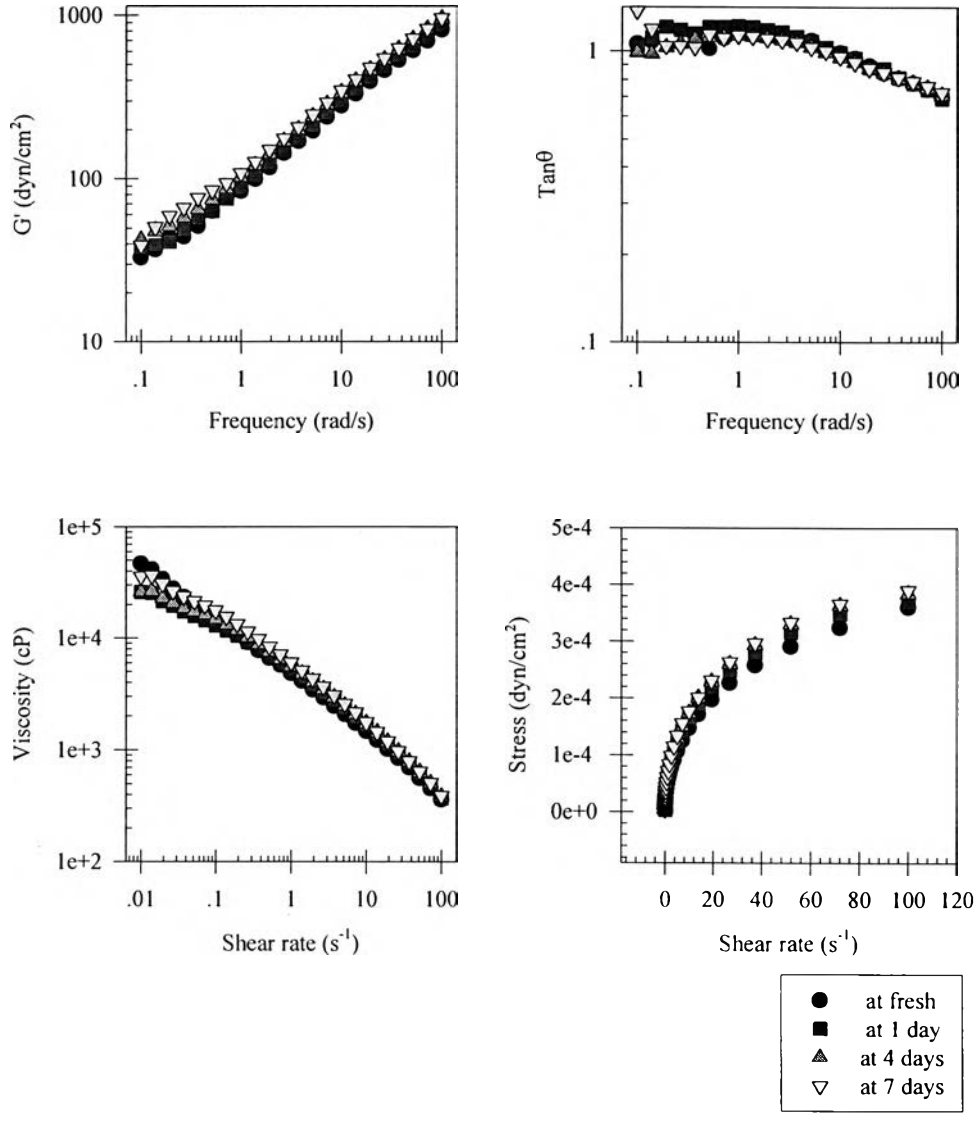
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	686	954	1370	1890
72	589	818	1210	1650
51.8	502	715	1050	1470
37.3	437	628	930	1310
26.8	370	551	812	1170
19.3	320	498	710	1060
13.9	273	415	632	939
10	231	361	559	839
7.2	198	314	488	751
5.18	168	274	432	669
3.73	147	238	382	591
2.68	124	215	344	540
1.93	106	181	296	485
1.39	94	164	274	432
1	82.2	146	242	391
0.72	69.8	132	219	354
0.518	61.9	119	200	329
0.373	55.3	106	185	294
0.268	52.1	101	170	272
0.193	49.9	92.3	162	251
0.139			152	238
0.1		72.5	147	222

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.74	0.705	0.724	0.641
72	0.793	0.743	0.735	0.663
51.8	0.825	0.754	0.747	0.667
37.3	0.854	0.796	0.759	0.68
26.8	0.907	0.798	0.785	0.693
19.3	0.945	0.8	0.801	0.689
13.9	0.964	0.86	0.803	0.712
10	0.989	0.875	0.812	0.732
7.2	1.02	0.894	0.819	0.742
5.18	1.02	0.895	0.828	0.747
3.73	1.01	0.91	0.82	0.766
2.68	1.01	0.899	0.803	0.744
1.93	1.05	0.952	0.821	0.723
1.39	0.976	0.882	0.764	0.735
1	0.98	0.874	0.798	0.73
0.72	0.989	0.82	0.77	0.746
0.518	0.953	0.833	0.767	0.72
0.373	0.931	0.778	0.726	0.722
0.268	0.865	0.791	0.738	0.734
0.193		0.762	0.763	0.724
0.139	0.678		0.741	0.686
0.1		0.844	0.735	0.692
%γ	0.3	0.2	0.2	0.2

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	7904.49	24504.6	39680.9	52628.3
0.0139	9381.43	21276.3	38675.8	45020.7
0.0193	9183.22	18042.2	33343.9	37597.9
0.0268	8945.25	15606.2	29460.2	32357.1
0.0373	8968.37	15031.6	27024.9	30481
0.0518	7937.3	14395.4	25706.7	27639.4
0.072	7182.17	13128.8	23800.6	24403.2
0.1	6370	11515.2	20680.7	20850.8
0.139	5438.68	9845.1	17407.7	17517.7
0.193	4671.36	8334.11	14473.3	14615.2
0.268	4060.41	7019.95	11985.3	12113.2
0.373	3536.01	5884.3	9874.88	9981.55
0.518	3049.31	4941.44	8116.27	8261.99
0.72	2639.84	4142.18	6644.06	6842.96
1	2293.25	3494.78	5475.18	5675.54
1.39	1989.8	2958.02	4486.61	4704.97
1.93	1729.8	2503.65	3701.78	3874.41
2.68	1501.97	2133.46	3052.22	3218.02
3.73	1304.23	1809.28	2477.32	2669.77
5.18	1132.2	1536.62	2068.08	2221.9
7.2	972.396	1301.32	1713.59	1839.11
10	839.163	1094.02	1388.99	1516.37
13.9	717.46	922.359	1137.04	1259.71
19.3	613.48	773.356	939.989	1039.44
26.8	523.322	648.62	781.787	856.902
37.3	441.623	538.314	639.316	702.853
51.8	371.716	447.925	527.543	576.411
72	310.781	369.71	430.668	469.665
100	258.698	305.195	350.391	378.149

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	7.92E-07	2.45E-06	3.96E-06	5.28E-06
0.0139	1.31E-06	2.96E-06	5.37E-06	6.27E-06
0.0193	1.78E-06	3.48E-06	6.45E-06	7.26E-06
0.0268	2.40E-06	4.20E-06	7.92E-06	8.70E-06
0.0373	3.36E-06	5.61E-06	1.01E-05	1.14E-05
0.0518	4.11E-06	7.47E-06	1.33E-05	1.43E-05
0.072	5.16E-06	9.45E-06	1.72E-05	1.76E-05
0.1	6.39E-06	1.15E-05	2.07E-05	2.09E-05
0.139	7.56E-06	1.37E-05	2.42E-05	2.44E-05
0.193	9.03E-06	1.61E-05	2.80E-05	2.83E-05
0.268	1.09E-05	1.88E-05	3.21E-05	3.24E-05
0.373	1.32E-05	2.20E-05	3.69E-05	3.72E-05
0.518	1.58E-05	2.56E-05	4.20E-05	4.29E-05
0.72	1.90E-05	2.99E-05	4.80E-05	4.92E-05
1	2.30E-05	3.51E-05	5.49E-05	5.67E-05
1.39	2.77E-05	4.11E-05	6.24E-05	6.54E-05
1.93	3.33E-05	4.83E-05	7.14E-05	7.50E-05
2.68	4.02E-05	5.73E-05	8.19E-05	8.64E-05
3.73	4.86E-05	6.75E-05	9.24E-05	9.96E-05
5.18	5.88E-05	7.98E-05	1.07E-04	1.15E-04
7.2	7.02E-05	9.39E-05	1.24E-04	1.33E-04
10	8.40E-05	1.10E-04	1.39E-04	1.52E-04
13.9	9.99E-05	1.28E-04	1.58E-04	1.75E-04
19.3	1.19E-04	1.49E-04	1.82E-04	2.01E-04
26.8	1.40E-04	1.74E-04	2.10E-04	2.30E-04
37.3	1.65E-04	2.01E-04	2.39E-04	2.62E-04
51.8	1.93E-04	2.32E-04	2.74E-04	2.99E-04
72	2.24E-04	2.66E-04	3.09E-04	3.39E-04
100	2.59E-04	3.06E-04	3.51E-04	3.78E-04

I.11 Emulsion of CTAC/FA/HEC = 0.7/2.3/0.5% Systems



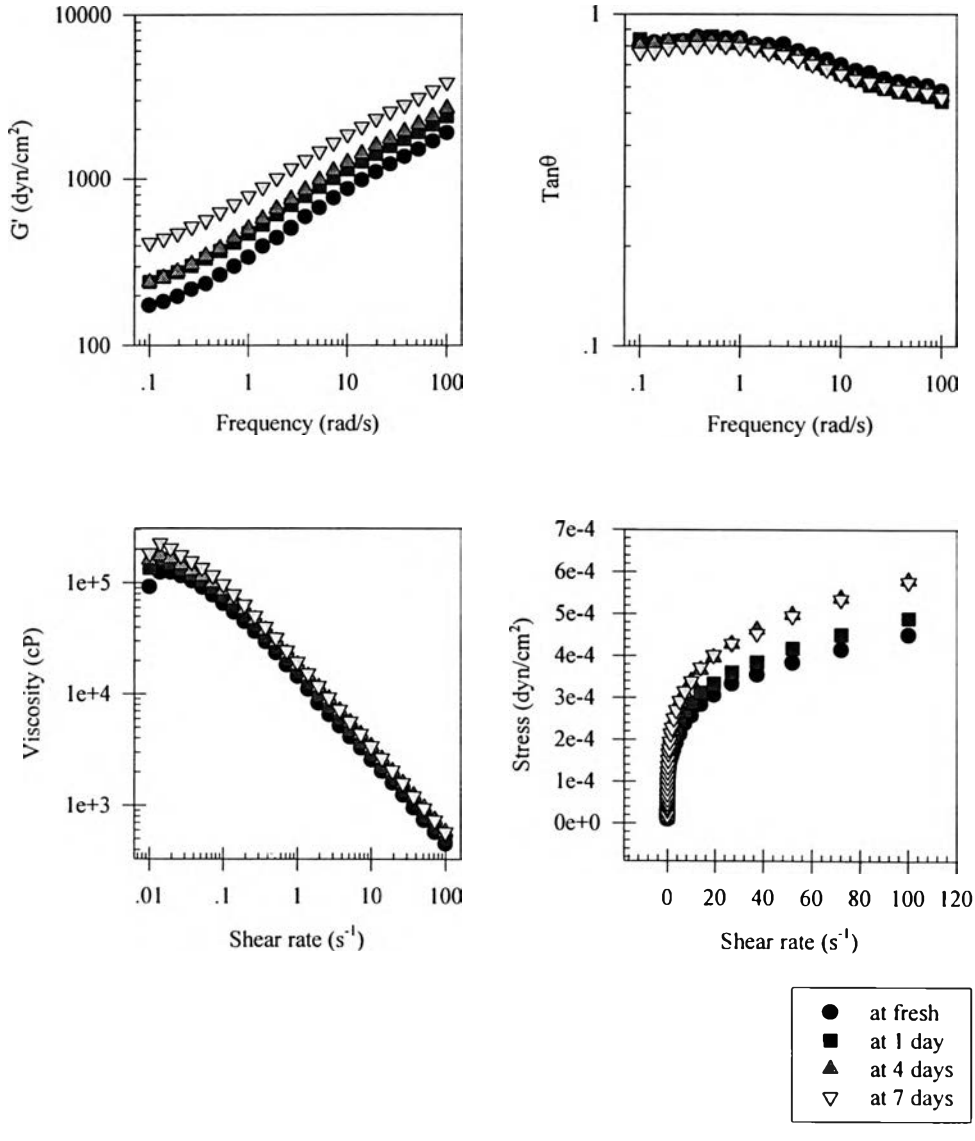
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	820	862	955	962
72	701	738	823	828
51.8	610	644	713	722
37.3	533	561	620	629
26.8	463	477	535	545
19.3	396	419	464	478
13.9	333	354	396	406
10	282	300	337	347
7.2	240	253	286	293
5.18	196	213	241	248
3.73	170	177	201	208
2.68	144	148	170	177
1.93	117	124	142	151
1.39	99.3	103	121	127
1	84.1	87.5	102	108
0.72	76.5	75.2	86.8	93.7
0.518	62.8	63.1	74.4	84.8
0.373	51.6	56.7	64.7	76.1
0.268	44	48.7	57.5	66.1
0.193	43.9	41.2	51.6	59
0.139	36.9	39.3	47.8	50.5
0.1	33	37.7	42.3	39.2

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.697	0.689	0.708	0.724
72	0.744	0.74	0.75	0.759
51.8	0.778	0.776	0.779	0.789
37.3	0.81	0.811	0.806	0.815
26.8	0.846	0.872	0.844	0.845
19.3	0.893	0.881	0.871	0.873
13.9	0.945	0.945	0.915	0.915
10	0.989	0.987	0.949	0.956
7.2	1.01	1.03	0.989	1
5.18	1.09	1.08	1.03	1.03
3.73	1.1	1.12	1.07	1.07
2.68	1.12	1.16	1.09	1.09
1.93	1.17	1.18	1.11	1.1
1.39	1.17	1.21	1.12	1.12
1	1.18	1.22	1.13	1.13
0.72	1.11	1.21	1.12	1.11
0.518	1.02	1.21	1.12	1.14
0.373	1.14	1.15	1.1	1.03
0.268		1.18	1.06	1.04
0.193		1.21	1.03	1.04
0.139	1.08	1.11	0.977	1.19
0.1	1.06	1.04	0.987	1.37
%γ	0.4	0.4	0.6	0.6

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	46674.7	25932.1	26041	35747
0.0139	41470.9	25425.6	26379.1	36383
0.0193	33991.4	21325.6	22845.9	30730.3
0.0268	27809.3	19410.6	20473.1	26519.9
0.0373	23336.5	17207.3	18481.3	23542.5
0.0518	19949.9	15651.8	17308.5	21491.7
0.072	17046.7	14379.9	16260.2	19694.9
0.1	14784.8	12971	14774.5	17720.3
0.139	12537.9	11676.2	13244.5	15540.3
0.193	10654.1	10468.2	11702.7	13365.4
0.268	9126.5	9176.74	10142.6	11469.1
0.373	7744.26	7962.98	8729.18	9825.38
0.518	6606.68	6900.28	7494.7	8386.32
0.72	5696.06	5973.09	6451.5	7146.23
1	4842.42	5172.2	5558.03	6060.56
1.39	4109.93	4458.64	4771.05	5122.89
1.93	3423.42	3811.57	4068.49	4338.02
2.68	2902.33	3267.89	3471.82	3663.9
3.73	2447.71	2767.9	2933.1	3067.53
5.18	2065.82	2336.14	2475.53	2568.06
7.2	1737.45	1966.89	2081.79	2153.49
10	1464.68	1643.21	1729.67	1760.46
13.9	1226.36	1365.93	1437.19	1441.93
19.3	1020.23	1125.33	1181.07	1191.45
26.8	843.056	924.262	967.601	978.509
37.3	689.587	751.268	785.508	794.941
51.8	560.28	606.794	634.093	640.637
72	451.234	483.869	503.429	507.95
100	360.089	368.217	383.913	390.312

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	4.68E-06	2.60E-06	2.61E-06	3.57E-06
0.0139	5.76E-06	3.54E-06	3.66E-06	5.07E-06
0.0193	6.57E-06	4.11E-06	4.41E-06	5.94E-06
0.0268	7.47E-06	5.22E-06	5.49E-06	7.11E-06
0.0373	8.70E-06	6.42E-06	6.90E-06	8.79E-06
0.0518	1.04E-05	8.13E-06	8.97E-06	1.11E-05
0.072	1.23E-05	1.04E-05	1.17E-05	1.42E-05
0.1	1.48E-05	1.30E-05	1.48E-05	1.77E-05
0.139	1.74E-05	1.62E-05	1.84E-05	2.16E-05
0.193	2.06E-05	2.02E-05	2.26E-05	2.58E-05
0.268	2.45E-05	2.46E-05	2.72E-05	3.09E-05
0.373	2.89E-05	2.97E-05	3.27E-05	3.66E-05
0.518	3.42E-05	3.57E-05	3.90E-05	4.35E-05
0.72	4.11E-05	4.29E-05	4.65E-05	5.16E-05
1	4.86E-05	5.19E-05	5.55E-05	6.06E-05
1.39	5.73E-05	6.21E-05	6.63E-05	7.14E-05
1.93	6.63E-05	7.38E-05	7.86E-05	8.37E-05
2.68	7.80E-05	8.79E-05	9.33E-05	9.84E-05
3.73	9.12E-05	1.03E-04	1.10E-04	1.15E-04
5.18	1.07E-04	1.21E-04	1.28E-04	1.33E-04
7.2	1.25E-04	1.42E-04	1.50E-04	1.55E-04
10	1.47E-04	1.64E-04	1.73E-04	1.76E-04
13.9	1.71E-04	1.90E-04	2.00E-04	2.01E-04
19.3	1.97E-04	2.18E-04	2.28E-04	2.30E-04
26.8	2.27E-04	2.48E-04	2.60E-04	2.63E-04
37.3	2.57E-04	2.80E-04	2.93E-04	2.97E-04
51.8	2.90E-04	3.15E-04	3.30E-04	3.33E-04
72	3.24E-04	3.48E-04	3.63E-04	3.66E-04
100	3.60E-04	3.69E-04	3.84E-04	3.90E-04

I.12 Emulsion of CTAC/FA/HEC = 0.7/2.3/0.7% Systems



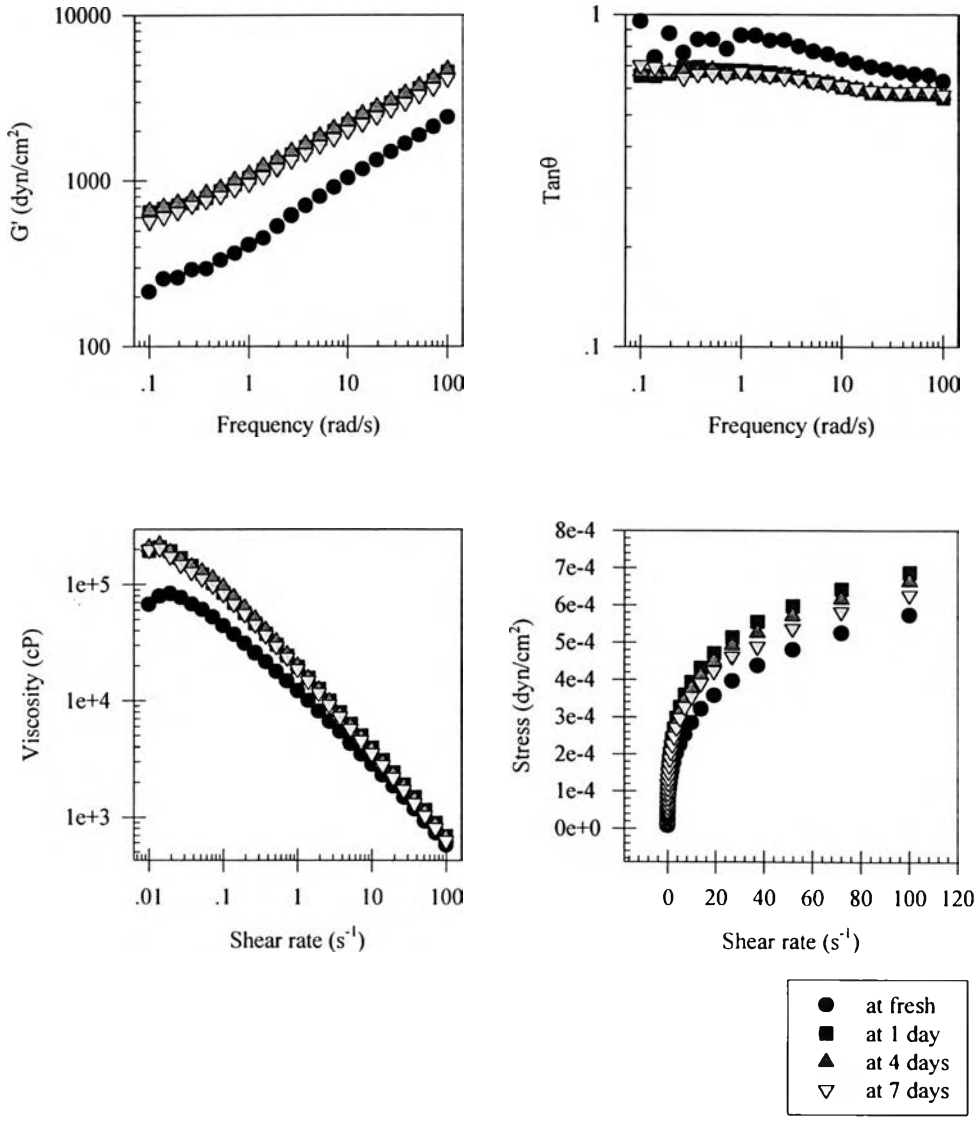
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	1900	2390	2680	3850
72	1690	2130	2390	3430
51.8	1510	1920	2150	3090
37.3	1360	1740	1940	2800
26.8	1230	1570	1750	2550
19.3	1100	1410	1590	2310
13.9	984	1270	1420	2070
10	869	1140	1260	1860
7.2	766	1010	1120	1660
5.18	671	895	987	1470
3.73	592	789	860	1300
2.68	508	695	757	1160
1.93	445	611	660	1010
1.39	397	534	575	891
1	340	472	503	786
0.72	300	417	446	703
0.518	267	372	385	628
0.373	236	334	347	565
0.268	218	302	310	518
0.193	198	277	280	474
0.139	184	260	257	441
0.1	175	242	241	416

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.583	0.543	0.562	0.558
72	0.606	0.562	0.584	0.576
51.8	0.615	0.571	0.591	0.582
37.3	0.624	0.581	0.596	0.588
26.8	0.637	0.594	0.605	0.6
19.3	0.663	0.607	0.619	0.621
13.9	0.673	0.631	0.64	0.633
10	0.7	0.657	0.665	0.656
7.2	0.727	0.684	0.689	0.679
5.18	0.753	0.707	0.714	0.703
3.73	0.772	0.743	0.742	0.726
2.68	0.81	0.76	0.751	0.748
1.93	0.805	0.776	0.781	0.762
1.39	0.809	0.8	0.804	0.782
1	0.844	0.816	0.823	0.793
0.72	0.844	0.816	0.82	0.799
0.518	0.837	0.853	0.826	0.803
0.373	0.853	0.847	0.839	0.8
0.268	0.828	0.832	0.823	0.8
0.193	0.816	0.828	0.825	0.787
0.139	0.82	0.812	0.811	0.766
0.1	0.8	0.837	0.8	0.763
%γ	0.6	0.6	0.3	0.6

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	91843.3	135274	162229	183964
0.0139	124033	163526	176269	225715
0.0193	124498	150071	166406	203662
0.0268	115559	133417	146413	177437
0.0373	103811	117704	129656	155913
0.0518	90992.6	104179	115390	136764
0.072	77399.8	91338.9	100661	117150
0.1	65160.9	76295.3	85064.1	97278.3
0.139	54371	62899	70741	78961.5
0.193	44776.1	51361.9	57982	63586.4
0.268	36381.9	41638.4	46897.2	50574.6
0.373	29396.1	33453.8	37584.4	40392.7
0.518	23526.4	26123.2	29804.7	32067
0.72	18173.9	20703.3	23279	24554
1	14346	15925.4	18276.2	19455
1.39	10998.2	12341.6	14539.7	15384.4
1.93	8318.68	9794.32	11509.4	11794.2
2.68	6467.93	7702.54	9075.86	9301.31
3.73	5144.52	6033.98	7116.23	7231.78
5.18	4095.15	4737.85	5569.52	5622.99
7.2	3288.79	3702.99	4347.95	4363.76
10	2565.68	2873.47	3387.58	3399.94
13.9	2035.47	2238.43	2636.75	2670.75
19.3	1588.44	1715.36	2050.84	2073.14
26.8	1245.32	1342.75	1595.19	1597.62
37.3	952.028	1028.14	1237.93	1217.46
51.8	741.502	801.949	960.937	953.128
72	575.88	625.664	746.109	739.404
100	449.683	488.749	579.179	575.089

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	9.18E-06	1.35E-05	1.62E-05	1.84E-05
0.0139	1.73E-05	2.27E-05	2.45E-05	3.15E-05
0.0193	2.41E-05	2.90E-05	3.21E-05	3.93E-05
0.0268	3.09E-05	3.57E-05	3.93E-05	4.77E-05
0.0373	3.87E-05	4.38E-05	4.83E-05	5.82E-05
0.0518	4.71E-05	5.40E-05	5.97E-05	7.08E-05
0.072	5.58E-05	6.57E-05	7.26E-05	8.43E-05
0.1	6.51E-05	7.65E-05	8.52E-05	9.75E-05
0.139	7.56E-05	8.76E-05	9.84E-05	1.10E-04
0.193	8.64E-05	9.93E-05	1.12E-04	1.23E-04
0.268	9.78E-05	1.12E-04	1.26E-04	1.36E-04
0.373	1.10E-04	1.25E-04	1.40E-04	1.51E-04
0.518	1.22E-04	1.35E-04	1.55E-04	1.66E-04
0.72	1.31E-04	1.49E-04	1.68E-04	1.77E-04
1	1.44E-04	1.59E-04	1.83E-04	1.95E-04
1.39	1.53E-04	1.72E-04	2.02E-04	2.14E-04
1.93	1.61E-04	1.89E-04	2.22E-04	2.28E-04
2.68	1.74E-04	2.07E-04	2.44E-04	2.50E-04
3.73	1.92E-04	2.25E-04	2.66E-04	2.70E-04
5.18	2.12E-04	2.46E-04	2.89E-04	2.92E-04
7.2	2.37E-04	2.67E-04	3.12E-04	3.15E-04
10	2.57E-04	2.88E-04	3.39E-04	3.39E-04
13.9	2.83E-04	3.12E-04	3.66E-04	3.72E-04
19.3	3.06E-04	3.33E-04	3.96E-04	4.02E-04
26.8	3.33E-04	3.60E-04	4.29E-04	4.29E-04
37.3	3.54E-04	3.84E-04	4.62E-04	4.53E-04
51.8	3.84E-04	4.17E-04	4.98E-04	4.95E-04
72	4.14E-04	4.50E-04	5.37E-04	5.34E-04
100	4.50E-04	4.89E-04	5.79E-04	5.76E-04

I.13 Emulsion of CTAC/FA/HEC = 0.7/3.3/0.5% Systems



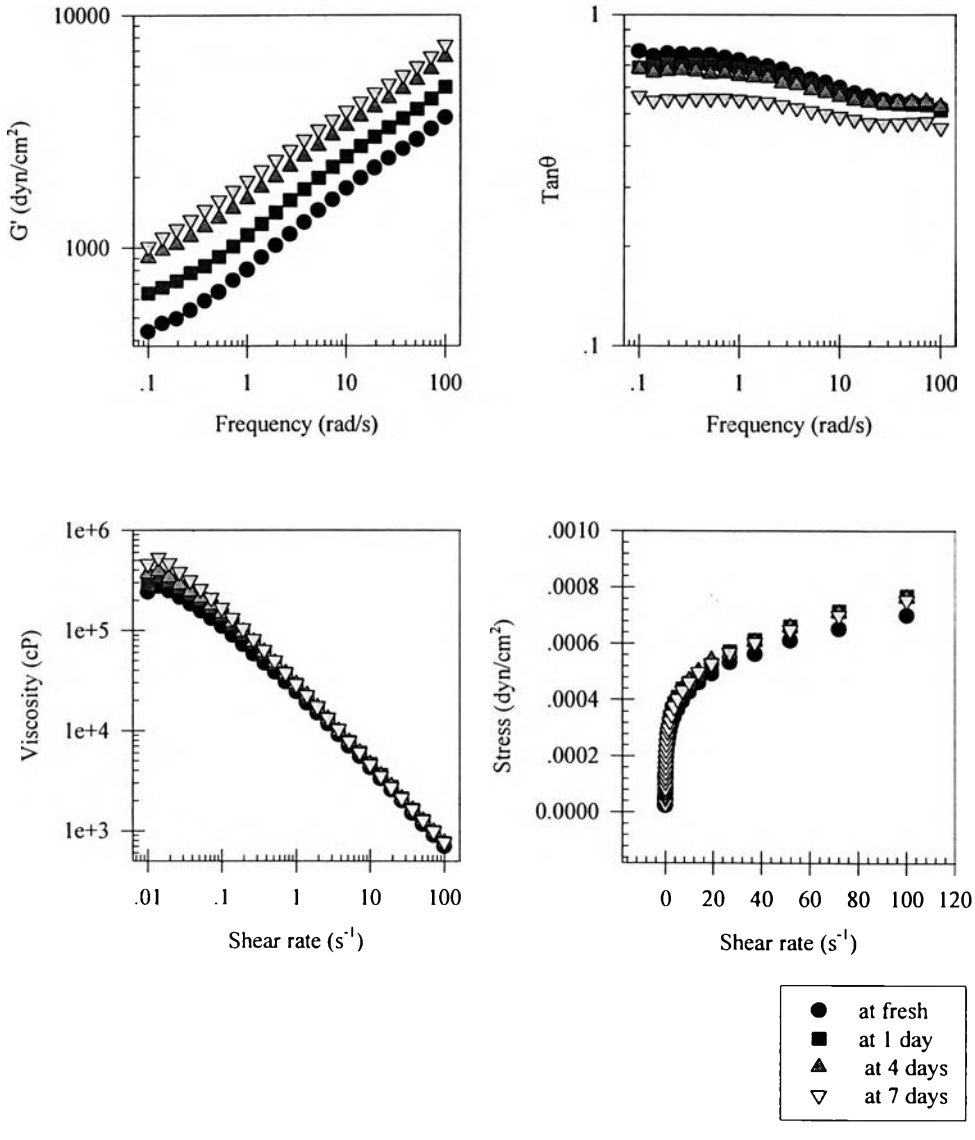
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	2420	4530	4690	4120
72	2120	4010	4160	3640
51.8	1880	3610	3750	3280
37.3	1670	3260	3390	2960
26.8	1490	2960	3080	2690
19.3	1330	2700	2810	2440
13.9	1170	2440	2550	2210
10	1040	2210	2300	2000
7.2	911	1990	2080	1800
5.18	802	1790	1870	1630
3.73	706	1600	1670	1460
2.68	618	1440	1510	1320
1.93	532	1290	1360	1180
1.39	453	1160	1230	1060
1	412	1040	1100	956
0.72	366	948	1010	887
0.518	333	868	905	806
0.373	295	788	845	752
0.268	291	730	778	706
0.193	261	710	737	645
0.139	257	676	695	603
0.1	214	646	659	567

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.629	0.562	0.575	0.575
72	0.656	0.579	0.587	0.588
51.8	0.661	0.578	0.59	0.589
37.3	0.671	0.578	0.582	0.586
26.8	0.684	0.581	0.59	0.587
19.3	0.695	0.583	0.592	0.593
13.9	0.714	0.598	0.597	0.602
10	0.732	0.607	0.611	0.612
7.2	0.758	0.623	0.621	0.621
5.18	0.774	0.63	0.63	0.631
3.73	0.801	0.648	0.644	0.64
2.68	0.836	0.661	0.656	0.646
1.93	0.834	0.668	0.648	0.655
1.39	0.863	0.674	0.658	0.661
1	0.864	0.678	0.664	0.672
0.72	0.787	0.68	0.658	0.657
0.518	0.839	0.681	0.683	0.663
0.373	0.839	0.695	0.667	0.662
0.268	0.766	0.693	0.67	0.645
0.193	0.876	0.663	0.67	0.68
0.139	0.741	0.653	0.669	0.693
0.1	0.954	0.655	0.672	0.704
%γ	0.4	0.4	0.4	0.4

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	67052.6	194376	207991	198327
0.0139	78928.7	210019	221249	204097
0.0193	83030	192760	189550	173809
0.0268	76676.7	168827	162795	147099
0.0373	67283.7	145019	143281	127443
0.0518	60454.3	122133	129372	111869
0.072	52267.8	102332	113139	97357
0.1	43823.3	84309.6	94893.6	81934
0.139	36954.4	68963.5	77556.2	67552.8
0.193	30911.6	56573.1	62822.5	55251
0.268	25821.5	46030.4	50513.1	44965.2
0.373	21474	37366.8	40381.9	36306
0.518	17826.2	30203.7	32196.2	29269.5
0.72	14723.4	24270.4	25026.6	23412.2
1	12153.7	19495.1	19944.4	18629.6
1.39	10001.2	15702.9	15542.5	14753.8
1.93	8076.05	12561.2	12378.8	11649.8
2.68	6607.2	10023.1	9817.97	9205.75
3.73	5414.8	7955.75	7557.28	7247.86
5.18	4345.31	6322.15	6036.67	5718.02
7.2	3495.97	5004.35	4768.61	4520.35
10	2842.13	3928.65	3752.4	3550.48
13.9	2297.46	3106.55	2961.72	2801.16
19.3	1846.24	2438.95	2333.85	2187.36
26.8	1472.28	1911.77	1832.7	1717.4
37.3	1170.64	1490.45	1404.2	1313.27
51.8	925.805	1152.68	1099.86	1033.7
72	729.795	892.698	854.107	806.179
100	572.171	687.121	663.777	626.866

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	6.72E-06	1.95E-05	2.08E-05	1.99E-05
0.0139	1.10E-05	2.92E-05	3.09E-05	2.84E-05
0.0193	1.61E-05	3.72E-05	3.66E-05	3.36E-05
0.0268	2.06E-05	4.53E-05	4.38E-05	3.96E-05
0.0373	2.51E-05	5.40E-05	5.34E-05	4.77E-05
0.0518	3.12E-05	6.33E-05	6.72E-05	5.79E-05
0.072	3.78E-05	7.38E-05	8.16E-05	7.02E-05
0.1	4.38E-05	8.43E-05	9.51E-05	8.19E-05
0.139	5.13E-05	9.60E-05	1.08E-04	9.39E-05
0.193	5.97E-05	1.09E-04	1.22E-04	1.07E-04
0.268	6.93E-05	1.24E-04	1.36E-04	1.21E-04
0.373	8.01E-05	1.40E-04	1.51E-04	1.36E-04
0.518	9.24E-05	1.57E-04	1.67E-04	1.52E-04
0.72	1.06E-04	1.75E-04	1.80E-04	1.69E-04
1	1.22E-04	1.95E-04	2.00E-04	1.87E-04
1.39	1.39E-04	2.18E-04	2.16E-04	2.05E-04
1.93	1.56E-04	2.43E-04	2.39E-04	2.25E-04
2.68	1.77E-04	2.69E-04	2.64E-04	2.47E-04
3.73	2.02E-04	2.97E-04	2.82E-04	2.71E-04
5.18	2.25E-04	3.27E-04	3.12E-04	2.96E-04
7.2	2.52E-04	3.60E-04	3.45E-04	3.27E-04
10	2.84E-04	3.93E-04	3.75E-04	3.54E-04
13.9	3.21E-04	4.32E-04	4.11E-04	3.90E-04
19.3	3.57E-04	4.71E-04	4.50E-04	4.23E-04
26.8	3.96E-04	5.13E-04	4.92E-04	4.62E-04
37.3	4.38E-04	5.55E-04	5.25E-04	4.89E-04
51.8	4.80E-04	5.97E-04	5.70E-04	5.37E-04
72	5.25E-04	6.42E-04	6.15E-04	5.82E-04
100	5.73E-04	6.87E-04	6.63E-04	6.27E-04

I.14 Emulsion of CTAC/FA/HEC = 0.7/3.3/0.7% Systems



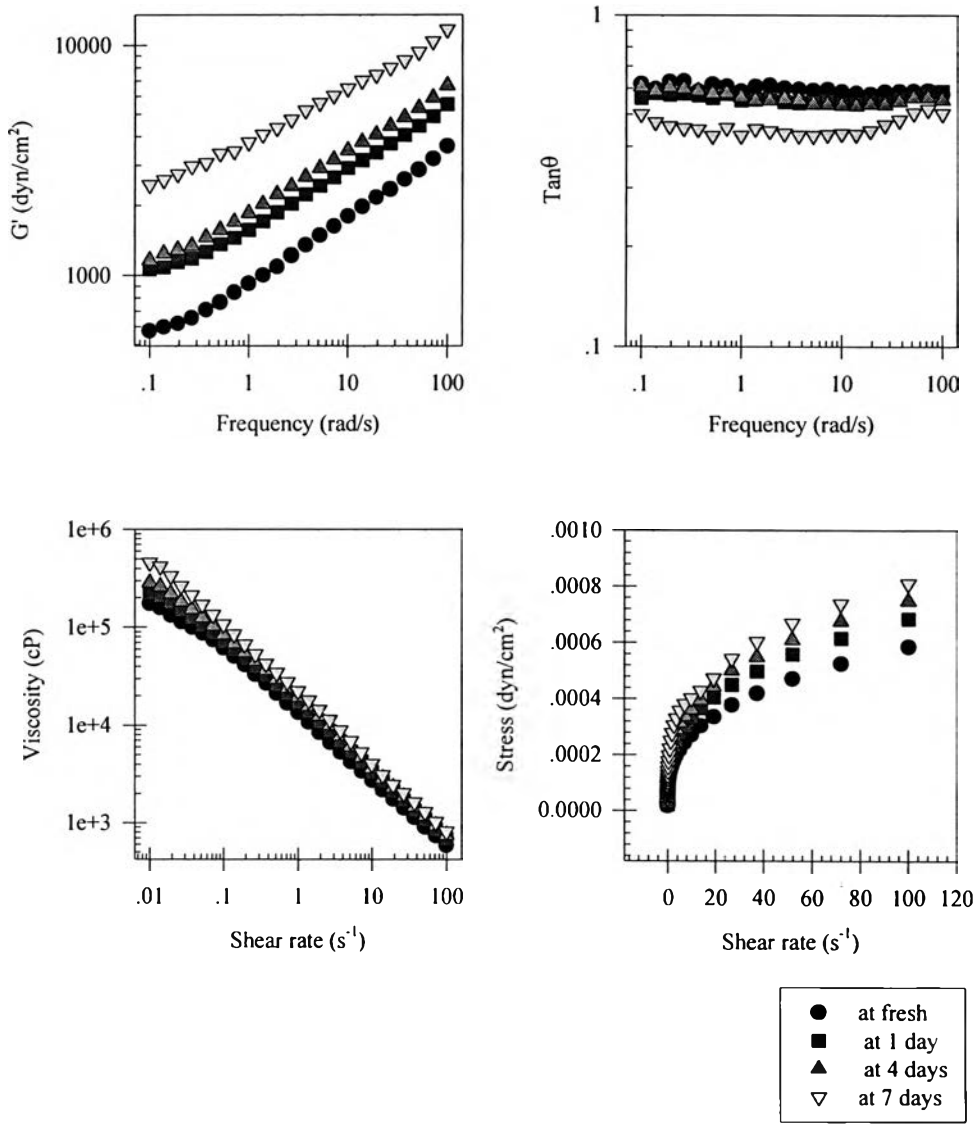
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	3600	4860	6540	7410
72	3220	4330	5780	6510
51.8	2900	3910	5200	5980
37.3	2640	3570	4740	5460
26.8	2410	3260	4330	5010
19.3	2190	2970	3960	4610
13.9	1980	2710	3630	4210
10	1790	2450	3310	3850
7.2	1600	2210	3010	3520
5.18	1440	1980	2710	3200
3.73	1280	1770	2440	2900
2.68	1140	1590	2210	2620
1.93	1020	1410	1990	2370
1.39	908	1260	1800	2140
1	804	1130	1610	1930
0.72	722	1010	1460	1750
0.518	645	913	1330	1590
0.373	589	833	1220	1450
0.268	538	778	1110	1310
0.193	494	718	1030	1200
0.139	473	673	970	1110
0.1	435	636	902	1010

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.518	0.512	0.525	0.454
72	0.535	0.532	0.544	0.473
51.8	0.541	0.534	0.542	0.472
37.3	0.545	0.536	0.539	0.469
26.8	0.55	0.54	0.539	0.467
19.3	0.565	0.55	0.541	0.47
13.9	0.577	0.56	0.549	0.481
10	0.599	0.579	0.563	0.491
7.2	0.621	0.594	0.577	0.5
5.18	0.635	0.618	0.589	0.51
3.73	0.655	0.632	0.609	0.521
2.68	0.681	0.648	0.618	0.531
1.93	0.696	0.67	0.64	0.542
1.39	0.706	0.679	0.644	0.547
1	0.726	0.689	0.649	0.552
0.72	0.738	0.698	0.661	0.556
0.518	0.752	0.706	0.658	0.555
0.373	0.752	0.71	0.67	0.555
0.268	0.757	0.696	0.676	0.552
0.193	0.761	0.706	0.672	0.553
0.139	0.746	0.695	0.663	0.547
0.1	0.772	0.689	0.683	0.565
%γ	0.8	0.6	0.4	0.6

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	240007	283375	366741	459772
0.0139	274526	347423	389754	529663
0.0193	247990	311142	338537	468898
0.0268	213882	268314	288394	383771
0.0373	182691	229728	245558	315795
0.0518	155618	205937	212371	259431
0.072	132100	172702	181242	211182
0.1	109398	141999	149339	168718
0.139	89029.6	115540	121035	133125
0.193	72136.6	93377.8	97187	104598
0.268	58164.1	74909.8	77387.6	82011.9
0.373	46931.9	59527.3	60912.2	64048.3
0.518	37981.5	46878.8	47814.1	49916.9
0.72	30475.8	36680.3	37365.6	37833.3
1	24242.2	28507.6	29070.6	28929.9
1.39	19159.3	21539.2	22552.9	22543.1
1.93	15038.9	16707.7	17020.4	17481.2
2.68	11762.7	12980.7	13246.3	13529.7
3.73	9122.34	10022.5	9978.87	10399.2
5.18	7074.24	7767.12	7810.48	7882.95
7.2	5506.85	5998.13	6064.89	6085.52
10	4255.01	4612.75	4660.88	4595.32
13.9	3297.72	3571.89	3599.41	3513.58
19.3	2549.5	2734.16	2795.14	2712.06
26.8	1981.28	2110.59	2105.44	2119.36
37.3	1506.09	1613.22	1621.29	1639.61
51.8	1171.71	1250.46	1265.42	1273.42
72	903.415	970.679	983.597	990.667
100	698.117	751.177	761.664	767.865

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	2.40E-05	4.59E-05	3.66E-05	2.84E-05
0.0139	3.81E-05	7.38E-05	5.43E-05	4.83E-05
0.0193	4.80E-05	9.06E-05	6.54E-05	6.00E-05
0.0268	5.73E-05	1.03E-04	7.74E-05	7.20E-05
0.0373	6.81E-05	1.18E-04	9.15E-05	8.58E-05
0.0518	8.07E-05	1.34E-04	1.10E-04	1.07E-04
0.072	9.51E-05	1.52E-04	1.31E-04	1.25E-04
0.1	1.10E-04	1.69E-04	1.49E-04	1.42E-04
0.139	1.24E-04	1.85E-04	1.68E-04	1.61E-04
0.193	1.40E-04	2.02E-04	1.88E-04	1.81E-04
0.268	1.56E-04	2.20E-04	2.08E-04	2.01E-04
0.373	1.75E-04	2.39E-04	2.27E-04	2.22E-04
0.518	1.97E-04	2.59E-04	2.48E-04	2.43E-04
0.72	2.20E-04	2.73E-04	2.69E-04	2.64E-04
1	2.43E-04	2.90E-04	2.91E-04	2.85E-04
1.39	2.66E-04	3.15E-04	3.15E-04	3.00E-04
1.93	2.91E-04	3.39E-04	3.30E-04	3.24E-04
2.68	3.15E-04	3.63E-04	3.57E-04	3.48E-04
3.73	3.39E-04	3.87E-04	3.72E-04	3.75E-04
5.18	3.66E-04	4.08E-04	4.05E-04	4.02E-04
7.2	3.96E-04	4.38E-04	4.38E-04	4.32E-04
10	4.26E-04	4.59E-04	4.68E-04	4.62E-04
13.9	4.59E-04	4.89E-04	5.01E-04	4.98E-04
19.3	4.92E-04	5.25E-04	5.40E-04	5.28E-04
26.8	5.31E-04	5.70E-04	5.64E-04	5.67E-04
37.3	5.61E-04	6.12E-04	6.06E-04	6.03E-04
51.8	6.09E-04	6.60E-04	6.57E-04	6.48E-04
72	6.51E-04	7.14E-04	7.08E-04	6.99E-04
100	6.99E-04	7.68E-04	7.62E-04	7.53E-04

I.15 Emulsion of CTAC/FA/HEC = 0.7/4.0/0.3% Systems



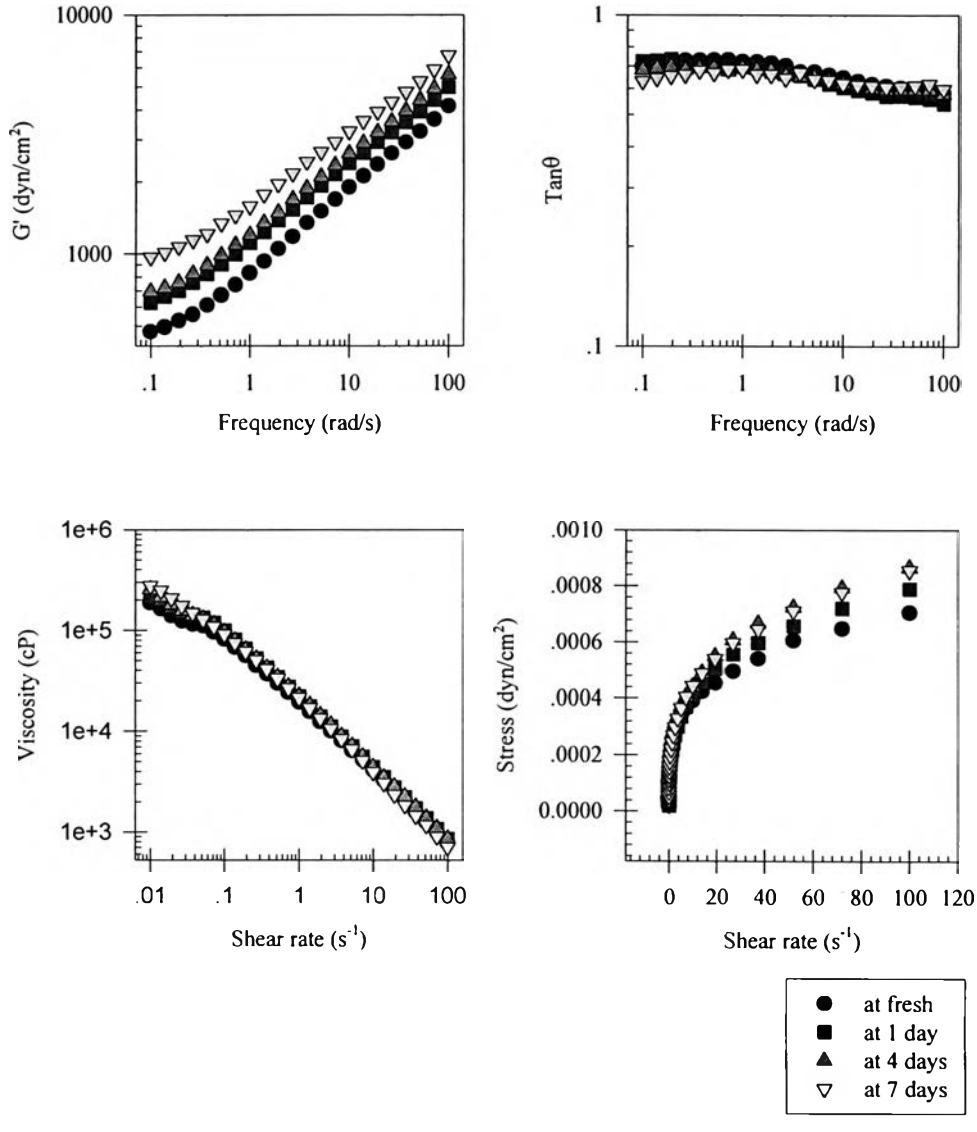
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	3630	5530	6670	11700
72	3200	4900	5900	10400
51.8	2870	4450	5320	9330
37.3	2600	4060	4850	8600
26.8	2360	3720	4440	7990
19.3	2170	3410	4070	7420
13.9	1980	3150	3780	7000
10	1800	2910	3470	6490
7.2	1630	2650	3170	6030
5.18	1490	2440	2910	5610
3.73	1350	2240	2670	5210
2.68	1220	2040	2430	4740
1.93	1090	1870	2240	4360
1.39	1000	1710	2030	4070
1	923	1570	1850	3770
0.72	844	1450	1700	3450
0.518	767	1360	1570	3370
0.373	709	1260	1460	3070
0.268	654	1180	1340	2970
0.193	618	1140	1290	2740
0.139	597	1080	1240	2580
0.1	575	1060	1160	2460

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.576	0.587	0.553	0.504
72	0.59	0.587	0.562	0.519
51.8	0.589	0.573	0.562	0.506
37.3	0.587	0.563	0.547	0.482
26.8	0.586	0.547	0.535	0.466
19.3	0.576	0.549	0.537	0.447
13.9	0.58	0.543	0.53	0.436
10	0.586	0.541	0.533	0.438
7.2	0.595	0.553	0.536	0.435
5.18	0.591	0.545	0.539	0.432
3.73	0.596	0.542	0.554	0.433
2.68	0.601	0.546	0.557	0.439
1.93	0.612	0.561	0.552	0.446
1.39	0.607	0.555	0.552	0.453
1	0.589	0.552	0.563	0.432
0.72	0.608	0.577	0.58	0.456
0.518	0.617	0.561	0.579	0.431
0.373	0.588	0.571	0.589	0.451
0.268	0.63	0.578	0.599	0.455
0.193	0.628	0.573	0.606	0.461
0.139	0.598	0.579	0.589	0.474
0.1	0.618	0.561	0.607	0.501
%γ	0.3	0.2	0.2	0.1

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	173421	222777	284498	457077
0.0139	159143	211484	260171	418630
0.0193	132770	179607	219893	331697
0.0268	112958	149521	182154	263778
0.0373	98822.3	125189	152904	211994
0.0518	86673.6	104476	125958	169026
0.072	74146.1	86688.4	103272	133943
0.1	61657.1	71269.9	84289.7	106396
0.139	50608.7	58343.7	68601.1	84241.6
0.193	41164.1	47785.3	55621.4	67013.1
0.268	33183.7	39142.4	45148.3	53289.6
0.373	26743.4	31829	36559.4	42569.4
0.518	21192.1	25961.8	29653.4	34217.1
0.72	16907.7	21229	24035.5	27592.4
1	13451.3	17052.4	19426.4	22278.4
1.39	10663.3	13756.3	15637.2	17952.2
1.93	8370.16	10874.1	12497.1	14384.4
2.68	6639.71	8635.42	9932.6	11383.9
3.73	5284.95	6798.41	7807.88	8863.63
5.18	4218.68	5356.88	6092.14	6880.5
7.2	3378.13	4223.71	4712.13	5287.05
10	2714.14	3323.81	3638.54	4020.09
13.9	2182.87	2637.87	2849.1	3090.11
19.3	1742.05	2101.06	2304.69	2457.05
26.8	1404.75	1680.54	1861.08	2018.09
37.3	1124.03	1334.87	1468.09	1612.03
51.8	907.423	1074.5	1175.26	1289.46
72	730.178	852.978	935.416	1022.37
100	585.107	683.831	746.169	810.509

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	1.74E-05	2.23E-05	2.85E-05	4.59E-05
0.0139	2.21E-05	2.94E-05	3.68E-05	5.82E-05
0.0193	2.57E-05	3.48E-05	4.26E-05	6.42E-05
0.0268	3.03E-05	4.02E-05	4.89E-05	7.08E-05
0.0373	3.69E-05	4.68E-05	5.70E-05	7.92E-05
0.0518	4.50E-05	5.43E-05	6.54E-05	8.76E-05
0.072	5.34E-05	6.24E-05	7.44E-05	9.66E-05
0.1	6.18E-05	7.14E-05	8.43E-05	1.07E-04
0.139	7.05E-05	8.13E-05	9.54E-05	1.17E-04
0.193	7.95E-05	9.24E-05	1.07E-04	1.30E-04
0.268	8.91E-05	1.05E-04	1.21E-04	1.43E-04
0.373	9.99E-05	1.19E-04	1.37E-04	1.59E-04
0.518	1.10E-04	1.35E-04	1.54E-04	1.77E-04
0.72	1.22E-04	1.53E-04	1.73E-04	1.99E-04
1	1.35E-04	1.71E-04	1.94E-04	2.23E-04
1.39	1.48E-04	1.91E-04	2.18E-04	2.50E-04
1.93	1.62E-04	2.10E-04	2.42E-04	2.78E-04
2.68	1.78E-04	2.32E-04	2.67E-04	3.06E-04
3.73	1.97E-04	2.54E-04	2.91E-04	3.30E-04
5.18	2.19E-04	2.78E-04	3.15E-04	3.57E-04
7.2	2.43E-04	3.03E-04	3.39E-04	3.81E-04
10	2.72E-04	3.33E-04	3.68E-04	4.02E-04
13.9	3.03E-04	3.66E-04	3.96E-04	4.29E-04
19.3	3.36E-04	4.05E-04	4.44E-04	4.74E-04
26.8	3.78E-04	4.50E-04	5.01E-04	5.43E-04
37.3	4.20E-04	4.98E-04	5.49E-04	6.03E-04
51.8	4.71E-04	5.58E-04	6.09E-04	6.69E-04
72	5.25E-04	6.15E-04	6.75E-04	7.38E-04
100	5.85E-04	6.84E-04	7.47E-04	8.10E-04

I.16 Emulsion of CTAC/FA/HEC = 0.7/4.0/0.5% Systems



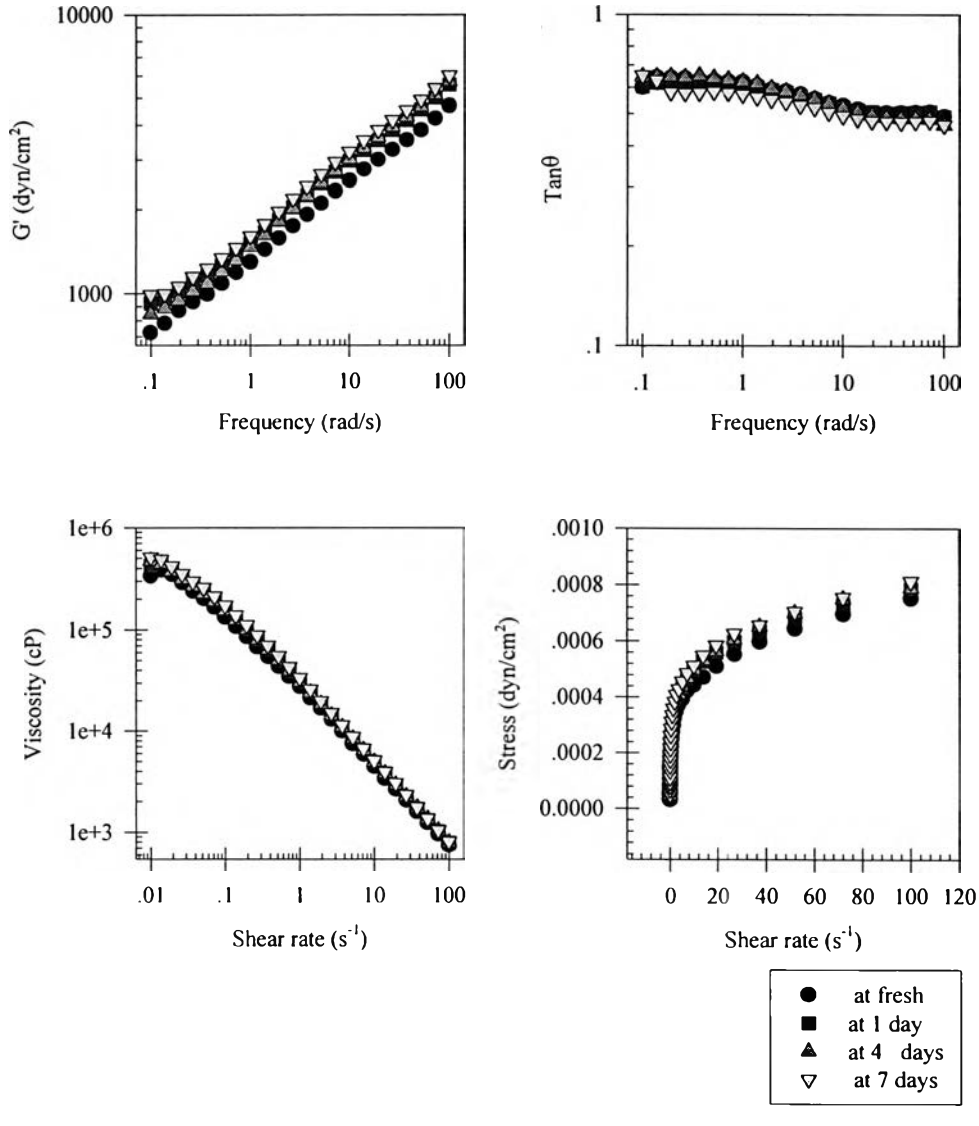
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	4150	4970	5620	6750
72	3660	4390	4920	5890
51.8	3260	3930	4400	5270
37.3	2930	3550	3960	4750
26.8	2640	3220	3580	4320
19.3	2370	2930	3230	3930
13.9	2120	2640	2910	3600
10	1900	2390	2630	3260
7.2	1690	2150	2350	2940
5.18	1510	1920	2100	2670
3.73	1350	1720	1880	2430
2.68	1180	1530	1690	2170
1.93	1050	1380	1490	1960
1.39	929	1230	1350	1770
1	832	1110	1200	1580
0.72	742	994	1090	1450
0.518	672	900	987	1340
0.373	609	822	896	1210
0.268	558	756	827	1140
0.193	526	698	760	1070
0.139	494	661	723	1010
0.1	472	624	696	966

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.579	0.538	0.576	0.597
72	0.596	0.556	0.594	0.618
51.8	0.598	0.563	0.593	0.611
37.3	0.601	0.568	0.594	0.607
26.8	0.608	0.567	0.593	0.605
19.3	0.616	0.581	0.599	0.61
13.9	0.629	0.59	0.611	0.613
10	0.645	0.602	0.62	0.619
7.2	0.657	0.617	0.633	0.634
5.18	0.672	0.638	0.646	0.638
3.73	0.671	0.655	0.651	0.668
2.68	0.7	0.674	0.653	0.643
1.93	0.714	0.674	0.676	0.659
1.39	0.72	0.699	0.681	0.659
1	0.721	0.696	0.689	0.683
0.72	0.73	0.706	0.675	0.682
0.518	0.73	0.708	0.692	0.667
0.373	0.729	0.712	0.69	0.678
0.268	0.729	0.719	0.683	0.66
0.193	0.702	0.735	0.698	0.654
0.139	0.709	0.726	0.691	0.644
0.1	0.698	0.724	0.682	0.63
%γ	0.4	0.4	0.2	0.3

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	188595	216582	255260	277423
0.0139	163038	203716	215505	247639
0.0193	140472	175068	182041	208840
0.0268	123374	154919	157863	175319
0.0373	114688	143077	141561	148742
0.0518	111104	134162	130482	128079
0.072	97130.8	118666	115157	109239
0.1	81840.3	99379.5	96446.1	91300.2
0.139	67807.2	81237.4	79137.3	75052.5
0.193	55628.7	65888.1	64480.5	61550.5
0.268	44945	52613.5	52343.7	50240.3
0.373	36589.2	42481.9	42345.5	40758.5
0.518	29709.9	34157	34266	32976.2
0.72	24017	27476.9	27674.9	26543
1	19402	22012.5	22317.7	21214.9
1.39	15558.3	17558.9	17988.2	16897.5
1.93	12415.3	13943.2	14434.4	13340.9
2.68	10030.9	11123.7	11586.9	10527.3
3.73	8026.82	8850.49	8997.9	8328.97
5.18	6465.14	7076.64	7150.84	6574.72
7.2	5161.62	5607.16	5607.37	5088.92
10	4108.3	4429.24	4419.06	3926.18
13.9	3279.02	3510.97	3507.13	3038.49
19.3	2603.59	2791.57	2835.88	2338.02
26.8	2066.57	2218.79	2257.93	1838.35
37.3	1603.37	1726.97	1783.15	1448.73
51.8	1267.6	1372.46	1394.33	1168.73
72	1001.03	1080.52	1098.18	899.502
100	787.793	854.239	861.93	704.872

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	2.78E-05	1.89E-05	2.56E-05	2.17E-05
0.0139	3.45E-05	2.27E-05	3.00E-05	2.84E-05
0.0193	4.05E-05	2.72E-05	3.51E-05	3.39E-05
0.0268	4.71E-05	3.30E-05	4.23E-05	4.17E-05
0.0373	5.55E-05	4.29E-05	5.28E-05	5.34E-05
0.0518	6.63E-05	5.76E-05	6.78E-05	6.96E-05
0.072	7.86E-05	6.99E-05	8.31E-05	8.55E-05
0.1	9.15E-05	8.19E-05	9.66E-05	9.96E-05
0.139	1.04E-04	9.42E-05	1.10E-04	1.13E-04
0.193	1.19E-04	1.07E-04	1.25E-04	1.27E-04
0.268	1.35E-04	1.21E-04	1.41E-04	1.41E-04
0.373	1.52E-04	1.37E-04	1.58E-04	1.58E-04
0.518	1.71E-04	1.54E-04	1.78E-04	1.77E-04
0.72	1.91E-04	1.73E-04	2.00E-04	1.98E-04
1	2.12E-04	1.94E-04	2.24E-04	2.21E-04
1.39	2.35E-04	2.16E-04	2.50E-04	2.44E-04
1.93	2.58E-04	2.40E-04	2.79E-04	2.69E-04
2.68	2.83E-04	2.69E-04	3.12E-04	2.99E-04
3.73	3.12E-04	2.99E-04	3.36E-04	3.30E-04
5.18	3.42E-04	3.36E-04	3.72E-04	3.66E-04
7.2	3.66E-04	3.72E-04	4.05E-04	4.05E-04
10	3.93E-04	4.11E-04	4.41E-04	4.44E-04
13.9	4.23E-04	4.56E-04	4.89E-04	4.89E-04
19.3	4.53E-04	5.04E-04	5.49E-04	5.40E-04
26.8	4.95E-04	5.55E-04	6.06E-04	5.97E-04
37.3	5.40E-04	5.97E-04	6.66E-04	6.45E-04
51.8	6.06E-04	6.57E-04	7.23E-04	7.11E-04
72	6.48E-04	7.20E-04	7.92E-04	7.77E-04
100	7.05E-04	7.89E-04	8.64E-04	8.55E-04

I.17 Emulsion of CTAC/FA/HEC = 0.7/4.0/0.7% Systems



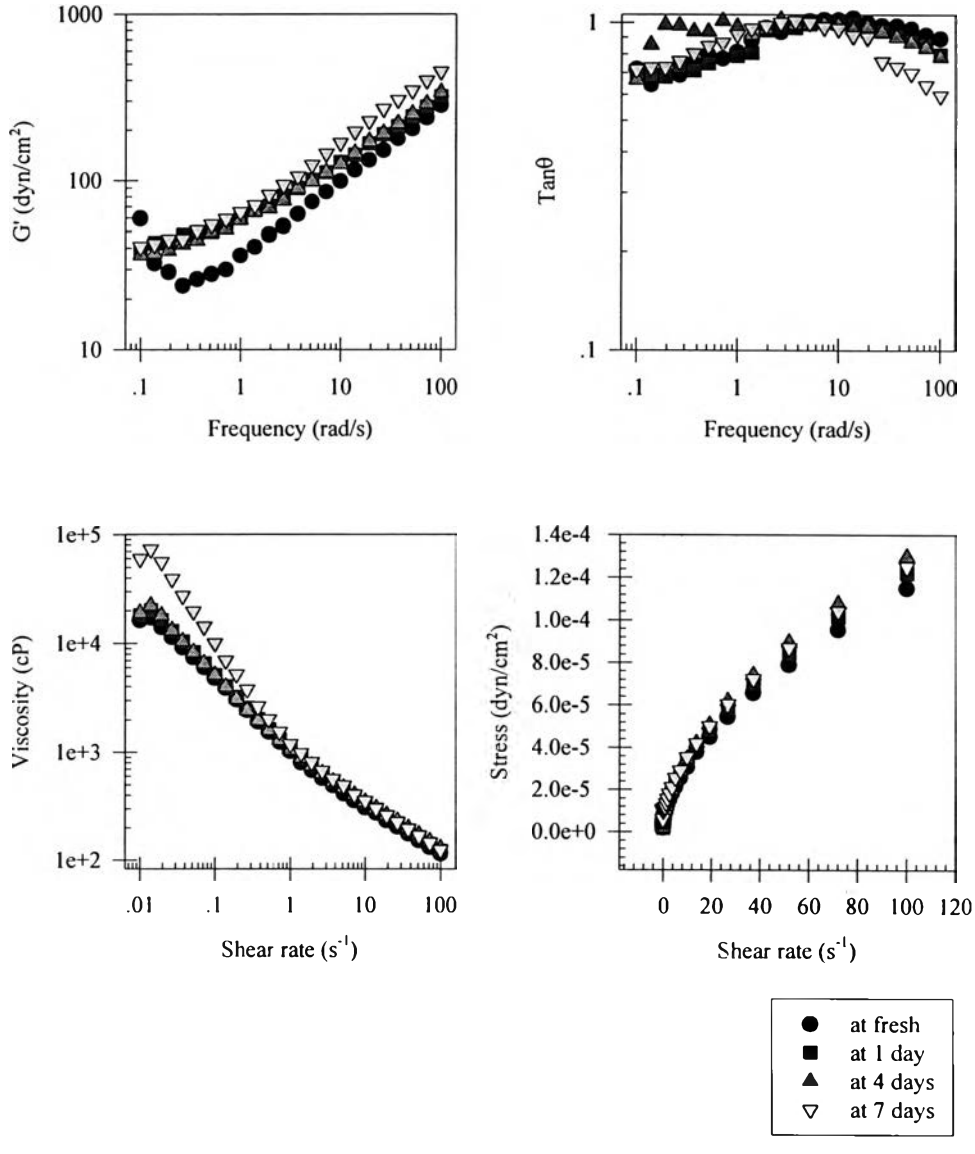
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	4700	5580	5730	6030
72	4230	5020	5140	5430
51.8	3850	4550	4670	4940
37.3	3540	4170	4280	4530
26.8	3270	3840	3940	4170
19.3	3010	3530	3620	3850
13.9	2780	3260	3310	3530
10	2540	2980	3020	3220
7.2	2330	2720	2750	2950
5.18	2110	2480	2490	2670
3.73	1920	2250	2240	2420
2.68	1750	2040	2020	2190
1.93	1580	1840	1820	1970
1.39	1440	1660	1620	1780
1	1300	1510	1470	1610
0.72	1190	1380	1320	1460
0.518	1090	1260	1200	1340
0.373	997	1160	1090	1230
0.268	935	1090	1020	1150
0.193	869	1020	945	1060
0.139	784	955	887	998
0.1	725	923	844	989

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.491	0.49	0.463	0.463
72	0.506	0.506	0.482	0.476
51.8	0.505	0.505	0.484	0.474
37.3	0.504	0.504	0.484	0.472
26.8	0.504	0.503	0.487	0.474
19.3	0.503	0.508	0.494	0.476
13.9	0.516	0.513	0.507	0.483
10	0.529	0.524	0.521	0.493
7.2	0.539	0.538	0.537	0.505
5.18	0.555	0.551	0.553	0.521
3.73	0.573	0.566	0.57	0.529
2.68	0.584	0.579	0.584	0.542
1.93	0.592	0.59	0.596	0.551
1.39	0.608	0.599	0.617	0.56
1	0.622	0.606	0.625	0.57
0.72	0.624	0.612	0.633	0.577
0.518	0.628	0.621	0.64	0.582
0.373	0.632	0.617	0.651	0.578
0.268	0.639	0.613	0.643	0.576
0.193	0.641	0.617	0.648	0.579
0.139	0.644	0.619	0.646	0.629
0.1	0.601	0.604	0.646	0.652
%γ	0.6	0.4	0.6	0.6

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	337009	425145	473308	514336
0.0139	389039	448898	446274	486978
0.0193	350004	383954	376649	418617
0.0268	289021	321959	315278	353429
0.0373	240438	271764	266244	297486
0.0518	201643	230209	226522	259128
0.072	167185	194160	190143	213464
0.1	134828	156269	155332	173407
0.139	107700	124810	125085	139388
0.193	85876.4	98972.1	100279	111578
0.268	68617.8	78418	79965.9	88826.8
0.373	54604.1	62009.4	63313.8	70257
0.518	43687.4	48992.1	50002.9	55277.5
0.72	34837.8	38568.1	39310.6	43244.2
1	27506.7	30221.2	30771.9	33594.8
1.39	21595.5	23572.2	23950.5	25936.4
1.93	16866.1	18060.1	18542.7	19889.3
2.68	13101.9	14032.2	14297.6	15185.3
3.73	10077.9	10825.3	10987.2	11470.9
5.18	7581.3	8357.25	8449.35	8785.88
7.2	5869.89	6436.25	6496.34	6744.89
10	4445.31	4938.31	4974.36	5127.19
13.9	3378.53	3803.06	3817.47	3947.77
19.3	2643.06	2891.25	2923.38	3032.61
26.8	2059.98	2224.81	2254.39	2332.79
37.3	1599.66	1696.82	1741.35	1760.24
51.8	1243.42	1314	1345.5	1362.33
72	967.851	1012.72	1039.39	1048.86
100	753.263	785.541	788.782	811.49

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	3.36E-05	4.26E-05	4.74E-05	5.16E-05
0.0139	5.40E-05	6.24E-05	6.21E-05	6.78E-05
0.0193	6.75E-05	7.41E-05	7.29E-05	8.10E-05
0.0268	7.77E-05	8.64E-05	8.46E-05	9.48E-05
0.0373	8.97E-05	1.01E-04	9.93E-05	1.11E-04
0.0518	1.05E-04	1.19E-04	1.18E-04	1.34E-04
0.072	1.20E-04	1.40E-04	1.37E-04	1.54E-04
0.1	1.35E-04	1.56E-04	1.55E-04	1.74E-04
0.139	1.50E-04	1.74E-04	1.74E-04	1.94E-04
0.193	1.66E-04	1.91E-04	1.94E-04	2.16E-04
0.268	1.84E-04	2.11E-04	2.15E-04	2.39E-04
0.373	2.04E-04	2.31E-04	2.36E-04	2.62E-04
0.518	2.27E-04	2.54E-04	2.59E-04	2.87E-04
0.72	2.51E-04	2.78E-04	2.83E-04	3.12E-04
1	2.75E-04	3.03E-04	3.09E-04	3.36E-04
1.39	3.00E-04	3.27E-04	3.33E-04	3.60E-04
1.93	3.27E-04	3.48E-04	3.57E-04	3.84E-04
2.68	3.51E-04	3.78E-04	3.84E-04	4.08E-04
3.73	3.75E-04	4.05E-04	4.11E-04	4.29E-04
5.18	3.93E-04	4.32E-04	4.38E-04	4.56E-04
7.2	4.23E-04	4.65E-04	4.68E-04	4.86E-04
10	4.44E-04	4.95E-04	4.98E-04	5.13E-04
13.9	4.71E-04	5.28E-04	5.31E-04	5.49E-04
19.3	5.10E-04	5.58E-04	5.64E-04	5.85E-04
26.8	5.52E-04	5.97E-04	6.06E-04	6.27E-04
37.3	5.97E-04	6.33E-04	6.51E-04	6.57E-04
51.8	6.45E-04	6.81E-04	6.99E-04	7.05E-04
72	6.96E-04	7.29E-04	7.50E-04	7.56E-04
100	7.53E-04	7.86E-04	7.89E-04	8.13E-04

I.18 Emulsion of CTAC/FA/HEC = 1.05/2.3/0.3% Systems



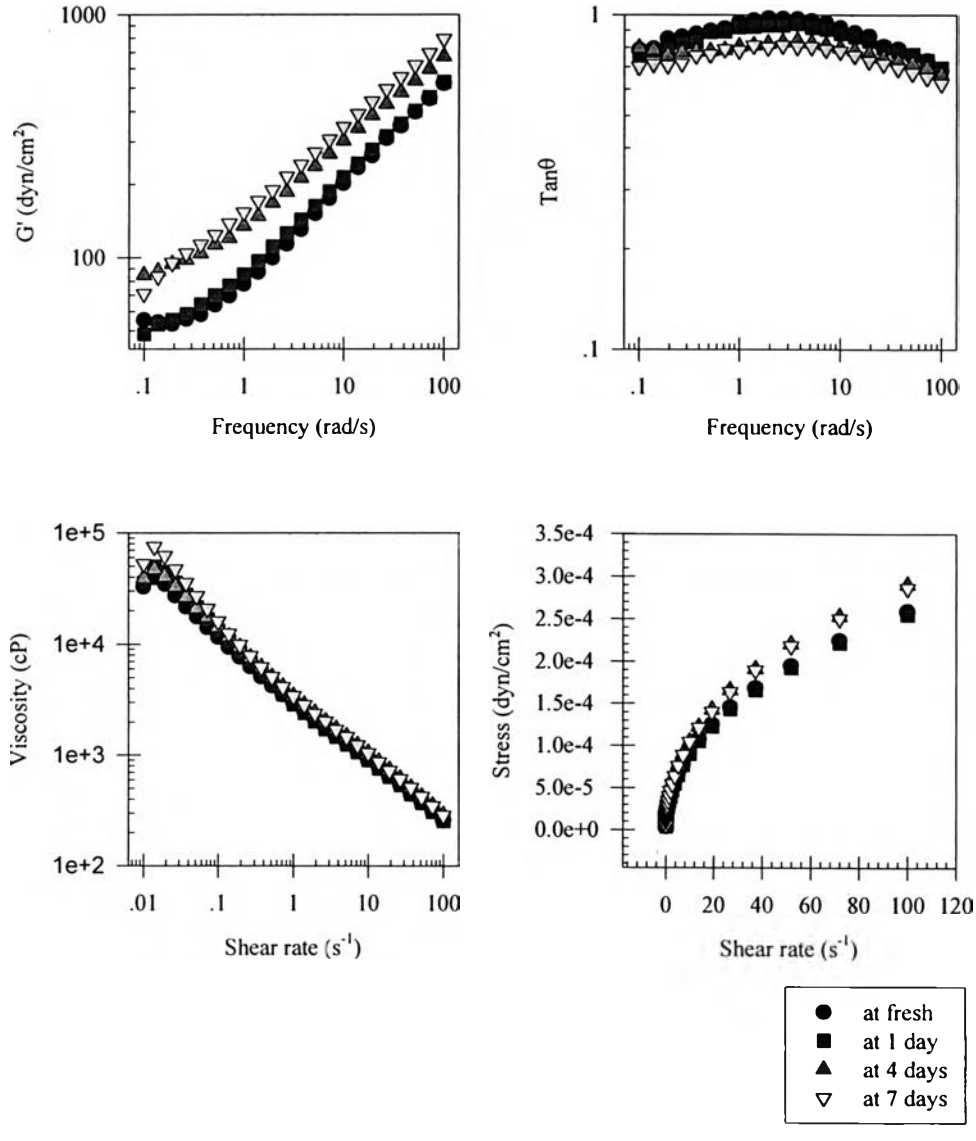
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	283	321	339	452
72	238	277	289	399
51.8	205	242	251	347
37.3	178	211	220	304
26.8	152	189	192	269
19.3	133	167	172	227
13.9	116	143	146	196
10	99.4	129	126	168
7.2	85.6	112	112	145
5.18	74.6	101	98.9	124
3.73	63.5	90	89.8	106
2.68	53.8	81.1	75.9	94.2
1.93	47.9	70.8	68.1	82.3
1.39	40.6	66.5	65.6	71.3
1	36.2	59.8	58.3	65
0.72	29.9	56	51.5	59.3
0.518	28.1	49.9	49.5	55
0.373	26.2	49.2	44.3	50.7
0.268	24	47.7	42.1	45
0.193	28.9	42.8	38.7	44.9
0.139	32.6	42.7	37.3	42.3
0.1	59.6	39.5	36.3	40.7

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.891	0.796	0.782	0.597
72	0.917	0.853	0.834	0.641
51.8	0.957	0.88	0.866	0.699
37.3	0.975	0.915	0.9	0.731
26.8	0.978	0.941	0.933	0.758
19.3	0.999	0.943	0.968	0.9
13.9	1.03	0.996	0.953	0.91
10	1.02	1.01	0.98	0.956
7.2	1.02	1.01	0.989	0.967
5.18	1.01	0.99	0.99	0.998
3.73	0.971	0.964	0.985	1.01
2.68	0.935	0.961	1.02	0.998
1.93	0.963	0.946	0.954	0.977
1.39	0.884	0.806	0.917	0.96
1	0.813	0.789	0.969	0.917
0.72	0.774		1.01	0.867
0.518	0.794	0.748	0.935	0.846
0.373	0.746	0.712	0.937	0.803
0.268	0.687	0.736	0.976	0.76
0.193	0.697	0.68	0.98	0.729
0.139	0.643	0.69	0.852	0.727
0.1	0.719	0.687	0.665	0.716
%γ	0.3	0.8	1.1	0.9

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	16326.2	18213	19129.9	59944.8
0.0139	17326.3	20275.6	22371	72844.8
0.0193	14187.6	16400.4	18213.9	55926.1
0.0268	11472.3	13003.5	13265.2	39087.1
0.0373	9242.59	10467.2	10476.8	27481.9
0.0518	7463.99	8365.77	8311.38	19765.8
0.072	6021.31	6558.26	6574.3	14308.9
0.1	4816.43	5120.21	5153.69	10141.5
0.139	3893.5	4037.05	4009.99	6975.25
0.193	3068.8	3222.74	3098.76	5203.4
0.268	2456.83	2548.6	2462.18	3785.7
0.373	1931.58	2040.92	1981.55	2645.06
0.518	1546.81	1640.79	1606.75	2031.69
0.72	1246.74	1315.28	1301.49	1552.68
1	1025.87	1053.9	1048.77	1188.96
1.39	802.429	870.755	885.505	980.136
1.93	674.101	738.393	751.131	812.235
2.68	575.779	620.675	636.625	674.106
3.73	489.296	525.838	534.585	565.946
5.18	411.859	463.24	469.177	494.286
7.2	354.784	388.96	403.346	402.61
10	307.056	338.41	345.91	354.136
13.9	271.707	291.698	302.833	300.965
19.3	233.576	249.897	262.52	259.533
26.8	203.249	218.074	229.578	224.755
37.3	176.037	187.959	198.526	193.747
51.8	152.026	162.481	172.622	167.828
72	132.243	140.732	149.348	144.809
100	114.846	121.888	129.439	124.887

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	1.64E-06	1.82E-06	1.92E-06	6.00E-06
0.0139	2.41E-06	2.82E-06	3.11E-06	1.01E-05
0.0193	2.74E-06	3.17E-06	3.52E-06	1.08E-05
0.0268	3.09E-06	3.49E-06	3.56E-06	1.05E-05
0.0373	3.45E-06	3.91E-06	3.91E-06	1.03E-05
0.0518	3.87E-06	4.34E-06	4.31E-06	1.02E-05
0.072	4.35E-06	4.72E-06	4.74E-06	1.03E-05
0.1	4.83E-06	5.13E-06	5.16E-06	1.02E-05
0.139	5.43E-06	5.62E-06	5.58E-06	9.70E-06
0.193	5.94E-06	6.23E-06	5.99E-06	1.01E-05
0.268	6.60E-06	6.84E-06	6.61E-06	1.02E-05
0.373	7.20E-06	7.62E-06	7.39E-06	9.87E-06
0.518	8.01E-06	8.51E-06	8.33E-06	1.05E-05
0.72	8.97E-06	9.48E-06	9.38E-06	1.12E-05
1	1.03E-05	1.06E-05	1.05E-05	1.19E-05
1.39	1.12E-05	1.21E-05	1.23E-05	1.36E-05
1.93	1.30E-05	1.43E-05	1.45E-05	1.57E-05
2.68	1.55E-05	1.67E-05	1.71E-05	1.81E-05
3.73	1.83E-05	1.96E-05	1.99E-05	2.11E-05
5.18	2.14E-05	2.40E-05	2.43E-05	2.56E-05
7.2	2.56E-05	2.80E-05	2.91E-05	2.90E-05
10	3.06E-05	3.39E-05	3.46E-05	3.55E-05
13.9	3.78E-05	4.06E-05	4.21E-05	4.19E-05
19.3	4.50E-05	4.83E-05	5.07E-05	5.02E-05
26.8	5.46E-05	5.86E-05	6.17E-05	6.04E-05
37.3	6.57E-05	7.01E-05	7.41E-05	7.23E-05
51.8	7.89E-05	8.42E-05	8.95E-05	8.70E-05
72	9.54E-05	1.01E-04	1.08E-04	1.04E-04
100	1.15E-04	1.22E-04	1.30E-04	1.25E-04

I.19 Emulsion of CTAC/FA/HEC = 1.05/2.3/0.5% Systems



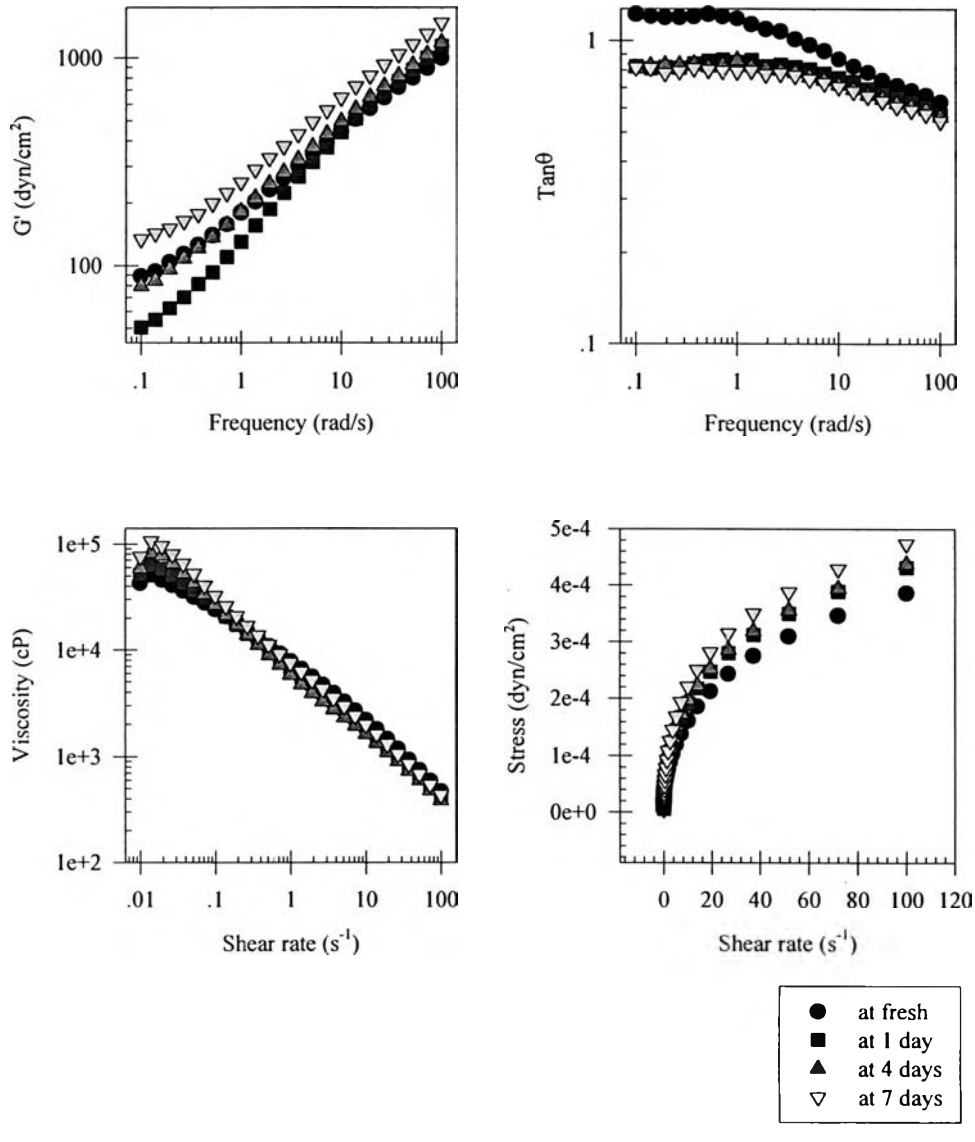
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	522	528	673	793
72	453	457	596	693
51.8	398	402	534	619
37.3	349	356	478	553
26.8	309	315	429	494
19.3	263	277	385	439
13.9	234	243	340	390
10	202	214	302	345
7.2	175	187	266	306
5.18	152	163	237	271
3.73	131	143	212	241
2.68	114	126	186	215
1.93	99.6	111	168	189
1.39	87.3	96.7	148	171
1	77.6	85.3	135	153
0.72	69.9	76.5	120	138
0.518	63.8	69.8	113	124
0.373	58.2	64.2	104	113
0.268	55.8	58.5	97.8	104
0.193	53.5	55.4	94	95.1
0.139	54.2	53.2	88	83.5
0.1	55.3	48.3	84.8	70.9

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.683	0.694	0.662	0.624
77.2	0.73	0.731	0.693	0.65
51.8	0.756	0.761	0.712	0.671
37.3	0.791	0.779	0.726	0.692
26.8	0.805	0.799	0.743	0.714
19.3	0.862	0.835	0.764	0.728
13.9	0.884	0.861	0.781	0.756
10	0.913	0.879	0.796	0.779
7.2	0.942	0.904	0.812	0.79
5.18	0.957	0.915	0.822	0.803
3.73	0.969	0.939	0.835	0.803
2.68	0.972	0.929	0.828	0.811
1.93	0.974	0.929	0.82	0.799
1.39	0.962	0.922	0.81	0.81
1	0.947	0.918	0.804	0.782
0.72	0.91	0.891	0.785	0.789
0.518	0.895	0.887	0.778	0.761
0.373	0.878	0.83	0.777	0.754
0.268	0.86	0.827	0.773	0.716
0.193	0.849	0.786	0.756	0.706
0.139	0.793	0.782	0.788	0.712
0.1	0.786	0.748	0.796	0.699
%γ	0.8	1.5	2.2	1.3

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	32655.7	35327.9	39009.6	52660.3
0.0139	39831.7	49719	47088.9	74875.1
0.0193	34552.4	44303.1	40364.5	62216.5
0.0268	27229	35608.1	32937.3	46895.5
0.0373	21464.2	27584.1	26514.7	35403.7
0.0518	17512	21297.5	21064.1	27035.4
0.072	14014.2	16659.8	17394.7	20773.1
0.1	11530.1	13172.2	14229.5	16005.9
0.139	9420.06	10560.7	11680.5	12401.7
0.193	7700.86	8474.06	9431.26	9842.38
0.268	6307.88	6780.14	7608.39	7838.67
0.373	5141.98	5424.65	6245.68	6227.71
0.518	4227.11	4338.99	5070.01	5084.94
0.72	3531.25	3536.19	4147.59	4142.9
1	2966.58	2866.24	3421.93	3419.96
1.39	2480.24	2405.55	2865.28	2847.71
1.93	2089.49	2025.45	2420.48	2380.42
2.68	1769.5	1718.36	2056.41	2018.83
3.73	1494.19	1460.23	1736.45	1704.83
5.18	1273.21	1243.98	1481.71	1464.77
7.2	1082.63	1061.24	1243.58	1231.07
10	911.51	897.054	1047.27	1044.57
13.9	770.233	755.345	879.09	870.247
19.3	645.649	634.791	738.153	726.238
26.8	541.093	532.951	616.437	609.6
37.3	450.101	444.222	511.152	506.851
51.8	375.247	370.162	424.482	420.092
72	311.372	307.188	350.67	346.77
100	258.323	254.485	289.611	286.018

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	3.27E-06	3.54E-06	3.91E-06	5.27E-06
0.0139	5.54E-06	6.92E-06	6.55E-06	1.04E-05
0.0193	6.68E-06	8.56E-06	7.80E-06	1.20E-05
0.0268	7.31E-06	9.56E-06	8.85E-06	1.26E-05
0.0373	8.01E-06	1.03E-05	9.89E-06	1.32E-05
0.0518	9.08E-06	1.10E-05	1.09E-05	1.40E-05
0.072	1.01E-05	1.20E-05	1.25E-05	1.50E-05
0.1	1.15E-05	1.32E-05	1.42E-05	1.60E-05
0.139	1.31E-05	1.47E-05	1.62E-05	1.73E-05
0.193	1.49E-05	1.64E-05	1.82E-05	1.90E-05
0.268	1.69E-05	1.82E-05	2.04E-05	2.11E-05
0.373	1.92E-05	2.02E-05	2.33E-05	2.32E-05
0.518	2.19E-05	2.25E-05	2.63E-05	2.64E-05
0.72	2.54E-05	2.55E-05	2.99E-05	2.98E-05
1	2.97E-05	2.87E-05	3.43E-05	3.42E-05
1.39	3.45E-05	3.35E-05	3.99E-05	3.96E-05
1.93	4.04E-05	3.91E-05	4.68E-05	4.60E-05
2.68	4.75E-05	4.61E-05	5.52E-05	5.42E-05
3.73	5.58E-05	5.45E-05	6.48E-05	6.36E-05
5.18	6.60E-05	6.45E-05	7.68E-05	7.59E-05
7.2	7.80E-05	7.65E-05	8.96E-05	8.87E-05
10	9.12E-05	8.98E-05	1.05E-04	1.05E-04
13.9	1.07E-04	1.05E-04	1.22E-04	1.21E-04
19.3	1.25E-04	1.23E-04	1.43E-04	1.40E-04
26.8	1.45E-04	1.43E-04	1.66E-04	1.64E-04
37.3	1.68E-04	1.66E-04	1.91E-04	1.89E-04
51.8	1.95E-04	1.92E-04	2.20E-04	2.18E-04
72	2.24E-04	2.21E-04	2.53E-04	2.50E-04
100	2.59E-04	2.55E-04	2.90E-04	2.86E-04

I.20 Emulsion of CTAC/FA/HEC = 1.05/2.3/0.7% Systems



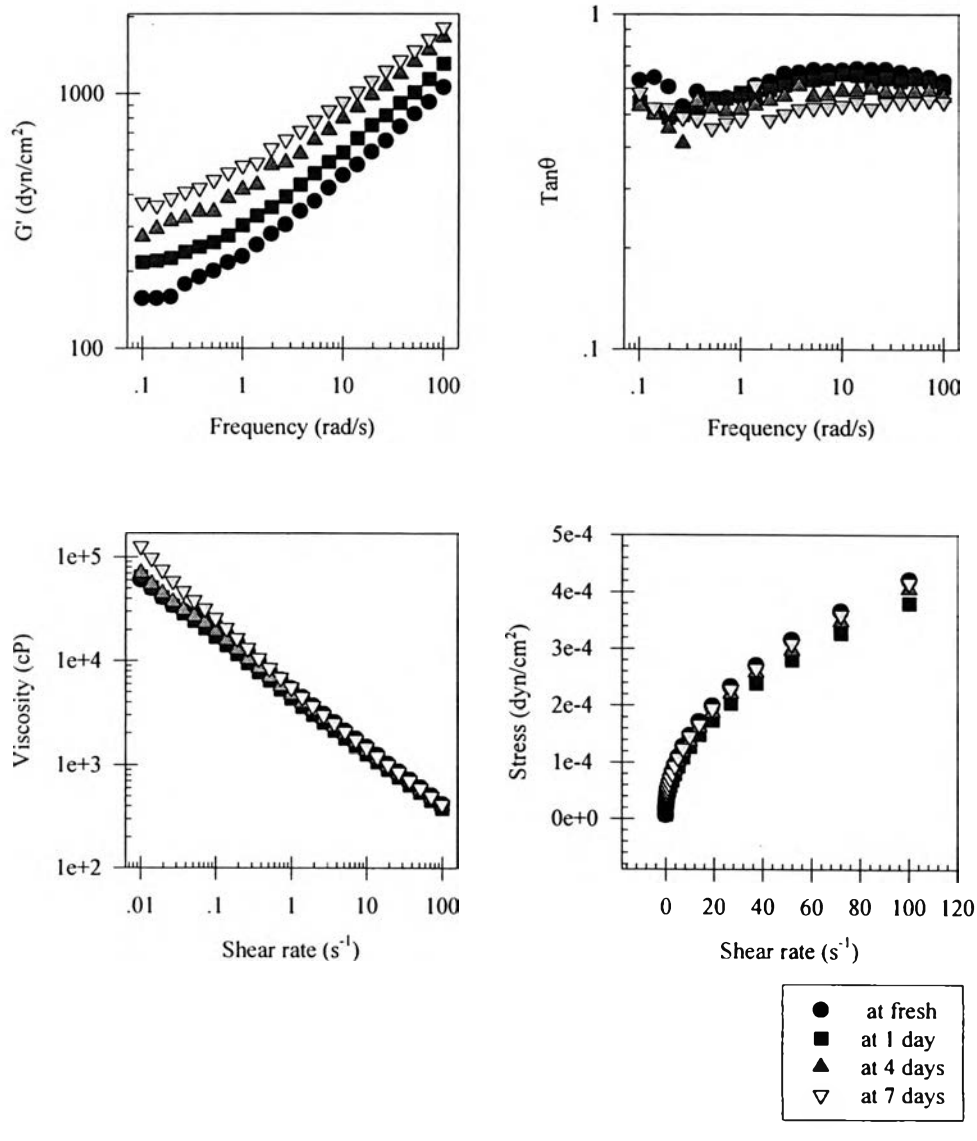
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	1000	1140	1180	1470
72	893	997	1040	1300
51.8	804	875	923	1160
37.3	723	771	821	1040
26.8	645	677	732	926
19.3	574	589	647	822
13.9	507	511	567	730
10	445	439	496	644
7.2	391	370	433	561
5.18	344	316	374	493
3.73	302	268	325	430
2.68	263	223	282	376
1.93	232	187	248	330
1.39	203	156	211	290
1	180	130	182	251
0.72	158	110	157	223
0.518	140	92.5	137	199
0.373	126	81.4	121	177
0.268	114	70.2	108	164
0.193	104	62.2	95.7	151
0.139	93.9	54.8	84.3	143
0.1	89.1	50.3	79.5	134

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.628	0.572	0.561	0.545
72	0.661	0.607	0.589	0.575
51.8	0.686	0.629	0.604	0.592
37.3	0.712	0.651	0.621	0.608
26.8	0.741	0.67	0.643	0.634
19.3	0.785	0.696	0.661	0.657
13.9	0.824	0.733	0.689	0.682
10	0.868	0.755	0.714	0.706
7.2	0.924	0.779	0.738	0.726
5.18	0.966	0.805	0.758	0.747
3.73	1.01	0.819	0.783	0.767
2.68	1.07	0.833	0.797	0.779
1.93	1.09	0.822	0.809	0.775
1.39	1.13	0.862	0.819	0.795
1	1.18	0.849	0.861	0.79
0.72	1.2	0.865	0.83	0.794
0.518	1.22	0.855	0.815	0.799
0.373	1.2	0.838	0.837	0.81
0.268	1.19	0.813	0.83	0.792
0.193	1.19	0.817	0.831	0.781
0.139	1.2	0.809	0.825	0.811
0.1	1.22	0.82	0.81	0.814
%γ	1.2	0.8	0.8	1.5

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	42566.4	51144.2	59255.1	76040.3
0.0139	51195.5	63476.2	81732.2	106359
0.0193	45834.3	57986.6	77164.6	95817.7
0.0268	40465.7	50022.4	65344.4	79630.3
0.0373	36027.5	43156.3	52778.6	65039.6
0.0518	31593.7	36192	42660.7	52342.8
0.072	27838.2	30144.4	33520.4	40664.2
0.1	24231.3	24798.4	26505.7	32390.9
0.139	20794.8	20605.6	21318.9	25967.9
0.193	17770.8	17186.7	17181	20866.7
0.268	15106.2	14222.8	13878.5	16930
0.373	12775.2	11702.8	11116.9	13724.6
0.518	10860.5	9693.08	8866.45	11180.9
0.72	9219.39	8002.89	7196.42	9147.68
1	7804.16	6681.27	5788.48	7548.73
1.39	6624.38	5606.91	4703.17	6242.86
1.93	5583.62	4732.84	3906.73	5187.44
2.68	4692.33	3983.61	3284.2	4271.83
3.73	3912.07	3325.83	2754.03	3523.25
5.18	3244	2789.36	2311.82	2957.21
7.2	2683.12	2314.49	1928.1	2395.17
10	2200.89	1909.15	1614.47	1975.17
13.9	1797.74	1562.61	1336.64	1598.82
19.3	1454.64	1277.19	1100.42	1303.69
26.8	1172.08	1041.02	906.24	1062.55
37.3	938.71	835.888	736.325	852.701
51.8	747.8	673.76	596.972	685.102
72	594.801	539.483	480.828	546.407
100	473.237	430.975	386.125	436.808

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	5.93E-06	5.12E-06	7.61E-06	4.26E-06
0.0139	1.14E-05	8.83E-06	1.48E-05	7.12E-06
0.0193	1.49E-05	1.12E-05	1.85E-05	8.86E-06
0.0268	1.75E-05	1.34E-05	2.14E-05	1.09E-05
0.0373	1.97E-05	1.61E-05	2.43E-05	1.34E-05
0.0518	2.21E-05	1.88E-05	2.71E-05	1.64E-05
0.072	2.41E-05	2.17E-05	2.93E-05	2.01E-05
0.1	2.65E-05	2.48E-05	3.24E-05	2.43E-05
0.139	2.97E-05	2.87E-05	3.61E-05	2.89E-05
0.193	3.32E-05	3.32E-05	4.03E-05	3.43E-05
0.268	3.73E-05	3.82E-05	4.55E-05	4.06E-05
0.373	4.15E-05	4.37E-05	5.12E-05	4.77E-05
0.518	4.60E-05	5.03E-05	5.80E-05	5.63E-05
0.72	5.18E-05	5.77E-05	6.59E-05	6.64E-05
1	5.79E-05	6.69E-05	7.56E-05	7.81E-05
1.39	6.54E-05	7.80E-05	8.68E-05	9.21E-05
1.93	7.55E-05	9.15E-05	1.00E-04	1.08E-04
2.68	8.82E-05	1.07E-04	1.15E-04	1.26E-04
3.73	1.03E-04	1.24E-04	1.31E-04	1.46E-04
5.18	1.20E-04	1.45E-04	1.53E-04	1.68E-04
7.2	1.39E-04	1.67E-04	1.73E-04	1.93E-04
10	1.62E-04	1.91E-04	1.98E-04	2.20E-04
13.9	1.86E-04	2.17E-04	2.22E-04	2.50E-04
19.3	2.13E-04	2.47E-04	2.52E-04	2.81E-04
26.8	2.43E-04	2.80E-04	2.85E-04	3.15E-04
37.3	2.75E-04	3.12E-04	3.18E-04	3.50E-04
51.8	3.10E-04	3.49E-04	3.55E-04	3.88E-04
72	3.46E-04	3.89E-04	3.94E-04	4.29E-04
100	3.87E-04	4.31E-04	4.37E-04	4.74E-04

I.21 Emulsion of CTAC/FA/HEC = 1.05/3.3/0.3% Systems



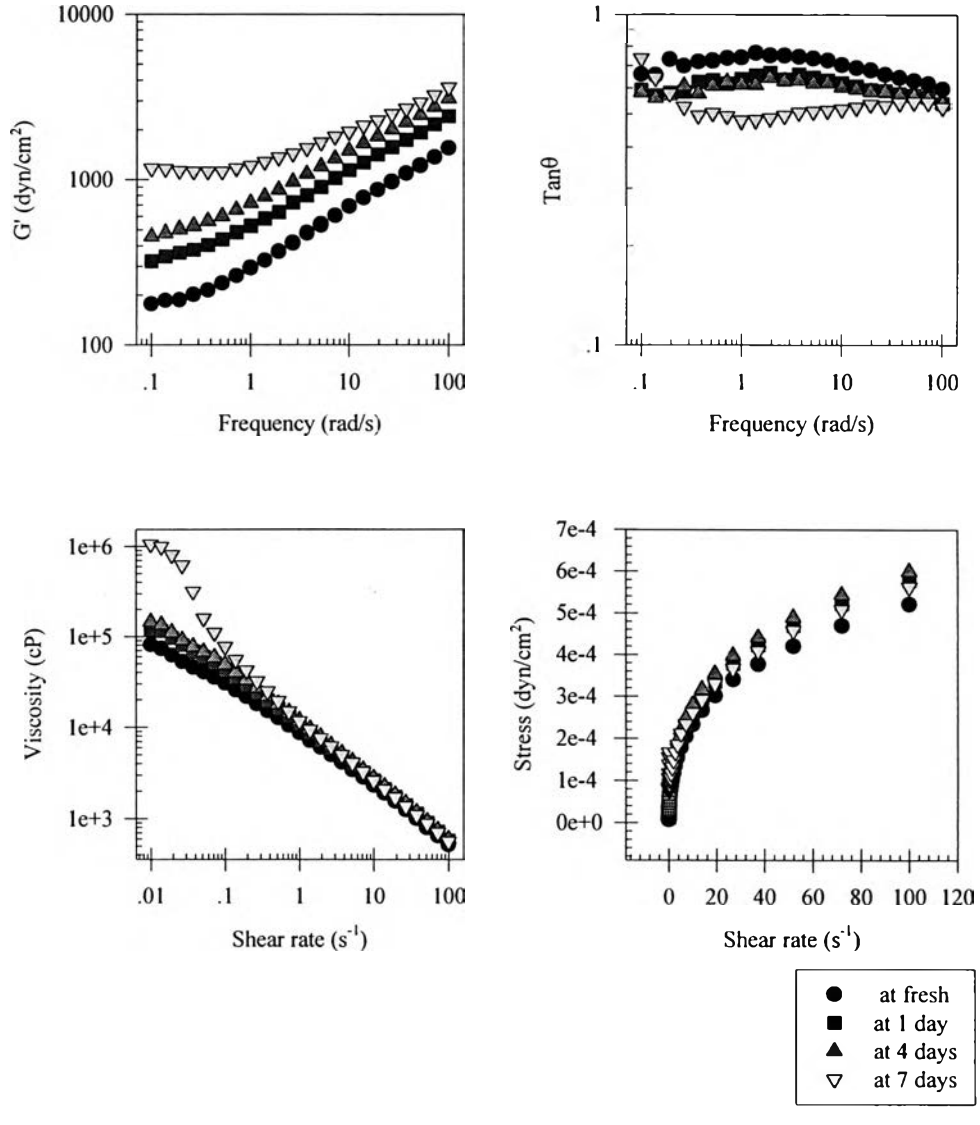
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	1060	1310	1660	1820
72	927	1140	1480	1640
51.8	831	1010	1330	1480
37.3	740	917	1190	1350
26.8	652	820	1070	1230
19.3	591	751	984	1120
13.9	526	665	881	1020
10	477	585	796	929
7.2	426	537	717	857
5.18	377	484	654	782
3.73	345	438	577	713
2.68	306	393	534	657
1.93	281	357	521	608
1.39	254	331	436	534
1	229	303	418	520
0.72	217	276	387	488
0.518	201	260	342	456
0.373	190	249	342	424
0.268	178	238	323	409
0.193	159	225	314	387
0.139	157	220	293	362
0.1	157	217	273	372

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.632	0.606	0.566	0.548
72	0.648	0.631	0.59	0.555
51.8	0.661	0.642	0.585	0.548
37.3	0.67	0.629	0.579	0.548
26.8	0.684	0.643	0.586	0.545
19.3	0.684	0.632	0.597	0.524
13.9	0.687	0.656	0.588	0.545
10	0.68	0.663	0.588	0.534
7.2	0.678	0.642	0.571	0.527
5.18	0.683	0.636	0.568	0.525
3.73	0.67	0.628	0.61	0.521
2.68	0.664	0.613	0.567	0.503
1.93	0.629	0.595	0.551	0.483
1.39	0.613	0.56	0.533	0.614
1	0.566	0.582	0.52	0.485
0.72	0.563	0.56	0.511	0.472
0.518	0.554	0.561	0.522	0.456
0.373	0.586	0.523	0.549	0.485
0.268	0.53	0.5	0.41	0.491
0.193	0.607	0.49	0.455	0.523
0.139	0.646	0.507	0.501	0.525
0.1	0.636	0.545	0.53	0.583
%γ	0.4	0.3	0.3	0.2

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	60033.8	64669.4	70349.2	125779
0.0139	50115.6	50471.6	54819.8	96956.1
0.0193	40940.8	40916.6	44519.8	74825.8
0.0268	34349	33959.1	36831.5	58567.6
0.0373	30029.7	28427.3	30897.3	46707.7
0.0518	27659.2	24166.3	26765.2	38277
0.072	25390.9	20465.7	23085.7	31752
0.1	21863	16935.8	19211.2	25826
0.139	17934.9	13985.4	15759.9	20646.8
0.193	14790.9	11540.9	12760.9	16557.2
0.268	12068.7	9455.69	10378.4	13264.8
0.373	9855.69	7769.02	8480.79	10605.3
0.518	8040.85	6414.42	6932.36	8534.72
0.72	6557.83	5264.23	5699.26	6885.97
1	5426.04	4319.17	4708.69	5530.71
1.39	4472.52	3565.91	3921.76	4471.18
1.93	3698.25	2989.66	3274.77	3661.22
2.68	3071.63	2511.2	2752.13	2994.57
3.73	2547.45	2108.13	2304.15	2489.9
5.18	2125.23	1777.51	1944.56	2071.44
7.2	1774.73	1500.49	1634.99	1720.13
10	1480.55	1265.91	1369.02	1451.07
13.9	1241.81	1066.49	1159.83	1197.53
19.3	1030.91	897.229	971.19	1003.67
26.8	868.162	759.233	820.593	849.795
37.3	725.076	639.614	690.683	709.049
51.8	610.078	540.243	572.171	596.466
72	508.279	453.594	482.625	499.14
100	421.474	379.668	404.786	416.12

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	6.01E-06	6.47E-06	7.04E-06	1.26E-05
0.0139	6.97E-06	7.02E-06	7.63E-06	1.35E-05
0.0193	7.91E-06	7.91E-06	8.60E-06	1.45E-05
0.0268	9.22E-06	9.12E-06	9.89E-06	1.57E-05
0.0373	1.12E-05	1.06E-05	1.15E-05	1.74E-05
0.0518	1.43E-05	1.25E-05	1.39E-05	1.98E-05
0.072	1.83E-05	1.47E-05	1.66E-05	2.29E-05
0.1	2.19E-05	1.70E-05	1.92E-05	2.59E-05
0.139	2.49E-05	1.95E-05	2.19E-05	2.87E-05
0.193	2.86E-05	2.23E-05	2.47E-05	3.20E-05
0.268	3.24E-05	2.54E-05	2.79E-05	3.56E-05
0.373	3.68E-05	2.90E-05	3.16E-05	3.96E-05
0.518	4.17E-05	3.33E-05	3.59E-05	4.43E-05
0.72	4.72E-05	3.79E-05	4.11E-05	4.96E-05
1	5.43E-05	4.32E-05	4.71E-05	5.54E-05
1.39	6.22E-05	4.96E-05	5.46E-05	6.22E-05
1.93	7.15E-05	5.78E-05	6.33E-05	7.08E-05
2.68	8.25E-05	6.74E-05	7.39E-05	8.04E-05
3.73	9.51E-05	7.87E-05	8.60E-05	9.29E-05
5.18	1.10E-04	9.22E-05	1.01E-04	1.07E-04
7.2	1.28E-04	1.08E-04	1.18E-04	1.24E-04
10	1.48E-04	1.27E-04	1.37E-04	1.45E-04
13.9	1.73E-04	1.48E-04	1.61E-04	1.67E-04
19.3	1.99E-04	1.73E-04	1.88E-04	1.94E-04
26.8	2.33E-04	2.04E-04	2.20E-04	2.28E-04
37.3	2.71E-04	2.39E-04	2.58E-04	2.65E-04
51.8	3.16E-04	2.80E-04	2.97E-04	3.09E-04
72	3.66E-04	3.27E-04	3.48E-04	3.60E-04
100	4.22E-04	3.80E-04	4.05E-04	4.17E-04

I.22 Emulsion of CTAC/FA/HEC = 1.05/3.3/0.5% Systems



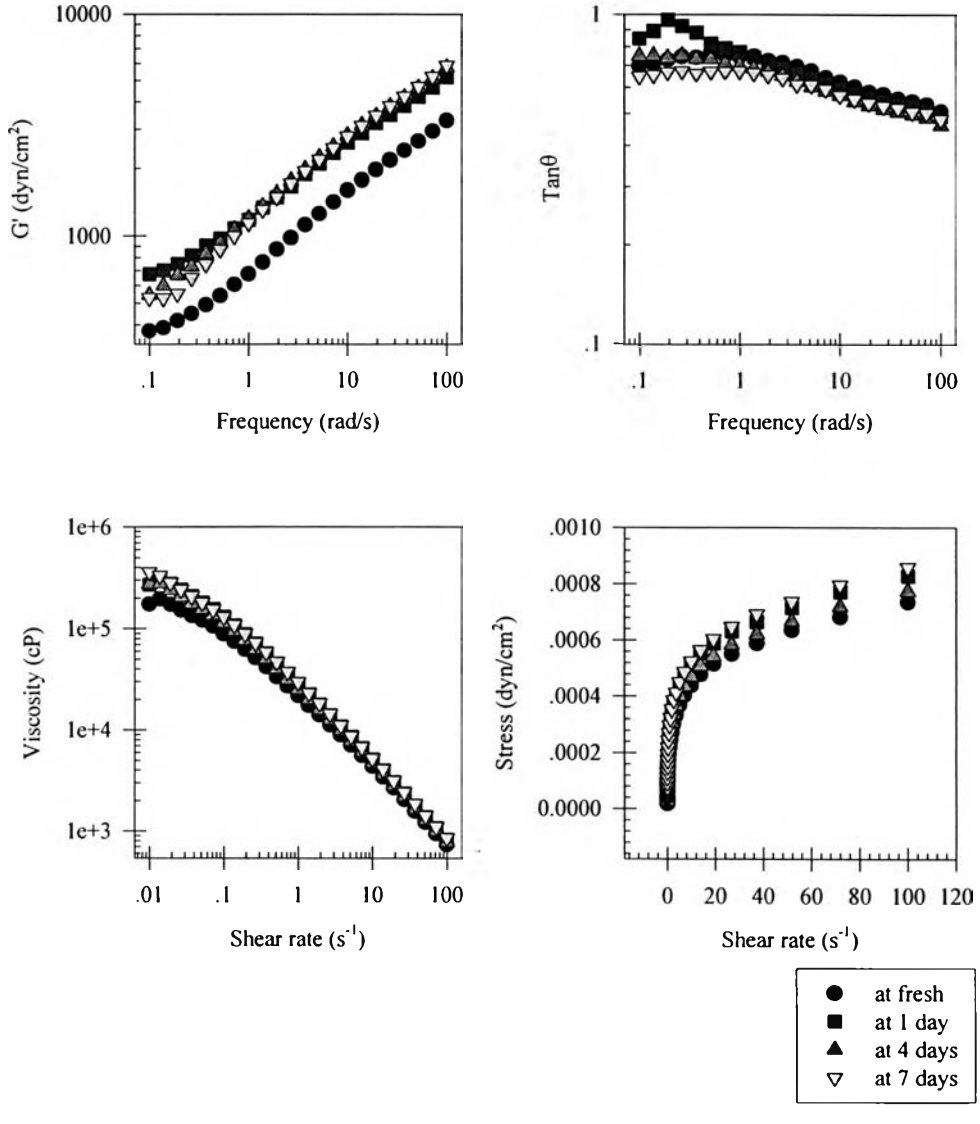
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	1550	2420	3090	3620
72	1370	2160	2750	3250
51.8	1220	1930	2460	2940
37.3	1090	1740	2220	2690
26.8	971	1570	2010	2490
19.3	865	1420	1820	2280
13.9	776	1270	1660	2120
10	689	1140	1490	1950
7.2	605	1020	1340	1820
5.18	537	900	1200	1680
3.73	476	801	1080	1550
2.68	418	725	968	1440
1.93	370	635	866	1360
1.39	326	580	788	1280
1	294	527	719	1210
0.72	262	482	655	1170
0.518	237	437	598	1120
0.373	215	404	560	1120
0.268	202	378	526	1120
0.193	187	363	503	1130
0.139	186	345	476	1160
0.1	177	322	454	1170

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.597	0.539	0.538	0.525
72	0.619	0.563	0.558	0.544
51.8	0.633	0.571	0.567	0.545
37.3	0.646	0.578	0.573	0.543
26.8	0.66	0.59	0.586	0.532
19.3	0.68	0.594	0.587	0.537
13.9	0.69	0.609	0.596	0.526
10	0.705	0.622	0.604	0.519
7.2	0.727	0.634	0.622	0.514
5.18	0.736	0.646	0.621	0.511
3.73	0.745	0.659	0.633	0.507
2.68	0.751	0.638	0.63	0.496
1.93	0.752	0.667	0.644	0.488
1.39	0.765	0.655	0.614	0.482
1	0.742	0.639	0.615	0.48
0.72	0.738	0.619	0.627	0.494
0.518	0.726	0.634	0.61	0.505
0.373	0.72	0.627	0.577	0.496
0.268	0.7	0.585	0.609	0.527
0.193	0.731	0.581	0.57	0.578
0.139	0.656	0.57	0.559	0.644
0.1	0.66	0.593	0.581	0.737
%γ	0.6	0.4	0.3	0.3

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	81113.4	118052	145261	1055970
0.0139	73723.8	115161	135750	991342
0.0193	62048.5	95980.8	111051	800814
0.0268	52716.8	80399.8	91496.8	619823
0.0373	45562.2	68077.7	77698.1	315076
0.0518	40166.3	59207.1	67942.1	159190
0.072	35283	50762	58658	110494
0.1	30412.1	42354	49044.3	76843.4
0.139	25782.2	34947.2	40388.3	55135.1
0.193	21829.1	28875.4	33213.4	42132.4
0.268	18272.1	23816.6	27191	31943
0.373	15240.3	19492.8	22137	24833.9
0.518	12685.9	15980.3	18047.8	19375.4
0.72	10536.8	13155.9	14683.3	14925
1	8714.33	10772.6	11956.1	11678.8
1.39	7274.71	8817.09	9722.2	9410.03
1.93	6045.47	7158.05	7902.6	7633.78
2.68	5024.5	5868.69	6408.76	6205.44
3.73	4158.88	4721.07	5204.33	4965.14
5.18	3453.17	3906.81	4241.58	4079.16
7.2	2845.48	3197.5	3447.01	3255.85
10	2327.3	2608.15	2790.85	2609.92
13.9	1913.47	2116.44	2274.41	2099
19.3	1556.69	1732.61	1830.38	1704.99
26.8	1264.04	1406.8	1479.96	1365.78
37.3	1010.32	1132.33	1180.68	1094.64
51.8	809.299	904.377	941.978	882.507
72	650.633	723.541	753.581	704.124
100	519.758	576.734	599.098	561.352

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	8.12E-06	1.18E-05	1.45E-05	1.06E-04
0.0139	1.03E-05	1.60E-05	1.89E-05	1.38E-04
0.0193	1.20E-05	1.86E-05	2.15E-05	1.55E-04
0.0268	1.42E-05	2.16E-05	2.46E-05	1.66E-04
0.0373	1.70E-05	2.54E-05	2.90E-05	1.18E-04
0.0518	2.08E-05	3.07E-05	3.52E-05	8.25E-05
0.072	2.54E-05	3.66E-05	4.23E-05	7.96E-05
0.1	3.04E-05	4.24E-05	4.91E-05	7.69E-05
0.139	3.59E-05	4.86E-05	5.62E-05	7.67E-05
0.193	4.22E-05	5.58E-05	6.42E-05	8.14E-05
0.268	4.91E-05	6.40E-05	7.30E-05	8.58E-05
0.373	5.69E-05	7.27E-05	8.26E-05	9.27E-05
0.518	6.58E-05	8.29E-05	9.36E-05	1.00E-04
0.72	7.59E-05	9.48E-05	1.06E-04	1.08E-04
1	8.72E-05	1.08E-04	1.20E-04	1.17E-04
1.39	1.01E-04	1.23E-04	1.35E-04	1.31E-04
1.93	1.17E-04	1.38E-04	1.53E-04	1.48E-04
2.68	1.35E-04	1.58E-04	1.72E-04	1.67E-04
3.73	1.55E-04	1.76E-04	1.94E-04	1.85E-04
5.18	1.79E-04	2.03E-04	2.20E-04	2.12E-04
7.2	2.05E-04	2.30E-04	2.48E-04	2.35E-04
10	2.33E-04	2.61E-04	2.79E-04	2.61E-04
13.9	2.66E-04	2.94E-04	3.16E-04	2.92E-04
19.3	3.01E-04	3.35E-04	3.54E-04	3.30E-04
26.8	3.39E-04	3.78E-04	3.97E-04	3.67E-04
37.3	3.77E-04	4.23E-04	4.41E-04	4.08E-04
51.8	4.20E-04	4.69E-04	4.88E-04	4.58E-04
72	4.69E-04	5.21E-04	5.43E-04	5.07E-04
100	5.20E-04	5.77E-04	6.00E-04	5.62E-04

I.23 Emulsion of CTAC/FA/HEC = 1.05/3.3/0.7% Systems



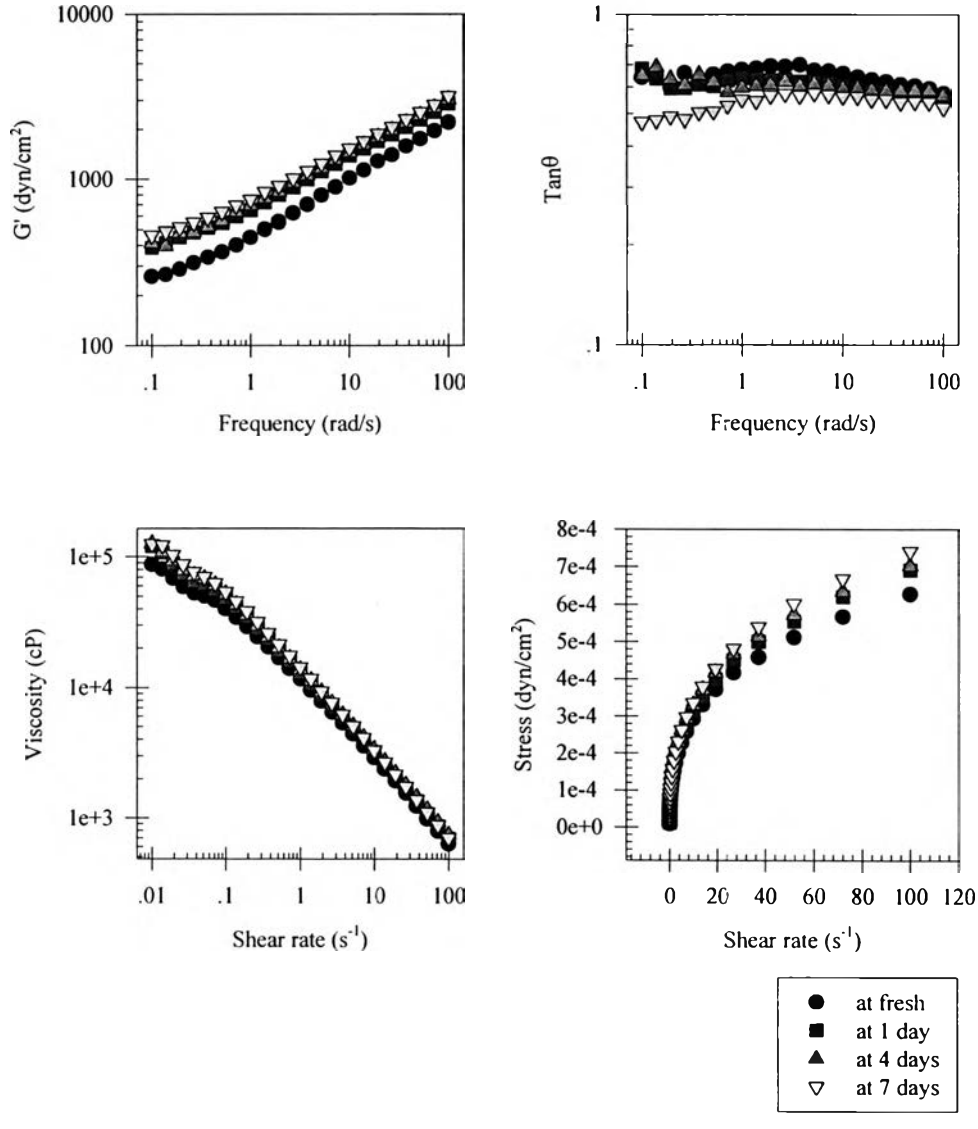
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	3300	5190	5760	5880
72	2950	4640	5140	5230
51.8	2660	4220	4640	4700
37.3	2410	3830	4200	4240
26.8	2190	3490	3820	3840
19.3	1980	3210	3460	3470
13.9	1780	2880	3140	3120
10	1600	2620	2820	2800
7.2	1420	2350	2520	2480
5.18	1260	2100	2250	2200
3.73	1120	1890	1990	1950
2.68	982	1670	1760	1720
1.93	870	1490	1550	1490
1.39	761	1340	1360	1310
1	675	1180	1200	1140
0.72	605	1080	1070	997
0.518	540	972	929	868
0.373	491	904	832	745
0.268	448	817	727	649
0.193	416	749	665	550
0.139	387	701	598	526
0.1	374	675	542	527

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.507	0.49	0.46	0.48
72	0.532	0.514	0.484	0.501
51.8	0.544	0.527	0.495	0.505
37.3	0.554	0.532	0.504	0.519
26.8	0.571	0.544	0.514	0.526
19.3	0.581	0.559	0.527	0.538
13.9	0.603	0.575	0.543	0.553
10	0.624	0.597	0.566	0.567
7.2	0.644	0.62	0.583	0.593
5.18	0.675	0.641	0.602	0.61
3.73	0.696	0.663	0.625	0.612
2.68	0.715	0.689	0.651	0.64
1.93	0.726	0.713	0.669	0.654
1.39	0.748	0.742	0.685	0.664
1	0.749	0.77	0.699	0.674
0.72	0.752	0.791	0.711	0.671
0.518	0.76	0.816	0.732	0.672
0.373	0.742	0.881	0.732	0.662
0.268	0.746	0.922	0.751	0.673
0.193	0.729	0.963	0.739	0.668
0.139	0.71	0.891	0.752	0.654
0.1	0.697	0.844	0.749	0.648
%γ	0.5	0.3	0.4	0.4

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	173698	270412	273609	360266
0.0139	194925	312129	277974	331582
0.0193	172196	276530	240353	280891
0.0268	150653	241285	204903	242580
0.0373	134153	208917	177464	208252
0.0518	120069	180430	156811	180575
0.072	105531	155194	135821	154559
0.1	89411	130144	114482	131006
0.139	75017.4	107118	94710.7	108693
0.193	62441.1	87617	77565.2	89255.5
0.268	51415.3	71121.1	63036.4	72764.3
0.373	41901	57171.6	50394.9	58737.2
0.518	33501.7	45053.3	40278	47114.5
0.72	27164.2	35778.9	31668.4	37581.7
1	21907	28341.1	25097.2	29796.5
1.39	17587.6	22473.9	20024.9	23166.3
1.93	14076.3	17768.6	15882.1	18291.4
2.68	11237	13977.9	12542	14370
3.73	8912.77	10818.3	9844.08	11068.8
5.18	7075.55	8512.23	7730.42	8682.55
7.2	5576.16	6621.24	6039.49	6754.11
10	4365.35	5123.82	4690.39	5237.45
13.9	3422.41	3969.98	3649.14	4062.74
19.3	2662.48	3045.56	2802.9	3122
26.8	2046.94	2350.05	2172.69	2409.92
37.3	1574.04	1778	1664.3	1853.55
51.8	1223.68	1378.39	1284.42	1420.82
72	945.689	1070.36	997.474	1105.49
100	734.358	826.91	772.817	858.15

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	1.74E-05	2.71E-05	2.74E-05	3.61E-05
0.0139	2.71E-05	4.34E-05	3.87E-05	4.61E-05
0.0193	3.33E-05	5.34E-05	4.65E-05	5.43E-05
0.0268	4.05E-05	6.48E-05	5.50E-05	6.51E-05
0.0373	5.01E-05	7.80E-05	6.62E-05	7.77E-05
0.0518	6.23E-05	9.36E-05	8.13E-05	9.36E-05
0.072	7.60E-05	1.12E-04	9.79E-05	1.11E-04
0.1	8.95E-05	1.30E-04	1.15E-04	1.31E-04
0.139	1.04E-04	1.49E-04	1.32E-04	1.51E-04
0.193	1.21E-04	1.69E-04	1.50E-04	1.73E-04
0.268	1.38E-04	1.91E-04	1.69E-04	1.95E-04
0.373	1.56E-04	2.13E-04	1.88E-04	2.19E-04
0.518	1.74E-04	2.34E-04	2.09E-04	2.44E-04
0.72	1.96E-04	2.58E-04	2.28E-04	2.71E-04
1	2.19E-04	2.84E-04	2.51E-04	2.98E-04
1.39	2.45E-04	3.13E-04	2.79E-04	3.22E-04
1.93	2.72E-04	3.43E-04	3.07E-04	3.54E-04
2.68	3.02E-04	3.75E-04	3.37E-04	3.86E-04
3.73	3.33E-04	4.04E-04	3.67E-04	4.13E-04
5.18	3.67E-04	4.41E-04	4.01E-04	4.50E-04
7.2	4.02E-04	4.77E-04	4.35E-04	4.87E-04
10	4.37E-04	5.13E-04	4.70E-04	5.24E-04
13.9	4.76E-04	5.52E-04	5.08E-04	5.65E-04
19.3	5.15E-04	5.89E-04	5.42E-04	6.03E-04
26.8	5.50E-04	6.31E-04	5.83E-04	6.47E-04
37.3	5.87E-04	6.63E-04	6.21E-04	6.92E-04
51.8	6.34E-04	7.15E-04	6.66E-04	7.37E-04
72	6.81E-04	7.71E-04	7.19E-04	7.96E-04
100	7.35E-04	8.28E-04	7.74E-04	8.59E-04

I.24 Emulsion of CTAC/FA/HEC = 1.05/4.0/0.3% Systems



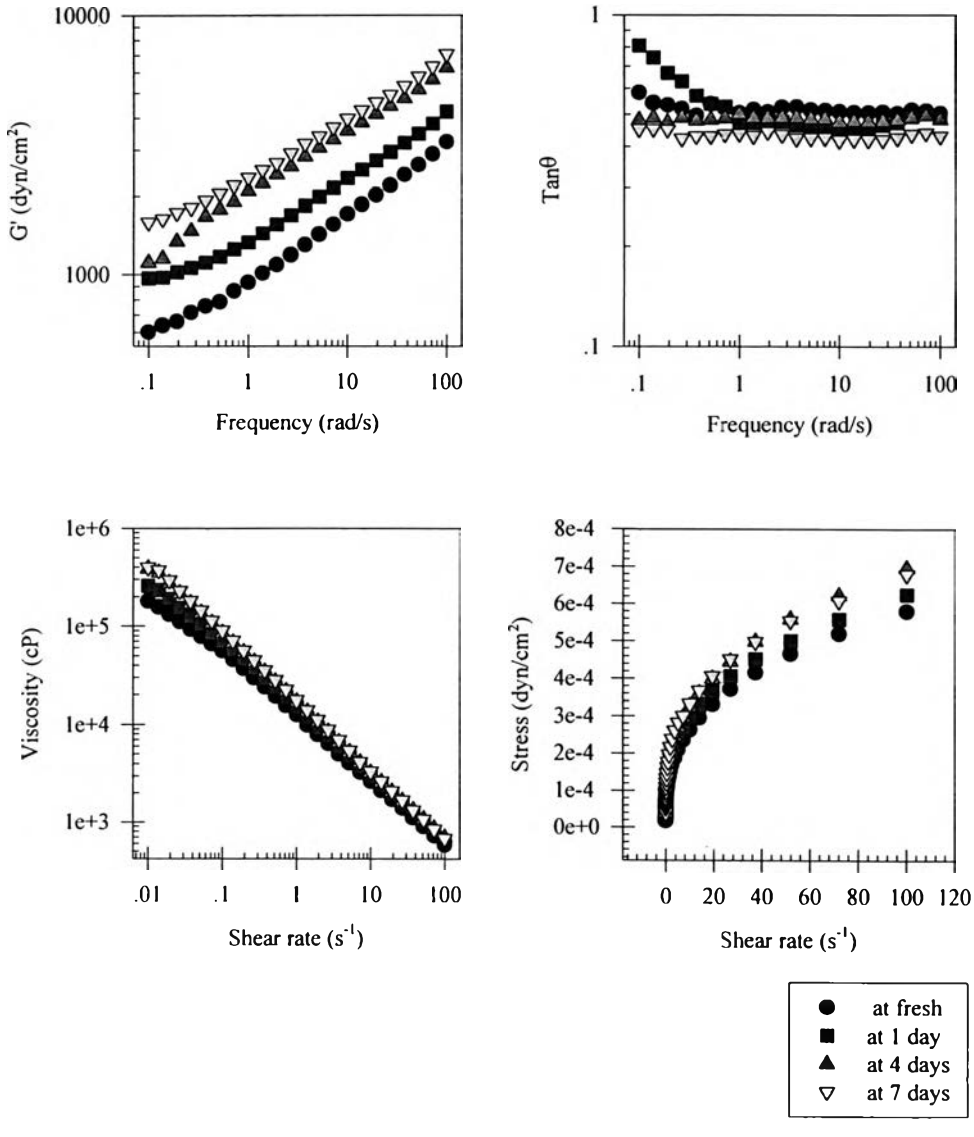
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	2210	2860	3030	3180
72	1960	2540	2700	2820
51.8	1750	2290	2430	2540
37.3	1580	2060	2190	2300
26.8	1400	1860	1970	2070
19.3	1280	1690	1790	1880
13.9	1130	1530	1610	1700
10	1010	1380	1450	1530
7.2	892	1230	1300	1390
5.18	796	1110	1160	1240
3.73	700	995	1050	1120
2.68	622	888	948	1010
1.93	552	801	836	911
1.39	496	723	763	835
1	447	647	692	751
0.72	400	597	635	694
0.518	365	547	558	635
0.373	338	511	520	587
0.268	313	477	479	550
0.193	287	446	476	512
0.139	266	414	395	486
0.1	259	386	412	460

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.573	0.55	0.565	0.52
72	0.593	0.566	0.586	0.54
51.8	0.605	0.569	0.586	0.542
37.3	0.61	0.577	0.585	0.541
26.8	0.622	0.58	0.584	0.55
19.3	0.631	0.588	0.588	0.551
13.9	0.643	0.594	0.596	0.561
10	0.658	0.607	0.594	0.562
7.2	0.67	0.618	0.607	0.568
5.18	0.674	0.625	0.614	0.575
3.73	0.7	0.624	0.604	0.565
2.68	0.692	0.632	0.624	0.573
1.93	0.694	0.629	0.61	0.565
1.39	0.683	0.635	0.604	0.545
1	0.676	0.639	0.597	0.551
0.72	0.669	0.629	0.579	0.528
0.518	0.653	0.604	0.622	0.507
0.373	0.63	0.61	0.654	0.504
0.268	0.661	0.596	0.608	0.481
0.193	0.597	0.595	0.635	0.49
0.139	0.651	0.636	0.689	0.477
0.1	0.642	0.681	0.651	0.472
%γ	0.3	0.3	0.3	0.2

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	86873.6	120353	125801	125067
0.0139	80234.2	107285	108833	122649
0.0193	68247.8	88765.4	92646.2	103151
0.0268	58912.9	74673.2	79398.9	87387.5
0.0373	52608.7	65828.1	71724.5	76383.8
0.0518	49948.7	61992.5	68081.9	70161.7
0.072	46204.6	56774.2	61058.6	62808.4
0.1	40274.2	49049.5	51998.4	53994.7
0.139	34353.6	41274	43259.8	45725.2
0.193	29051	34435.6	35893.6	38335.3
0.268	24322.2	28518.2	29691.1	31809.7
0.373	20264.1	23428.5	24487.8	26070.1
0.518	16860	19323.6	20196.8	21360.3
0.72	13983.4	15888.4	16666	17488.7
1	11566.4	13050.4	13718.5	14291.3
1.39	9552.47	10703.3	11276.4	11660.9
1.93	7873.52	8773.57	9273.31	9318.86
2.68	6449.68	7115.29	7592.42	7633.57
3.73	5314.61	5733.29	6193.58	6173.86
5.18	4380.78	4732.92	5063.22	5050.65
7.2	3581.13	3831.71	4134.69	4079.99
10	2915.84	3133.28	3357	3299.72
13.9	2372.95	2528.62	2729.74	2666.68
19.3	1919.15	2062.06	2212.48	2156.28
26.8	1549.16	1676.96	1793.19	1737.95
37.3	1227.03	1339.84	1445.42	1377.23
51.8	985.801	1069.28	1161.05	1103.05
72	786.146	860.57	927.064	879.75
100	626.229	690.087	740.152	700.819

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	8.70E-06	1.20E-05	1.25E-05	1.26E-05
0.0139	1.12E-05	1.49E-05	1.71E-05	1.51E-05
0.0193	1.32E-05	1.72E-05	1.99E-05	1.79E-05
0.0268	1.58E-05	2.01E-05	2.35E-05	2.13E-05
0.0373	1.96E-05	2.46E-05	2.85E-05	2.68E-05
0.0518	2.59E-05	3.21E-05	3.64E-05	3.53E-05
0.072	3.33E-05	4.09E-05	4.53E-05	4.40E-05
0.1	4.03E-05	4.91E-05	5.41E-05	5.21E-05
0.139	4.78E-05	5.74E-05	6.36E-05	6.02E-05
0.193	5.61E-05	6.66E-05	7.41E-05	6.94E-05
0.268	6.53E-05	7.66E-05	8.54E-05	7.97E-05
0.373	7.56E-05	8.74E-05	9.73E-05	9.14E-05
0.518	8.74E-05	1.00E-04	1.11E-04	1.05E-04
0.72	1.01E-04	1.14E-04	1.26E-04	1.20E-04
1	1.16E-04	1.31E-04	1.43E-04	1.37E-04
1.39	1.33E-04	1.49E-04	1.62E-04	1.57E-04
1.93	1.52E-04	1.70E-04	1.80E-04	1.79E-04
2.68	1.73E-04	1.91E-04	2.05E-04	2.04E-04
3.73	1.98E-04	2.14E-04	2.30E-04	2.31E-04
5.18	2.27E-04	2.45E-04	2.62E-04	2.63E-04
7.2	2.58E-04	2.76E-04	2.94E-04	2.98E-04
10	2.92E-04	3.14E-04	3.30E-04	3.36E-04
13.9	3.30E-04	3.52E-04	3.71E-04	3.80E-04
19.3	3.71E-04	3.99E-04	4.17E-04	4.28E-04
26.8	4.16E-04	4.50E-04	4.67E-04	4.82E-04
37.3	4.58E-04	5.00E-04	5.14E-04	5.39E-04
51.8	5.11E-04	5.54E-04	5.72E-04	6.02E-04
72	5.66E-04	6.20E-04	6.34E-04	6.68E-04
100	6.27E-04	6.91E-04	7.02E-04	7.41E-04

I.25 Emulsion of CTAC/FA/HEC = 1.05/4.0/0.5% Systems



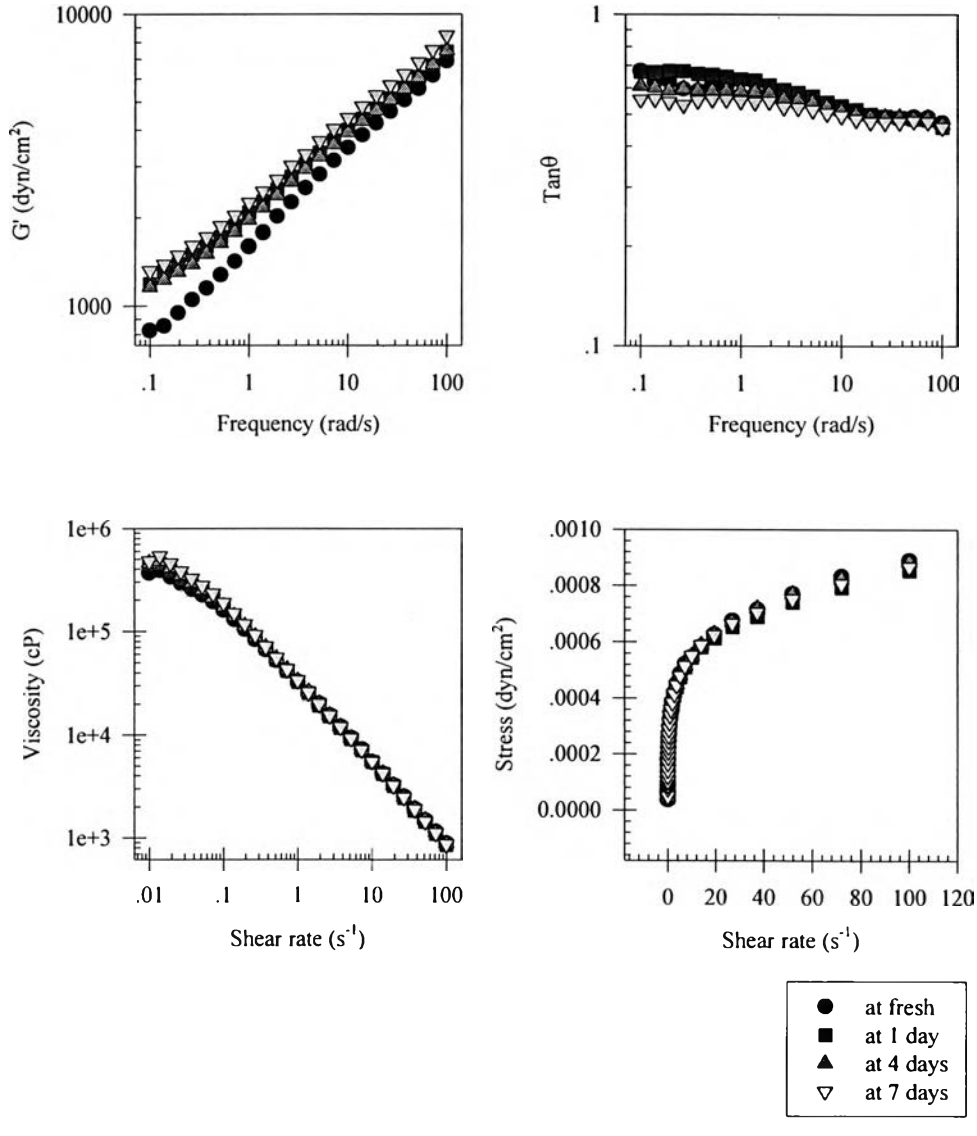
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	3230	4230	6250	7070
72	2900	3800	5630	6340
51.8	2630	3470	5150	5790
37.3	2410	3200	4750	5330
26.8	2200	2950	4440	4920
19.3	2020	2730	4130	4600
13.9	1860	2520	3840	4280
10	1710	2340	3560	3970
7.2	1560	2150	3300	3680
5.18	1430	1990	3060	3400
3.73	1300	1840	2830	3180
2.68	1190	1690	2590	2920
1.93	1090	1560	2410	2680
1.39	1010	1440	2240	2520
1	932	1330	2090	2350
0.72	864	1250	1900	2200
0.518	785	1170	1780	2050
0.373	757	1110	1670	1930
0.268	714	1060	1470	1810
0.193	660	1020	1340	1730
0.139	638	973	1150	1640
0.1	600	966	1110	1590

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.503	0.494	0.481	0.43
72	0.512	0.503	0.495	0.44
51.8	0.515	0.492	0.489	0.435
37.3	0.503	0.472	0.48	0.425
26.8	0.507	0.463	0.475	0.419
19.3	0.505	0.446	0.474	0.419
13.9	0.506	0.446	0.475	0.42
10	0.509	0.444	0.473	0.417
7.2	0.513	0.445	0.484	0.425
5.18	0.515	0.452	0.484	0.424
3.73	0.526	0.463	0.488	0.423
2.68	0.525	0.475	0.488	0.434
1.93	0.508	0.469	0.487	0.443
1.39	0.516	0.472	0.488	0.431
1	0.505	0.471	0.501	0.437
0.72	0.523	0.527	0.486	0.436
0.518	0.538	0.538	0.481	0.43
0.373	0.496	0.569	0.478	0.43
0.268	0.52	0.629	0.488	0.423
0.193	0.533	0.667	0.472	0.45
0.139	0.542	0.743	0.488	0.452
0.1	0.582	0.808	0.479	0.451
%γ	0.3	0.4	0.3	0.3

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	179737	258268	385694	398927
0.0139	157493	233647	351068	373589
0.0193	132300	189803	273867	293484
0.0268	110541	153239	214858	229863
0.0373	92211.3	125937	169842	181307
0.0518	78196.3	103763	135250	143755
0.072	66300.4	85387.4	107187	113433
0.1	55845	69899.2	84927	89854.9
0.139	45680.7	56653.5	67711.9	71151.7
0.193	36980.9	45695	53998.2	56438.7
0.268	29930.5	36725.3	42926.2	44801.9
0.373	23973.3	29390.2	34117.1	35516.6
0.518	19448.4	23571.4	27197.1	28281.9
0.72	15645.3	18861.7	21642.7	22509.1
1	12538	15034.3	17034	17650.2
1.39	9854.68	11657	13514.4	14084.6
1.93	7917.39	9286.28	10684.2	11190.4
2.68	6351.64	7395.01	8416.91	8853.88
3.73	5004.46	5861.98	6579.82	6968.3
5.18	4043.99	4666.3	5196.24	5431.07
7.2	3252.07	3714.56	4096.78	4164.22
10	2622.66	2947.06	3237.4	3318.97
13.9	2115.89	2355.8	2585.21	2637.88
19.3	1708.98	1885.09	2058.6	2100.61
26.8	1379.89	1510.98	1653.02	1679.1
37.3	1112.64	1209.62	1333.61	1334.87
51.8	897.768	963.112	1074.63	1068.13
72	719.665	774.084	861.541	843.084
100	578.112	623.029	693.456	677.382

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	1.80E-05	2.59E-05	3.86E-05	3.99E-05
0.0139	2.19E-05	3.25E-05	4.88E-05	5.20E-05
0.0193	2.56E-05	3.67E-05	5.29E-05	5.67E-05
0.0268	2.97E-05	4.12E-05	5.77E-05	6.17E-05
0.0373	3.44E-05	4.70E-05	6.34E-05	6.77E-05
0.0518	4.05E-05	5.38E-05	7.01E-05	7.45E-05
0.072	4.78E-05	6.15E-05	7.72E-05	8.17E-05
0.1	5.59E-05	7.00E-05	8.50E-05	9.00E-05
0.139	6.35E-05	7.88E-05	9.42E-05	9.90E-05
0.193	7.15E-05	8.83E-05	1.04E-04	1.09E-04
0.268	8.04E-05	9.86E-05	1.15E-04	1.20E-04
0.373	8.95E-05	1.10E-04	1.27E-04	1.33E-04
0.518	1.01E-04	1.22E-04	1.41E-04	1.47E-04
0.72	1.13E-04	1.36E-04	1.56E-04	1.62E-04
1	1.26E-04	1.51E-04	1.71E-04	1.77E-04
1.39	1.37E-04	1.62E-04	1.88E-04	1.96E-04
1.93	1.53E-04	1.79E-04	2.07E-04	2.16E-04
2.68	1.71E-04	1.99E-04	2.26E-04	2.38E-04
3.73	1.87E-04	2.19E-04	2.46E-04	2.60E-04
5.18	2.10E-04	2.42E-04	2.69E-04	2.82E-04
7.2	2.34E-04	2.68E-04	2.95E-04	3.00E-04
10	2.63E-04	2.95E-04	3.24E-04	3.32E-04
13.9	2.94E-04	3.28E-04	3.60E-04	3.67E-04
19.3	3.30E-04	3.64E-04	3.98E-04	4.06E-04
26.8	3.71E-04	4.06E-04	4.44E-04	4.51E-04
37.3	4.15E-04	4.51E-04	4.98E-04	4.98E-04
51.8	4.65E-04	4.99E-04	5.57E-04	5.54E-04
72	5.18E-04	5.58E-04	6.21E-04	6.07E-04
100	5.79E-04	6.24E-04	6.94E-04	6.78E-04

I.26 Emulsion of CTAC/FA/HEC = 1.05/4.0/0.7% Systems



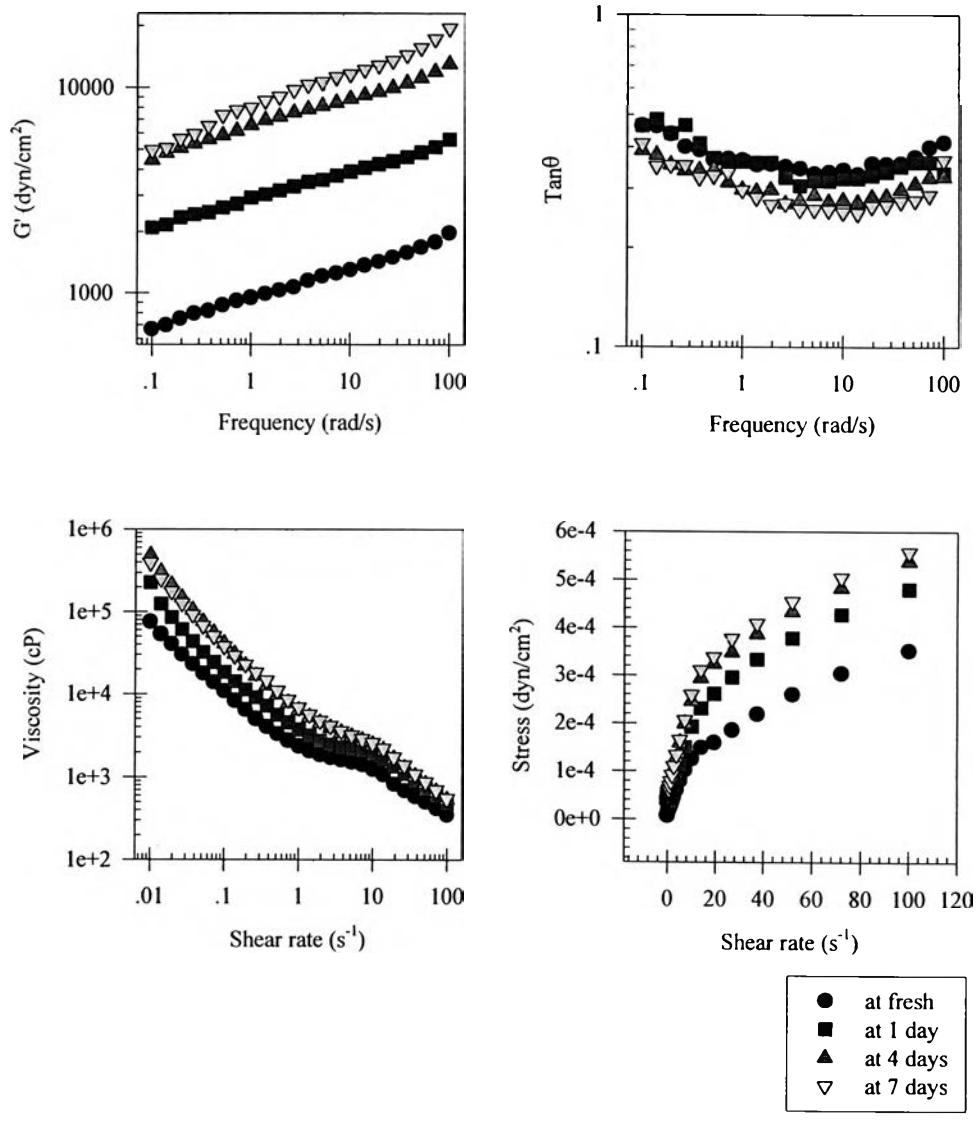
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	6920	7430	7510	8450
72	6170	6670	6720	7540
51.8	5570	6080	6080	6830
37.3	5070	5590	5560	6220
26.8	4630	5140	5090	5710
19.3	4230	4740	4680	5270
13.9	3850	4370	4300	4830
10	3480	4000	3930	4400
7.2	3140	3680	3570	4030
5.18	2820	3340	3240	3660
3.73	2530	3050	2930	3300
2.68	2260	2760	2650	3020
1.93	2020	2500	2380	2700
1.39	1780	2270	2160	2460
1	1600	2080	1960	2250
0.72	1420	1870	1790	2030
0.518	1280	1720	1640	1870
0.373	1150	1600	1510	1720
0.268	1050	1500	1390	1610
0.193	945	1390	1310	1490
0.139	855	1310	1230	1390
0.1	823	1190	1160	1320

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.471	0.456	0.466	0.456
72	0.488	0.48	0.487	0.474
51.8	0.491	0.484	0.487	0.477
37.3	0.485	0.488	0.489	0.473
26.8	0.488	0.493	0.489	0.472
19.3	0.494	0.5	0.492	0.474
13.9	0.499	0.516	0.5	0.482
10	0.511	0.53	0.512	0.494
7.2	0.52	0.543	0.527	0.503
5.18	0.538	0.566	0.542	0.514
3.73	0.54	0.58	0.552	0.523
2.68	0.556	0.593	0.556	0.525
1.93	0.569	0.611	0.578	0.546
1.39	0.575	0.633	0.586	0.543
1	0.569	0.637	0.588	0.548
0.72	0.603	0.648	0.588	0.553
0.518	0.608	0.657	0.589	0.553
0.373	0.587	0.661	0.59	0.549
0.268	0.596	0.674	0.597	0.533
0.193	0.628	0.675	0.59	0.544
0.139	0.625	0.668	0.601	0.555
0.1	0.675	0.671	0.608	0.553
%γ	0.4	0.4	0.3	0.4

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	365241	445651	457263	478743
0.0139	384979	450236	480863	539539
0.0193	335347	382788	413307	458030
0.0268	290057	321927	348149	381737
0.0373	253461	276101	294492	321703
0.0518	223471	241299	251315	275498
0.072	192260	206848	212019	231648
0.1	159235	170565	173676	188401
0.139	129123	137551	139971	149113
0.193	103991	109485	112030	117342
0.268	83226.7	86583	88965.8	92072.6
0.373	66168.5	68072.8	70054.6	71032.4
0.518	52502.6	53378.3	54974.2	55538.1
0.72	41459.2	41685.4	42989.6	43307
1	32635.6	32531.8	33444	33685.4
1.39	25580.4	25232.4	25900.9	25740.6
1.93	19969.1	19422	20089.9	19868
2.68	15575.3	15162.7	15584.6	15460
3.73	12101.7	11758.4	12029.5	11952
5.18	9396.43	9136.51	9291.79	9255.78
7.2	7243.08	7072.41	7160.06	7146.12
10	5452.34	5432.24	5486.11	5492.86
13.9	4185	4179.31	4221.33	4221.23
19.3	3233.59	3168.27	3240.52	3221.93
26.8	2512.99	2429.82	2494.52	2472.69
37.3	1914.09	1842.1	1921.35	1884.4
51.8	1485.26	1424.91	1483.1	1447.02
72	1154.21	1097.4	1140.37	1115.88
100	888.857	851.155	882.166	864.662

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	3.66E-05	4.46E-05	4.58E-05	4.79E-05
0.0139	5.35E-05	6.26E-05	6.69E-05	7.50E-05
0.0193	6.48E-05	7.40E-05	7.99E-05	8.85E-05
0.0268	7.79E-05	8.65E-05	9.35E-05	1.03E-04
0.0373	9.46E-05	1.03E-04	1.10E-04	1.20E-04
0.0518	1.16E-04	1.25E-04	1.30E-04	1.43E-04
0.072	1.39E-04	1.49E-04	1.53E-04	1.67E-04
0.1	1.59E-04	1.71E-04	1.74E-04	1.89E-04
0.139	1.80E-04	1.91E-04	1.95E-04	2.07E-04
0.193	2.01E-04	2.12E-04	2.17E-04	2.27E-04
0.268	2.24E-04	2.33E-04	2.39E-04	2.47E-04
0.373	2.47E-04	2.54E-04	2.61E-04	2.65E-04
0.518	2.72E-04	2.77E-04	2.85E-04	2.88E-04
0.72	2.99E-04	3.00E-04	3.10E-04	3.12E-04
1	3.27E-04	3.26E-04	3.35E-04	3.37E-04
1.39	3.56E-04	3.51E-04	3.60E-04	3.58E-04
1.93	3.86E-04	3.75E-04	3.88E-04	3.84E-04
2.68	4.18E-04	4.07E-04	4.19E-04	4.15E-04
3.73	4.52E-04	4.39E-04	4.49E-04	4.46E-04
5.18	4.87E-04	4.74E-04	4.82E-04	4.80E-04
7.2	5.22E-04	5.10E-04	5.16E-04	5.15E-04
10	5.46E-04	5.44E-04	5.49E-04	5.50E-04
13.9	5.82E-04	5.81E-04	5.87E-04	5.87E-04
19.3	6.25E-04	6.12E-04	6.26E-04	6.23E-04
26.8	6.75E-04	6.53E-04	6.70E-04	6.64E-04
37.3	7.14E-04	6.87E-04	7.17E-04	7.03E-04
51.8	7.70E-04	7.39E-04	7.69E-04	7.50E-04
72	8.32E-04	7.91E-04	8.22E-04	8.04E-04
100	8.90E-04	8.52E-04	8.83E-04	8.66E-04

I.27 Emulsion of BTAC/FA = 0.7/2.3% Systems



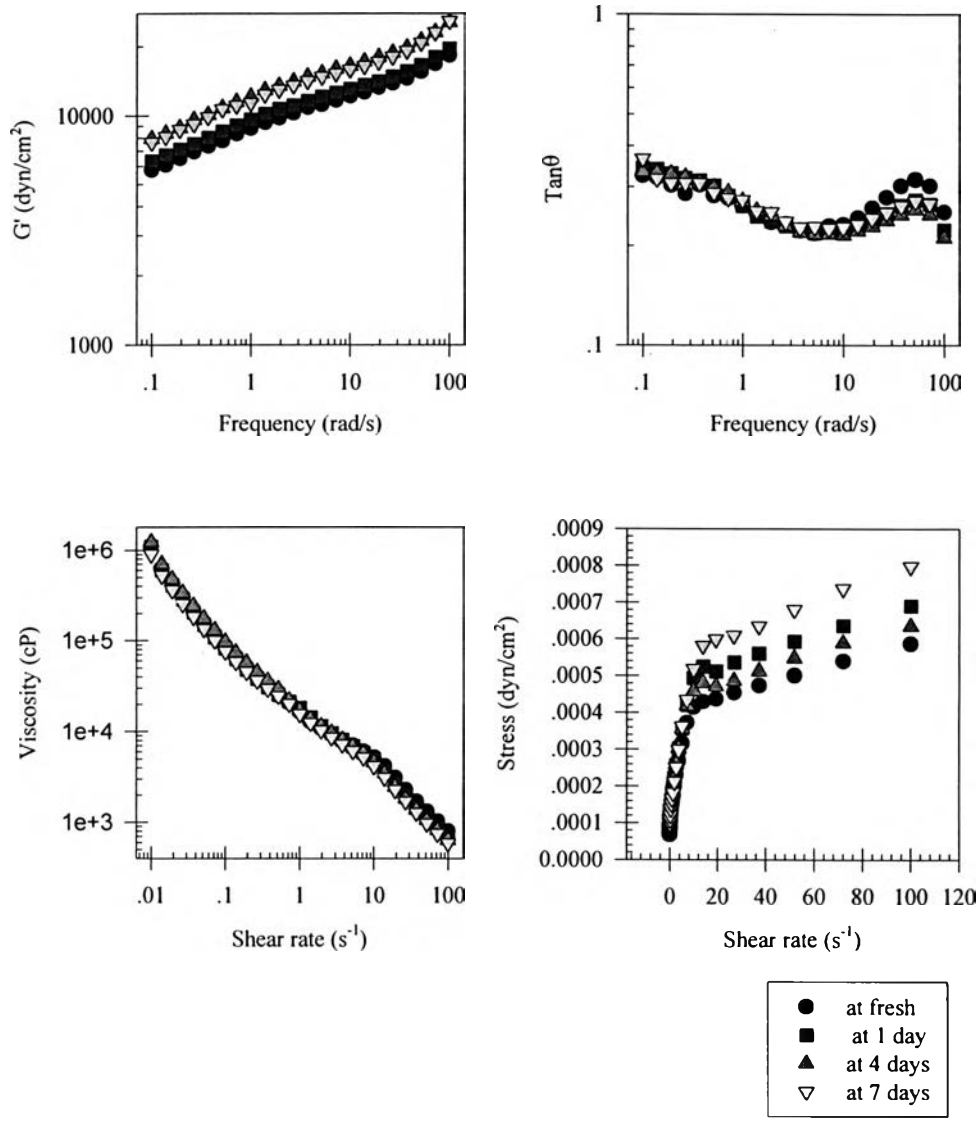
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	1970	5580	13000	19400
72	1780	5140	11900	17200
51.8	1680	4840	11100	15600
37.3	1580	4590	10500	14400
26.8	1500	4390	9940	13500
19.3	1430	4250	9500	12800
13.9	1370	4080	9160	12200
10	1300	3910	8810	11600
7.2	1250	3740	8420	11200
5.18	1210	3570	8120	10600
3.73	1150	3480	7830	10300
2.68	1070	3310	7530	9750
1.93	1030	3160	7200	9030
1.39	993	3030	6930	8620
1	950	2920	6520	7970
0.72	917	2720	6140	7740
0.518	874	2610	5850	7330
0.373	820	2480	5590	6500
0.268	795	2420	5340	5930
0.193	751	2340	5070	5610
0.139	698	2160	4800	5070
0.1	665	2090	4440	4950

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.413	0.334	0.325	0.366
72	0.399	0.36	0.323	0.287
51.8	0.373	0.36	0.309	0.277
37.3	0.357	0.35	0.297	0.275
26.8	0.355	0.337	0.284	0.267
19.3	0.357	0.329	0.282	0.266
13.9	0.331	0.322	0.272	0.253
10	0.341	0.322	0.276	0.255
7.2	0.336	0.316	0.273	0.259
5.18	0.333	0.317	0.286	0.26
3.73	0.345	0.306	0.275	0.26
2.68	0.35	0.324	0.27	0.271
1.93	0.356	0.359	0.297	0.269
1.39	0.355	0.359	0.294	0.282
1	0.366	0.362	0.298	0.297
0.72	0.369	0.361	0.313	0.335
0.518	0.368	0.371	0.341	0.328
0.373	0.392	0.41	0.34	0.324
0.268	0.401	0.465	0.34	0.353
0.193	0.438	0.44	0.353	0.353
0.139	0.462	0.484	0.378	0.35
0.1	0.464	0.463	0.39	0.409
%γ	0.3	0.3	0.3	0.3

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	75500	227205	479852	391271
0.0139	53800	124796	303280	250323
0.0193	40600	85170.8	211605	176716
0.0268	30000	60615.6	147513	126315
0.0373	23000	43586.2	104556	91876.3
0.0518	17800	32070.8	75230.1	67091.1
0.072	13900	24172.9	54797.3	50280.4
0.1	10800	18358.5	40748.5	37754.2
0.139	8320	14206.9	30308.1	29089.7
0.193	6450	11237.9	21977.6	22681.1
0.268	5020	9038.19	16389.9	18055.1
0.373	4000	7171.65	12529.8	14526
0.518	3270	5592.24	9738.32	10942.3
0.72	2770	4513.74	7750.56	8512.18
1	2360	3701.54	6292.15	6831.11
1.39	2070	3129.02	5222.45	5620.34
1.93	1860	2707.84	4434.95	4737.89
2.68	1720	2437.89	3869.75	4093.71
3.73	1620	2258.65	3401.68	3575.38
5.18	1540	2156.91	3058.32	3180.85
7.2	1410	2074.95	2752.35	2862.28
10	1250	1919.47	2450.26	2585.09
13.9	1070	1652.46	2104.36	2230.72
19.3	823	1349.71	1670.71	1747.85
26.8	690	1099.01	1294.14	1401.66
37.3	585	892.999	1034.16	1094.03
51.8	501	727.295	835.47	877.346
72	422	592.64	670.032	700.189
100	352	479.367	536.863	556.725

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	7.56E-06	2.27E-05	4.80E-05	3.92E-05
0.0139	7.48E-06	1.74E-05	4.22E-05	3.48E-05
0.0193	7.86E-06	1.65E-05	4.09E-05	3.42E-05
0.0268	8.07E-06	1.63E-05	3.96E-05	3.39E-05
0.0373	8.59E-06	1.63E-05	3.90E-05	3.43E-05
0.0518	9.21E-06	1.66E-05	3.90E-05	3.48E-05
0.072	9.98E-06	1.74E-05	3.95E-05	3.62E-05
0.1	1.08E-05	1.84E-05	4.08E-05	3.78E-05
0.139	1.16E-05	1.98E-05	4.22E-05	4.05E-05
0.193	1.25E-05	2.17E-05	4.25E-05	4.38E-05
0.268	1.35E-05	2.43E-05	4.40E-05	4.85E-05
0.373	1.49E-05	2.68E-05	4.68E-05	5.42E-05
0.518	1.70E-05	2.90E-05	5.05E-05	5.67E-05
0.72	1.99E-05	3.25E-05	5.58E-05	6.13E-05
1	2.37E-05	3.71E-05	6.30E-05	6.84E-05
1.39	2.87E-05	4.35E-05	7.26E-05	7.82E-05
1.93	3.60E-05	5.23E-05	8.57E-05	9.16E-05
2.68	4.62E-05	6.55E-05	1.04E-04	1.10E-04
3.73	6.06E-05	8.43E-05	1.27E-04	1.33E-04
5.18	7.97E-05	1.12E-04	1.59E-04	1.65E-04
7.2	1.01E-04	1.49E-04	1.98E-04	2.06E-04
10	1.25E-04	1.92E-04	2.45E-04	2.59E-04
13.9	1.49E-04	2.30E-04	2.93E-04	3.10E-04
19.3	1.59E-04	2.61E-04	3.23E-04	3.38E-04
26.8	1.85E-04	2.95E-04	3.48E-04	3.76E-04
37.3	2.18E-04	3.33E-04	3.86E-04	4.08E-04
51.8	2.60E-04	3.77E-04	4.33E-04	4.55E-04
72	3.04E-04	4.27E-04	4.83E-04	5.04E-04
100	3.52E-04	4.80E-04	5.37E-04	5.57E-04

I.28 Emulsion of BTAC/FA = 0.7/4.0% Systems



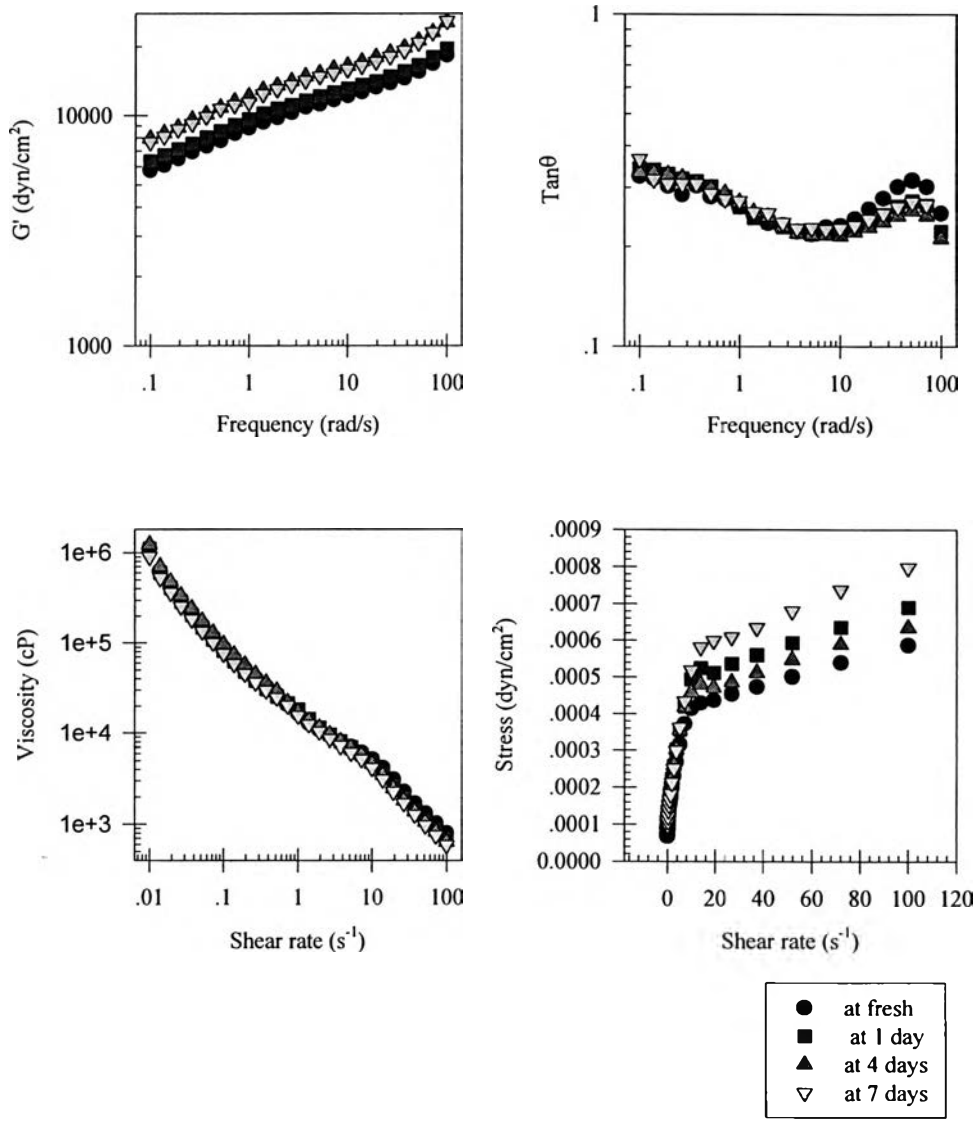
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	18400	19600	25500	25900
72	16900	18000	23100	23100
51.8	15600	16600	21200	20800
37.3	14600	15600	19800	19200
26.8	13900	14800	18800	18100
19.3	13300	14100	18000	17200
13.9	12700	13600	17200	16500
10	12200	13100	16500	15900
7.2	11700	12600	16000	15300
5.18	11200	12100	15300	14800
3.73	10900	11600	14800	14200
2.68	10300	11100	14100	13600
1.93	9790	10700	13500	13000
1.39	9360	10200	12900	12400
1	8860	9620	12100	11400
0.72	8340	9070	11500	11100
0.518	7810	8550	10800	10700
0.373	7350	8040	10100	9890
0.268	6940	7530	9580	9210
0.193	6480	7110	8830	8700
0.139	6100	6710	8370	8100
0.1	5770	6310	7910	7640

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.252	0.222	0.211	
72	0.302	0.266	0.247	0.267
51.8	0.316	0.274	0.256	0.272
37.3	0.302	0.264	0.247	0.263
26.8	0.279	0.249	0.237	0.251
19.3	0.259	0.237	0.228	0.241
13.9	0.242	0.226	0.221	0.231
10	0.231	0.22	0.215	0.227
7.2	0.229	0.223	0.216	0.225
5.18	0.218	0.218	0.217	0.228
3.73	0.222	0.222	0.219	0.227
2.68	0.232	0.229	0.23	0.236
1.93	0.235	0.237	0.246	0.252
1.39	0.249	0.244	0.254	0.254
1	0.264	0.263	0.272	0.274
0.72	0.277	0.282	0.289	0.277
0.518	0.283	0.302	0.299	0.288
0.373	0.304	0.313	0.309	0.308
0.268	0.286	0.319	0.321	0.308
0.193	0.303	0.329	0.328	0.308
0.139	0.32	0.339	0.332	0.317
0.1	0.324	0.342	0.333	0.365
%γ	0.8	0.8	0.8	0.8

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	1087010	1100350	1229250	896432
0.0139	623639	598418	706788	521353
0.0193	427558	407803	477984	361431
0.0268	301033	286296	337824	253329
0.0373	215190	204116	243132	182967
0.0518	156462	148079	176651	134342
0.072	115378	109166	130359	100026
0.1	86405.5	81680.7	97412.9	75435
0.139	65716.8	62278.2	73938.7	58031
0.193	51130.6	47958.1	57281.8	45518
0.268	40454.8	37939.3	45120.1	36463.2
0.373	32609.9	30727.1	36162.5	29698.6
0.518	26663.5	25344.9	29471.7	24665.4
0.72	21052.5	21422.7	22112.1	20113.5
1	16523.1	18304.6	17002.5	15473.3
1.39	13005.4	14290.1	13745.8	12396.7
1.93	10958.9	11488.1	11454.5	10270.9
2.68	9339.79	9580.39	9631.45	8575.86
3.73	8008.51	8080.4	8083.28	7193.66
5.18	6982.09	6873.7	6846.71	6091.24
7.2	6026.36	5824.78	5802.78	5164.94
10	5175.42	4925.74	4578.68	4134.81
13.9	4175.84	3769.04	3450.65	3085.99
19.3	3094.43	2643.17	2437.91	2256.74
26.8	2266.39	1993.19	1807.98	1689.74
37.3	1698.7	1499.48	1370.35	1268.02
51.8	1311.66	1142.01	1053.81	965.613
72	1022.67	882.204	816.258	747.951
100	796.3	688.726	633.092	585.808

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	8.97E-05	1.10E-04	1.23E-04	1.09E-04
0.0139	7.25E-05	8.32E-05	9.83E-05	8.67E-05
0.0193	6.99E-05	7.88E-05	9.24E-05	8.26E-05
0.0268	6.80E-05	7.69E-05	9.07E-05	8.08E-05
0.0373	6.83E-05	7.62E-05	9.07E-05	8.03E-05
0.0518	6.97E-05	7.68E-05	9.16E-05	8.11E-05
0.072	7.21E-05	7.86E-05	9.39E-05	8.31E-05
0.1	7.55E-05	8.18E-05	9.75E-05	8.65E-05
0.139	8.07E-05	8.66E-05	1.03E-04	9.14E-05
0.193	8.80E-05	9.27E-05	1.11E-04	9.88E-05
0.268	9.79E-05	1.02E-04	1.21E-04	1.09E-04
0.373	1.11E-04	1.15E-04	1.35E-04	1.22E-04
0.518	1.28E-04	1.31E-04	1.53E-04	1.38E-04
0.72	1.45E-04	1.54E-04	1.59E-04	1.52E-04
1	1.55E-04	1.83E-04	1.70E-04	1.65E-04
1.39	1.72E-04	1.99E-04	1.91E-04	1.81E-04
1.93	1.99E-04	2.22E-04	2.21E-04	2.12E-04
2.68	2.30E-04	2.57E-04	2.59E-04	2.51E-04
3.73	2.68E-04	3.02E-04	3.02E-04	2.99E-04
5.18	3.16E-04	3.56E-04	3.55E-04	3.62E-04
7.2	3.72E-04	4.20E-04	4.18E-04	4.34E-04
10	4.14E-04	4.93E-04	4.58E-04	5.18E-04
13.9	4.29E-04	5.24E-04	4.80E-04	5.81E-04
19.3	4.36E-04	5.11E-04	4.71E-04	5.98E-04
26.8	4.54E-04	5.35E-04	4.86E-04	6.09E-04
37.3	4.73E-04	5.60E-04	5.11E-04	6.34E-04
51.8	5.01E-04	5.92E-04	5.46E-04	6.80E-04
72	5.39E-04	6.36E-04	5.88E-04	7.37E-04
100	5.86E-04	6.89E-04	6.34E-04	7.97E-04

I.29 Emulsion of BTAC/FA = 1.05/2.3% Systems



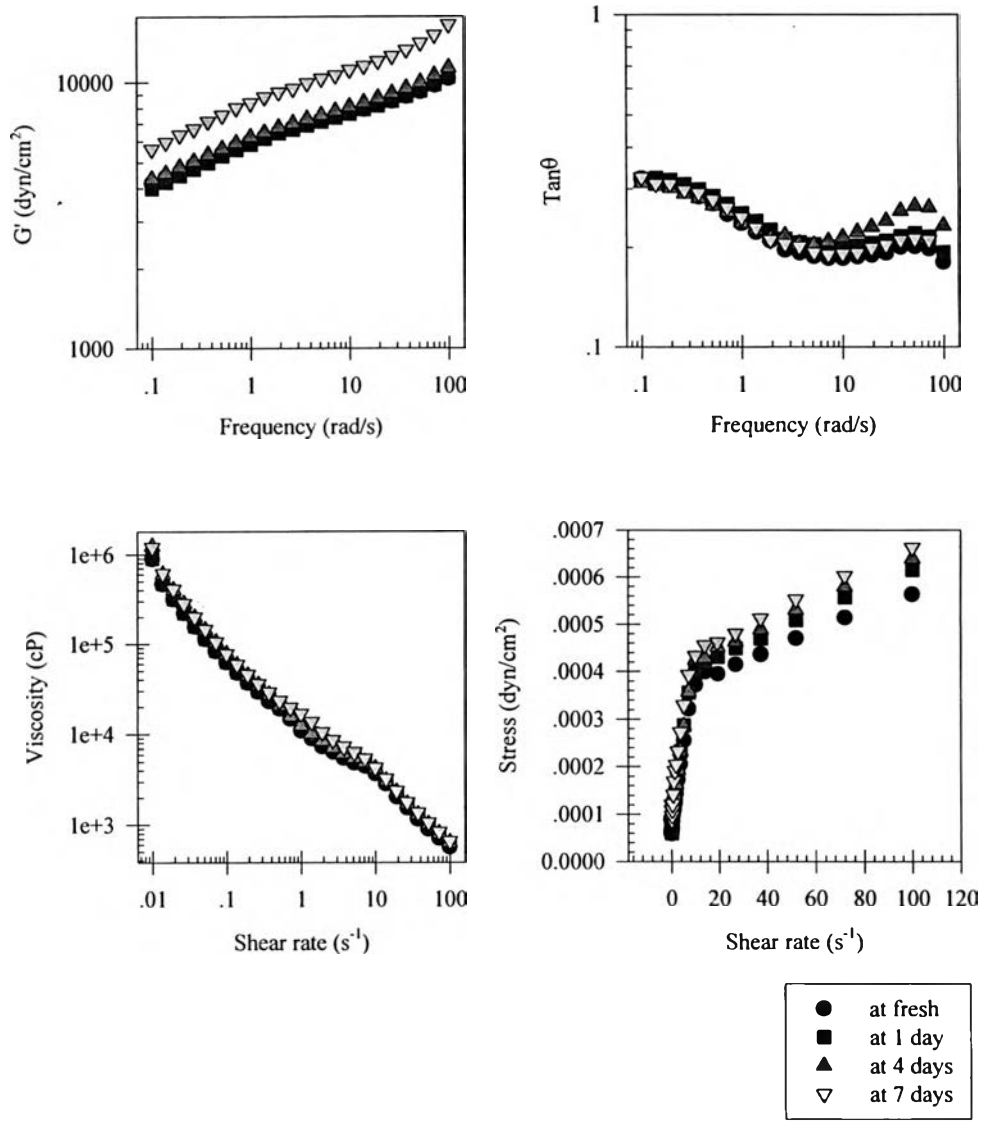
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	2880	6860	7980	24800
72	2760	6470	7530	21600
51.8	2660	6120	7120	19500
37.3	2580	5870	6810	17700
26.8	2500	5620	6530	16600
19.3	2430	5410	6230	15400
13.9	2370	5200	6000	14400
10	2290	4980	5750	13700
7.2	2210	4820	5550	12800
5.18	2150	4600	5360	12300
3.73	2090	4460	5170	11500
2.68	2020	4270	4940	10600
1.93	1960	4100	4750	10200
1.39	1880	3930	4550	
1	1830	3800	4400	9390
0.72	1760	3620	4150	8510
0.518	1710	3450	3960	7820
0.373	1630	3270	3720	7360
0.268	1560	3100	3550	7070
0.193	1500	2940	3290	6430
0.139	1440	2790	3110	5810
0.1	1370	2620	2840	5560

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.383		0.219	
72	0.427	0.234	0.231	0.21
51.8	0.424	0.233	0.227	0.192
37.3	0.397	0.226	0.221	0.186
26.8	0.375	0.222	0.217	0.18
19.3	0.359	0.222	0.213	0.175
13.9	0.349	0.218	0.219	0.171
10		0.218	0.213	0.175
7.2	0.328	0.216	0.216	0.175
5.18	0.309	0.207	0.206	0.171
3.73	0.304	0.215	0.207	0.174
2.68		0.212	0.214	0.176
1.93	0.299	0.22	0.214	
1.39		0.23	0.221	0.188
1	0.315	0.239	0.224	
0.72	0.323	0.265	0.233	0.198
0.518	0.343	0.272	0.26	0.209
0.373	0.341	0.29	0.273	0.226
0.268	0.401	0.305	0.282	0.231
0.193	0.426	0.335	0.299	0.253
0.139	0.387	0.342	0.313	0.265
0.1	0.415	0.333	0.316	0.271
%γ	0.4	0.4	0.4	0.4

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	365066	559908	560135	445249
0.0139	236384	299633	350564	257000
0.0193	161385	200606	242559	174305
0.0268	112451	138366	174923	123505
0.0373	79567.6	97932.4	128000	88053.2
0.0518	57452.1	70385.2	94446.9	63684.5
0.072	42243.9	50777.3	70434.8	47071.2
0.1	31602.2	38332.8	53250.3	35524.9
0.139	24046.3	29170.5	40302.1	27260
0.193	18295.1	22922.4	30760.3	21365.1
0.268	14637.9	18390.9	23602.9	17078.8
0.373	11922	15105.6	18313.2	13947.4
0.518	9898.35	12208.9	14381.1	11631.1
0.72	8417.99	10389.5	11406.6	9242.28
1	7163.61	7760.67	9063.21	7190.26
1.39	5446.22	6103.21	7173.95	5887.71
1.93	4429.35	5199.5	5626.5	4979.22
2.68	3780.1	4510.67	4363.26	4346.21
3.73	3338.6	4003.92	3345.44	3890.7
5.18	3105.75	3653.34	2545.77	3594.39
7.2	2967.26	3369.74	1965.75	3360.69
10	2660.73	2938.82	1501.99	2846.77
13.9	2073.54	2183.03	1166.41	2130.94
19.3	1525.33	1673.97	923.353	1555.73
26.8	1158.58	1288.33	738.624	1173.59
37.3	893.035	1049.09	586.968	900.392
51.8	699.714	864.029	471.663	705.233
72	550.615	695.539	378.644	556.128
100	432.811	551.885	304.812	439.41

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	5.61E-05	5.61E-05	3.65E-05	4.46E-05
0.0139	4.88E-05	4.17E-05	3.29E-05	3.57E-05
0.0193	4.69E-05	3.88E-05	3.12E-05	3.37E-05
0.0268	4.70E-05	3.72E-05	3.02E-05	3.32E-05
0.0373	4.78E-05	3.65E-05	2.97E-05	3.29E-05
0.0518	4.90E-05	3.65E-05	2.98E-05	3.30E-05
0.072	5.07E-05	3.66E-05	3.04E-05	3.39E-05
0.1	5.33E-05	3.84E-05	3.16E-05	3.56E-05
0.139	5.61E-05	4.06E-05	3.34E-05	3.79E-05
0.193	5.95E-05	4.43E-05	3.54E-05	4.13E-05
0.268	6.34E-05	4.94E-05	3.93E-05	4.59E-05
0.373	6.83E-05	5.64E-05	4.45E-05	5.20E-05
0.518	7.46E-05	6.33E-05	5.13E-05	6.03E-05
0.72	8.22E-05	7.49E-05	6.06E-05	6.66E-05
1	9.07E-05	7.77E-05	7.17E-05	7.20E-05
1.39	9.98E-05	8.49E-05	7.58E-05	8.19E-05
1.93	1.09E-04	1.00E-04	8.56E-05	9.62E-05
2.68	1.17E-04	1.21E-04	1.02E-04	1.17E-04
3.73	1.25E-04	1.49E-04	1.25E-04	1.45E-04
5.18	1.32E-04	1.89E-04	1.61E-04	1.86E-04
7.2	1.42E-04	2.43E-04	2.14E-04	2.42E-04
10	1.50E-04	2.94E-04	2.66E-04	2.85E-04
13.9	1.62E-04	3.04E-04	2.88E-04	2.96E-04
19.3	1.78E-04	3.24E-04	2.95E-04	3.01E-04
26.8	1.98E-04	3.46E-04	3.11E-04	3.15E-04
37.3	2.19E-04	3.91E-04	3.33E-04	3.36E-04
51.8	2.45E-04	4.48E-04	3.63E-04	3.66E-04
72	2.73E-04	5.01E-04	3.97E-04	4.01E-04
100	3.05E-04	5.52E-04	4.33E-04	4.40E-04

I.30 Emulsion of BTAC/FA = 1.05/3.3% Systems



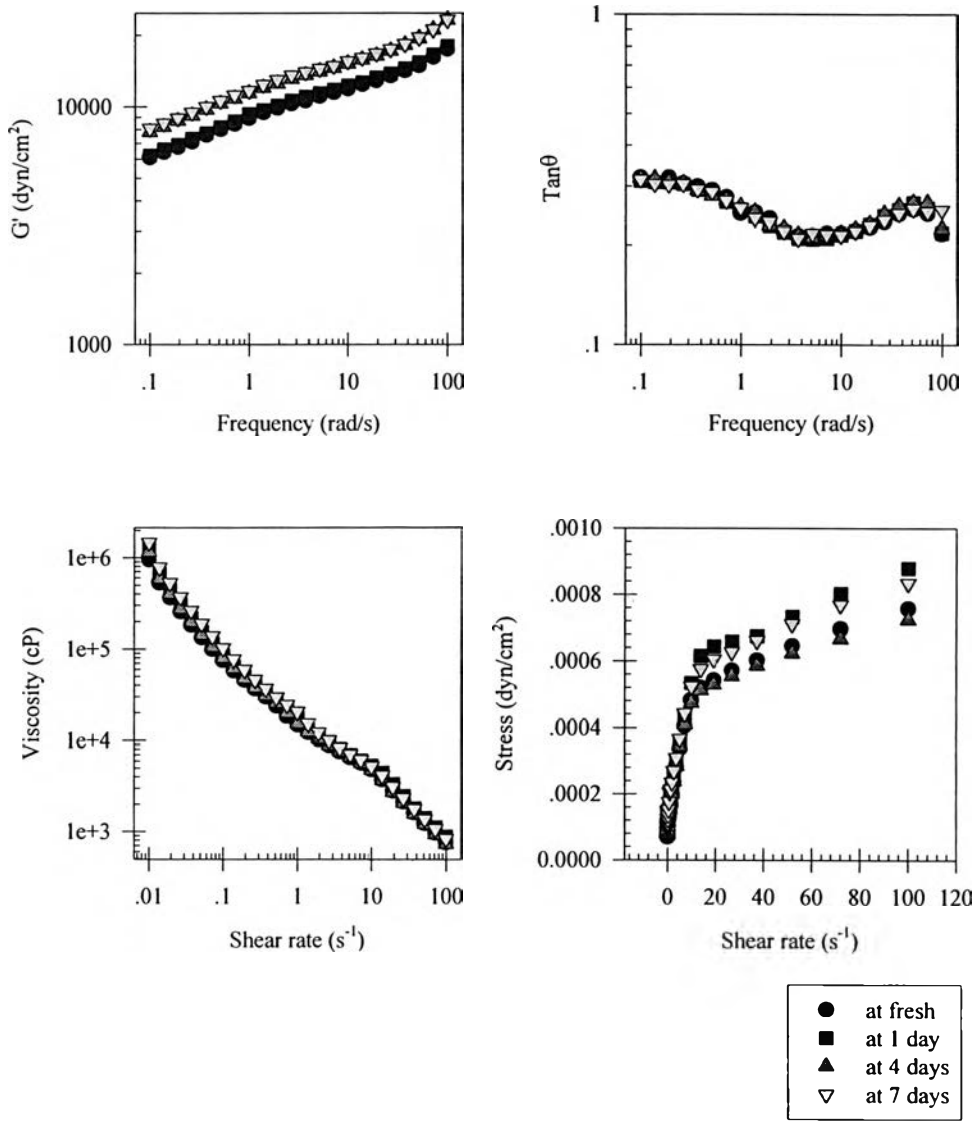
Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	10300	10400	11300	16400
72	9690	9760	10600	15000
51.8	9200	9250	9960	14000
37.3	8810	8840	9470	13200
26.8	8480	8480	9070	12500
19.3	8190	8160	8710	12000
13.9	7920	7910	8380	11500
10	7670	7610	8090	11100
7.2	7420	7370	7800	10600
5.18	7180	7120	7520	10300
3.73	6950	6870	7290	9900
2.68	6740	6640	7030	9460
1.93	6470	6430	6770	9180
1.39	6230	6140	6490	8790
1	5990	5830	6240	8360
0.72	5730	5580	5930	8020
0.518	5420	5270	5640	7540
0.373	5130	4980	5360	7160
0.268	4890	4700	5050	6700
0.193	4610	4450	4810	6360
0.139	4390	4210	4550	5970
0.1	4170	3980	4340	5620

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.18	0.193	0.232	
72	0.198	0.215	0.263	0.21
51.8	0.201	0.22	0.266	0.212
37.3	0.2	0.216	0.257	0.21
26.8	0.192	0.209	0.24	0.203
19.3	0.189	0.206	0.23	0.199
13.9	0.187	0.202	0.222	0.192
10	0.185	0.201	0.214	0.191
7.2	0.185	0.201	0.208	0.19
5.18	0.188	0.204	0.203	0.193
3.73	0.192	0.207	0.205	0.201
2.68	0.196	0.212	0.217	0.205
1.93	0.21	0.226	0.213	0.21
1.39	0.222	0.24	0.226	0.228
1	0.236	0.253	0.237	0.246
0.72	0.251	0.27	0.256	0.263
0.518	0.27	0.285	0.267	0.278
0.373	0.284	0.299	0.281	0.291
0.268	0.298	0.31	0.29	0.297
0.193	0.31	0.319	0.301	0.31
0.139	0.312	0.323	0.306	0.31
0.1	0.322	0.321	0.312	0.325
%γ	0.5	0.5	0.5	0.5

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	889937	896973	1236250	1208180
0.0139	471316	472936	601877	614220
0.0193	316328	318050	402957	410996
0.0268	220882	222045	281421	282453
0.0373	156860	158820	199356	200290
0.0518	113849	114747	143551	144859
0.072	83910.2	84466.3	104640	105522
0.1	62545.9	63393	77604.6	77768
0.139	47741.2	48507.7	58393.8	59219.1
0.193	37011.7	37853.4	44700.6	45892.6
0.268	29360.6	30123.1	34985.8	36217.6
0.373	23170	24509.5	27365	29131.5
0.518	19077.8	19965.8	20629	23448.5
0.72	14785.8	16815.6	15754.5	19727.7
1	10938.7	12630.2	12546.2	16917.6
1.39	8924.55	10182.4	10128.5	13699.9
1.93	7491.42	8451.86	8463.08	10543.8
2.68	6422.23	7192.05	7213.72	8665.22
3.73	5510.22	6225.54	6228.58	7319.55
5.18	4915.67	5534.63	5511.17	6352.3
7.2	4461.59	4932.81	4953.23	5450
10	3717.74	3995.41	4246.08	4328.46
13.9	2868.48	3020.16	3084.07	3274.15
19.3	2043.17	2225.82	2336.11	2388.09
26.8	1543.71	1671.54	1723.14	1788.99
37.3	1168.91	1258.91	1310.09	1372.15
51.8	906.743	980.474	1022.94	1065.69
72	712.919	772.666	804.022	836.189
100	562.257	614.251	637.844	661.383

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	8.91E-05	8.98E-05	1.24E-04	1.21E-04
0.0139	6.56E-05	6.58E-05	8.37E-05	8.54E-05
0.0193	6.11E-05	6.15E-05	7.79E-05	7.94E-05
0.0268	5.93E-05	5.96E-05	7.56E-05	7.59E-05
0.0373	5.85E-05	5.93E-05	7.44E-05	7.47E-05
0.0518	5.90E-05	5.95E-05	7.44E-05	7.51E-05
0.072	6.05E-05	6.09E-05	7.54E-05	7.60E-05
0.1	6.26E-05	6.35E-05	7.77E-05	7.79E-05
0.139	6.64E-05	6.75E-05	8.12E-05	8.24E-05
0.193	7.15E-05	7.32E-05	8.64E-05	8.87E-05
0.268	7.88E-05	8.09E-05	9.40E-05	9.73E-05
0.373	8.65E-05	9.15E-05	1.02E-04	1.09E-04
0.518	9.89E-05	1.04E-04	1.07E-04	1.22E-04
0.72	1.07E-04	1.21E-04	1.14E-04	1.42E-04
1	1.10E-04	1.26E-04	1.26E-04	1.69E-04
1.39	1.24E-04	1.42E-04	1.41E-04	1.91E-04
1.93	1.45E-04	1.63E-04	1.64E-04	2.04E-04
2.68	1.72E-04	1.93E-04	1.94E-04	2.33E-04
3.73	2.06E-04	2.32E-04	2.32E-04	2.73E-04
5.18	2.55E-04	2.87E-04	2.86E-04	3.29E-04
7.2	3.21E-04	3.55E-04	3.57E-04	3.93E-04
10	3.72E-04	4.00E-04	4.25E-04	4.33E-04
13.9	3.99E-04	4.20E-04	4.29E-04	4.55E-04
19.3	3.95E-04	4.30E-04	4.52E-04	4.62E-04
26.8	4.15E-04	4.49E-04	4.63E-04	4.80E-04
37.3	4.36E-04	4.70E-04	4.89E-04	5.12E-04
51.8	4.70E-04	5.08E-04	5.30E-04	5.53E-04
72	5.14E-04	5.57E-04	5.79E-04	6.02E-04
100	5.63E-04	6.15E-04	6.39E-04	6.62E-04

I.31 Emulsion of BTAC/FA = 1.05/4.0% Systems



Frequency (rad/s)	G' at fresh (dyn/cm^2)	G' at 1 day (dyn/cm^2)	G' at 4 days (dyn/cm^2)	G' at 7 days (dyn/cm^2)
100	17500	18000	23200	23200
72	16200	16600	21100	21200
51.8	15000	15400	19400	19600
37.3	14200	14500	18200	18400
26.8	13500	13800	17200	17500
19.3	12900	13300	16400	16800
13.9	12400	12700	15800	16100
10	11900	12300	15200	15600
7.2	11500	11800	14600	14900
5.18	11100	11400	14100	14500
3.73	10600	11000	13600	14000
2.68	10300	10600	13100	13600
1.93	9850	10100	12500	13000
1.39	9420	9660	12000	12400
1	8950	9300	11400	11700
0.72	8430	8670	10800	11200
0.518	8010	8180	10300	10600
0.373	7580	7720	9720	9990
0.268	7100	7310	9150	9460
0.193	6730	6900	8690	8940
0.139	6410	6590	8190	8490
0.1	6090	6220	7800	8090

Frequency (rad/s)	tanθ at fresh	tanθ at 1 day	tanθ at 4 days	tanθ at 7 days
100	0.216	0.217	0.224	0.254
72	0.248	0.257	0.268	0.251
51.8	0.255	0.267	0.268	0.256
37.3	0.247	0.255	0.262	0.248
26.8	0.236	0.244	0.248	0.237
19.3	0.226	0.23	0.231	0.228
13.9	0.22	0.22	0.222	0.22
10	0.216	0.214	0.216	0.214
7.2	0.216	0.209	0.215	0.215
5.18	0.213	0.208	0.21	0.217
3.73	0.213	0.209	0.214	0.209
2.68	0.22	0.218	0.224	0.22
1.93	0.24	0.228	0.229	0.234
1.39	0.25	0.243	0.251	0.24
1	0.249	0.255	0.261	0.258
0.72	0.278	0.269	0.272	0.271
0.518	0.292	0.286	0.28	0.288
0.373	0.3	0.292	0.291	0.293
0.268	0.306	0.304	0.306	0.304
0.193	0.319	0.307	0.309	0.303
0.139	0.309	0.308	0.317	0.304
0.1	0.319	0.311	0.317	0.314
%γ	1.0	1.0	1.0	1.0

Shear rate (s^{-1})	Viscosity at fresh (cP)	Viscosity at 1 day (cP)	Viscosity at 4 days (cP)	Viscosity at 7 days (cP)
0.01	941941	1289810	1162780	1471960
0.0139	535748	661846	590198	784737
0.0193	363971	443440	401861	530781
0.0268	255788	307580	277267	370574
0.0373	183448	217936	198767	262799
0.0518	133395	154626	144223	189314
0.072	99368.6	113662	105867	138377
0.1	74990.6	84973.9	79902.7	102586
0.139	57686.2	64463.5	61389	77280.1
0.193	45264.2	49805.6	47357.9	59174.1
0.268	36285.5	39328	37855.3	46182.1
0.373	29589.5	31581.1	30791.3	36660
0.518	23611.1	25947.7	25484.7	29411.5
0.72	18330.7	21101.6	19908.1	24351.6
1	14751.2	17226.9	15229.8	20483
1.39	12160.3	13699.9	12491.6	15279.6
1.93	10235	11282.6	10359	12141
2.68	8779.89	9496.71	8827.42	10022.9
3.73	7565.61	7962.43	7609.32	8256.14
5.18	6496.23	6910.4	6634.27	7072.7
7.2	5642.12	6022.81	5698.99	6136.74
10	4810.09	5316.18	4721.97	5223.7
13.9	3732.53	4419.86	3666.82	4133.46
19.3	2802.01	3329.32	2733.93	3127.12
26.8	2125.47	2449.98	2060.52	2333.4
37.3	1613.17	1808.26	1568.18	1770.97
51.8	1245.15	1413.26	1201.96	1371.54
72	966.657	1113.3	925.504	1066.83
100	756.467	877.305	723.307	833.56

Shear rate (s^{-1})	Stress at fresh (dyn/cm^2)	Stress at 1 day (dyn/cm^2)	Stress at 4 days (dyn/cm^2)	Stress at 7 days (dyn/cm^2)
0.01	9.43E-05	1.29E-04	1.16E-04	1.47E-04
0.0139	7.45E-05	9.21E-05	8.21E-05	1.09E-04
0.0193	7.03E-05	8.57E-05	7.77E-05	1.03E-04
0.0268	6.87E-05	8.26E-05	7.45E-05	9.95E-05
0.0373	6.85E-05	8.13E-05	7.42E-05	9.81E-05
0.0518	6.92E-05	8.02E-05	7.48E-05	9.82E-05
0.072	7.16E-05	8.19E-05	7.63E-05	9.97E-05
0.1	7.51E-05	8.51E-05	8.00E-05	1.03E-04
0.139	8.02E-05	8.97E-05	8.54E-05	1.07E-04
0.193	8.75E-05	9.63E-05	9.15E-05	1.14E-04
0.268	9.74E-05	1.06E-04	1.02E-04	1.24E-04
0.373	1.10E-04	1.18E-04	1.15E-04	1.37E-04
0.518	1.22E-04	1.35E-04	1.32E-04	1.52E-04
0.72	1.32E-04	1.52E-04	1.43E-04	1.75E-04
1	1.48E-04	1.72E-04	1.52E-04	2.05E-04
1.39	1.69E-04	1.91E-04	1.74E-04	2.13E-04
1.93	1.98E-04	2.18E-04	2.00E-04	2.35E-04
2.68	2.36E-04	2.55E-04	2.37E-04	2.69E-04
3.73	2.82E-04	2.97E-04	2.84E-04	3.08E-04
5.18	3.37E-04	3.58E-04	3.44E-04	3.67E-04
7.2	4.06E-04	4.34E-04	4.11E-04	4.42E-04
10	4.82E-04	5.32E-04	4.73E-04	5.23E-04
13.9	5.19E-04	6.15E-04	5.10E-04	5.75E-04
19.3	5.42E-04	6.43E-04	5.28E-04	6.04E-04
26.8	5.71E-04	6.58E-04	5.53E-04	6.27E-04
37.3	6.02E-04	6.75E-04	5.85E-04	6.61E-04
51.8	6.46E-04	7.33E-04	6.23E-04	7.11E-04
72	6.96E-04	8.02E-04	6.67E-04	7.69E-04
100	7.57E-04	8.78E-04	7.24E-04	8.34E-04

Pseudo-Equilibrium Properties

I. 32a Effect of CTAC and FA Concentrations : CTAC/FA = 0.7/y (Figures3.13a-3.14b)

FA conc.	G_N^o (ω= 100 rad/s)		tan θ		η_o (γ = 0.01 s^{-1})		τ_y (dyn/cm^2)	
	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2
2.0	1.05E+03	4.84E+02	0.5010		9.44E+04	1.12E+05	5.65E-05	2.00E-05
2.3	1.25E+03	2.70E+02		0.4430	1.22E+05	1.15E+04	8.00E-05	6.80E-05
2.8	3.58E+03	3.41E+03	0.3880		4.21E+05	4.15E+05	1.29E-04	1.30E-04
3.3	6.51E+03	6.42E+03		0.3550	8.51E+05	8.48E+05	1.73E-04	1.95E-04
3.8	8.60E+03	8.24E+03	0.3330		6.97E+05	7.21E+05	2.05E-04	2.10E-04
4.0	1.03E+04	1.34E+04		0.2970	9.75E+05	5.16E+05	2.18E-04	2.70E-04
4.5	1.57E+04	1.51E+04	0.2720		8.54E+05	5.58E+05	3.60E-04	2.90E-04
5.0	2.89E+04	2.75E+04	0.2660		1.10E+06	2.22E+06	3.80E-04	3.99E-04
5.5	4.30E+04	4.00E+04	0.2370		1.70E+06	1.97E+06	5.20E-04	6.50E-04
6.0	4.40E+04	4.32E+04	0.2240		1.77E+06	2.97E+06	5.60E-04	5.00E-04
6.5	5.33E+04	5.30E+04	0.2200		2.47E+06	3.11E+06	8.00E-04	9.00E-04
7.0	8.31E+04	8.41E+04	0.2130		2.56E+06	3.91E+06	8.80E-04	9.20E-04
7.5	8.34E+04	8.35E+04	0.2100		3.27E+06	4.00E+06	1.28E-03	1.20E-03
8.0	8.58E+04	8.67E+04	0.2000		3.85E+06	5.91E+06	1.20E-03	1.29E-03

I. 32b Effect of CTAC and FA Concentrations : CTAC/FA = 1.05/y (Figure3.13a-3.14b)

FA conc.	G_N^o (ω= 100 rad/s)		tan θ		η_o (γ = 0.01 s^{-1})		τ_y (dyn/cm^2)	
	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2
2.0	2.60E+03		0.4150		1.96E+05		1.40E-04	
2.3	1.75E+03	1.91E+03	0.3380		2.38E+05	3.68E+05	1.00E-04	1.32E -04
2.8	4.62E+03		0.3330		6.19E+05		2.40E-04	
3.3	6.86E+03	8.46E+03	0.3220		6.89E+05	8.67E+05	2.39E-04	2.80E-04
3.8	1.47E+04		0.3150		1.02E+06		3.40E-04	
4.0	1.30E+04	1.25E+04	0.3080		1.49E+06	1.38E+06	3.40E-04	2.40E-04
4.5	1.81E+04		0.2630		1.94E+06		7.20E-04	
5.0	2.29E+04		0.2550		1.63E+06		5.00E-04	
5.5	3.20E+04		0.2400		1.95E+06		8.60E-04	
6.0	4.15E+04		0.2220		2.95E+06		1.04E-03	
6.5	4.55E+04		0.2120		3.93E+06		1.16E-03	
7.0	6.60E+04		0.2090		4.41E+06		1.48E-03	
7.5	6.53E+04		0.2080		5.21E+06		1.50E-03	
8.0	8.37E+04		0.1680		4.42E+06		1.55E-03	

I. 33a Effect of HEC and Modified HEC Concentrations : CTAC/FA/HEC = 0.7/3.3/z (Figure3.18a-3.19)

HEC conc.	G_N° (ω= 100 rad/s)		tan θ		η_o ($\gamma = 0.01\ s^{-1}$)		τ_y (dyn/cm^2)	
	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2
0.0	6.42E+03	6.51E+03	0.2970	0.2900	3.48E+05	5.51E+05	1.95E-04	1.73E-04
0.05	2.84E+03		0.5010		8.69E+04		1.10E-04	
0.075	1.08E+03		0.6790		4.56E+04		8.10E-05	
0.1	7.47E+02		0.7320		2.15E+04		5.20E-05	
0.3	3.29E+03	2.22E+03	0.6180	0.4274	1.52E+05	3.03E+05	1.80E-04	2.00E-04
0.5	4.12E+03		0.5750		1.98E+05		2.80E-04	
0.7	7.41E+03	3.45E+03	0.4540	0.5270	4.59E+05	2.54E+05	3.60E-04	3.40E-04
0.9	4.84E+03		0.5320		2.71E+05		4.40E-04	
1.0	5.33E+03	3.68E+03	0.4950	0.5110	3.06E+05	2.92E+05	3.98E-04	4.00E-04
1.2	6.03E+03		0.4870		3.18E+05		4.60E-04	
1.5	7.02E+03		0.4610		3.29E+05		6.20E-04	

I. 33b Effect of HEC and Modified HEC Concentrations : CTAC/FA/modified HEC = 0.7/3.3/z (Figure3.18a-3.19)

Modified HEC conc.	G_N° (ω= 100 rad/s)		tan θ		η_o ($\gamma = 0.01\ s^{-1}$)	
	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2
0.0	6.42E+03	6.51E+03	0.2970	0.2900	3.48E+05	5.51E+05
0.05	3.33E+03	3.01E+03	0.3800	0.3600	1.37E+05	3.50E+05
0.075	8.08E+03	9.00E+03	0.3600	0.3500	1.16E+06	1.50E+06
0.1	1.37E+04	1.31E+04	0.3340	0.3300	3.90E+06	4.20E+06
0.3	2.71E+04	2.57E+04	0.3200	0.3220	6.63E+06	6.80E+06
0.5	4.47E+04	4.51E+04	0.3100	0.3090	9.48E+06	9.10E+06
0.7	6.01E+04	6.00E+04	0.2700	0.2600	1.16E+07	2.30E+07
0.9	6.56E+04	6.47E+04	0.2700	0.2500	3.00E+07	3.10E+07
1.0	6.88E+04	6.77E+04	0.2000	0.2300	3.40E+07	3.20E+07
1.2	7.20E+04	7.01E+04	0.2200	0.2200	3.60E+07	3.80E+07
1.5	7.40E+04	7.59E+04	0.2200	0.2100	4.10E+07	4.00E+07

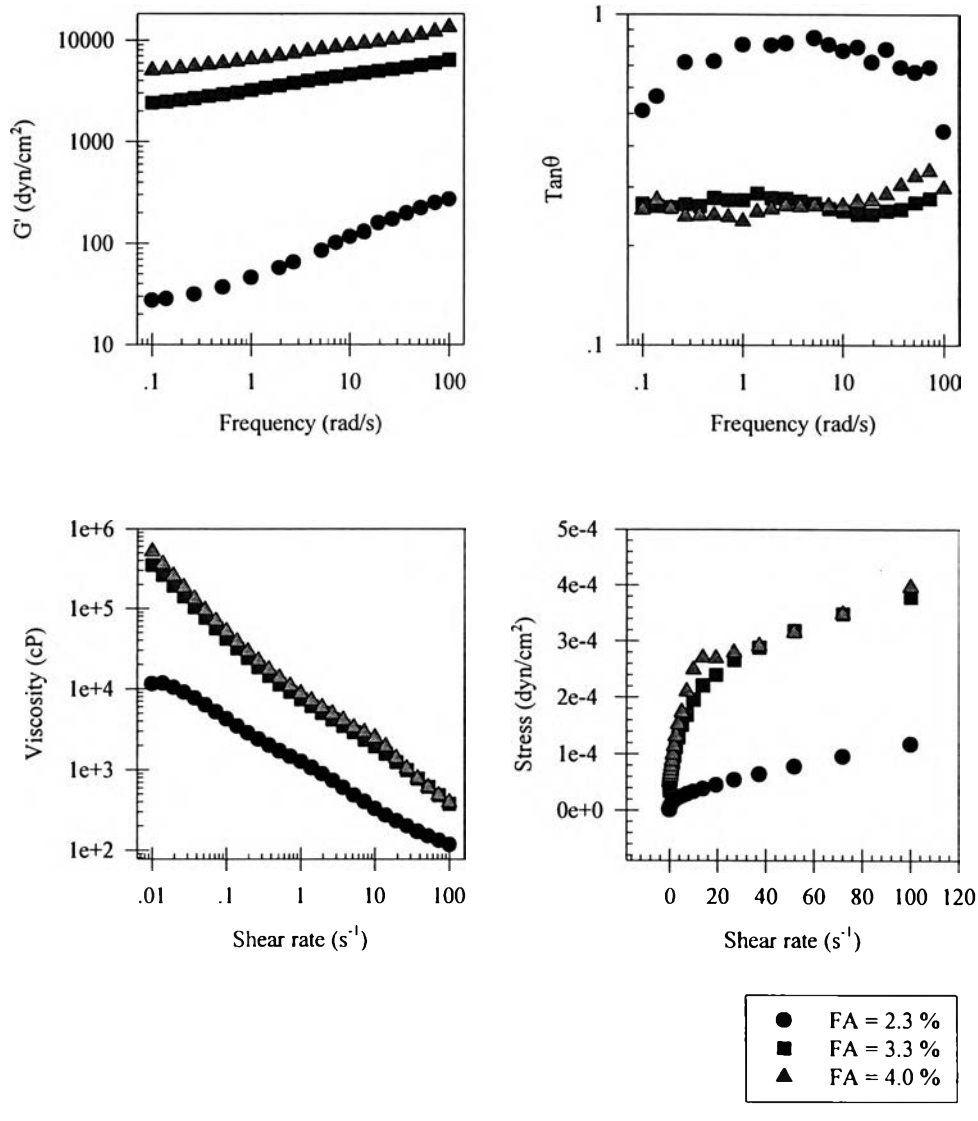
I. 34a Effect of BTAC and FA Concentrations : BTAC/FA = 0.7/y (Figure3.24a-3.25b)

FA conc.	G_N° (ω= 100 rad/s)		tan θ		η_o (γ = 0.01 s^{-1})		τ_y (dyn/cm^2)	
	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2
2.0	7.32E+03	4.11E+03	0.3985	0.4000	2.87E+05	4.01E+05	1.80E-04	1.50E-05
2.3	1.94E+04	1.33E+04	0.3637	0.3745	3.91E+05	3.75E+05	2.60E-04	2.50E -05
2.8	9.88E+03		0.3528		5.54E+05		3.20E-04	
3.3	1.75E+04	1.07E+04	0.3511	0.3510	6.33E+05	7.02E+05	3.40E-04	3.50E-04
3.8	2.25E+04	1.34E+04	0.3212	0.3302	8.62E+05	7.90E+05	3.80E-04	4.00E-04
4.0	1.84E+04	1.00E+04	0.3199	0.2010	8.96E+05	9.16E+05	4.20E-04	4.30E-04
4.5	1.97E+04		0.3100		9.74E+05		5.60E-04	
5.0	2.69E+04		0.2676		1.03E+06		4.80E-04	
5.5	3.32E+04		0.2637		1.24E+06		5.40E-04	
6.0	3.84E+04		0.2552		1.60E+06		5.60E-04	
6.5	4.20E+04		0.2430		1.62E+06		5.80E-04	
7.0	4.36E+04		0.2105		1.79E+06		8.00E-04	
7.5	5.36E+04		0.2086		2.00E+06		6.20E-04	
8.0	5.41E+04		0.2110		2.00E+06		6.50E-04	

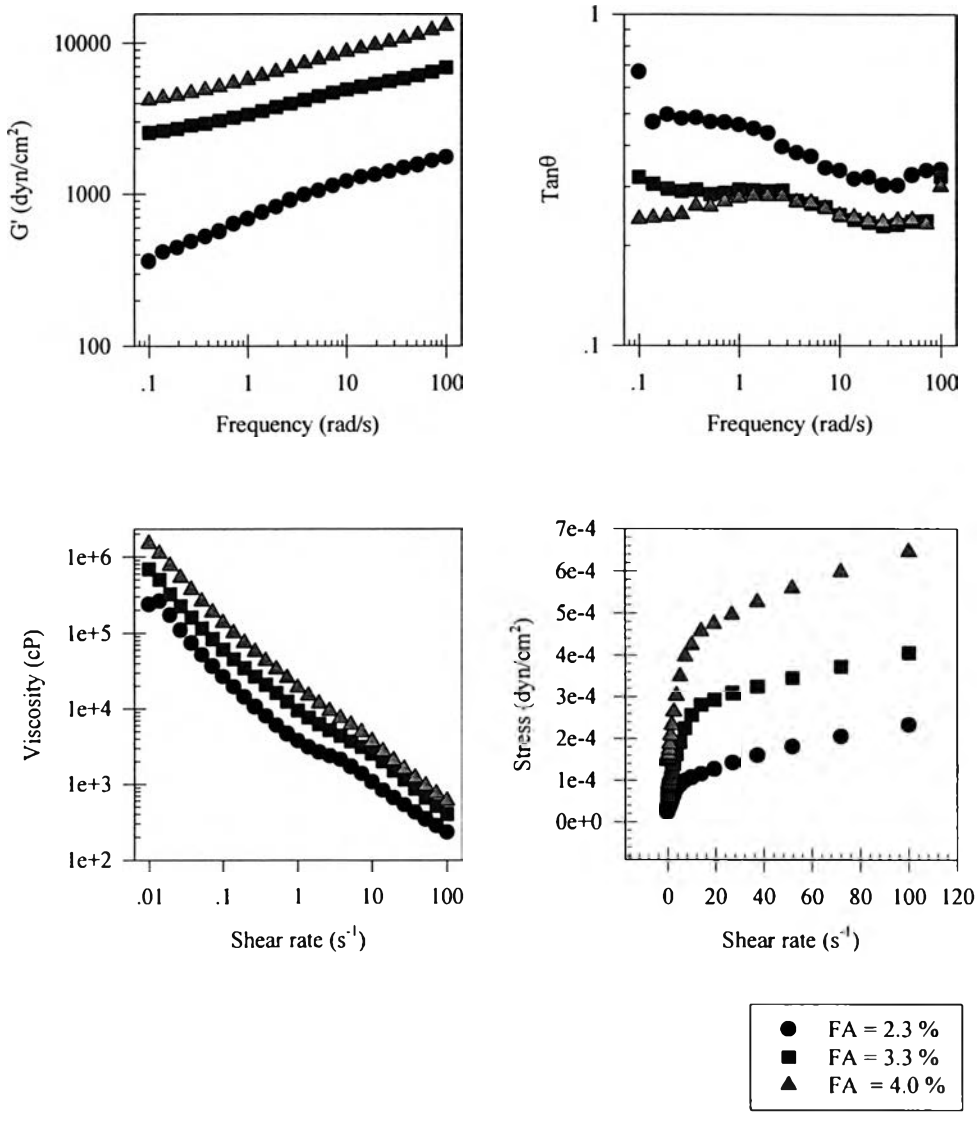
I. 34b Effect of BTAC and FA Concentrations : BTAC/FA = 1.05/y (Figure3.24a-3.25b)

FA conc.	G_N° (ω= 100 rad/s)		tan θ		η_o (γ = 0.01 s^{-1})		τ_y (dyn/cm^2)	
	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2
2.0	5.84E+03		0.3703		8.44E+04		2.10E-04	
2.3	7.98E+03	3.17E+03	0.3269	0.3301	4.45E+05	3.14E+05	2.90E-04	3.00E -04
2.8	9.32E+03		0.3048		8.08E+05		3.40E-04	
3.3	1.04E+04	1.54E+04	0.2911	0.3000	7.21E+05	1.20E+06	2.30E-04	3.00E-04
3.8	1.71E+04		0.2801		1.08E+06		5.00E-04	
4.0	1.60E+04	1.75E+04	0.2514	0.2522	1.00E+06	1.16E+06	4.60E-04	4.80E-04
4.5	2.14E+04		0.2441		1.30E+06		5.00E-04	
5.0	2.31E+04		0.2405		1.39E+06		5.60E-04	
5.5	3.19E+04		0.2202		1.59E+06		6.00E-04	
6.0	4.27E+04		0.2142		2.21E+06		7.20E-04	
6.5	4.37E+04		0.2083		2.31E+06		7.50E-04	
7.0	4.55E+04		0.2089		2.41E+06		7.80E-04	
7.5	4.61E+04		0.1970		2.55E+06		7.70E-04	
8.0	4.63E+04		0.1809		2.57E+06		7.90E-04	

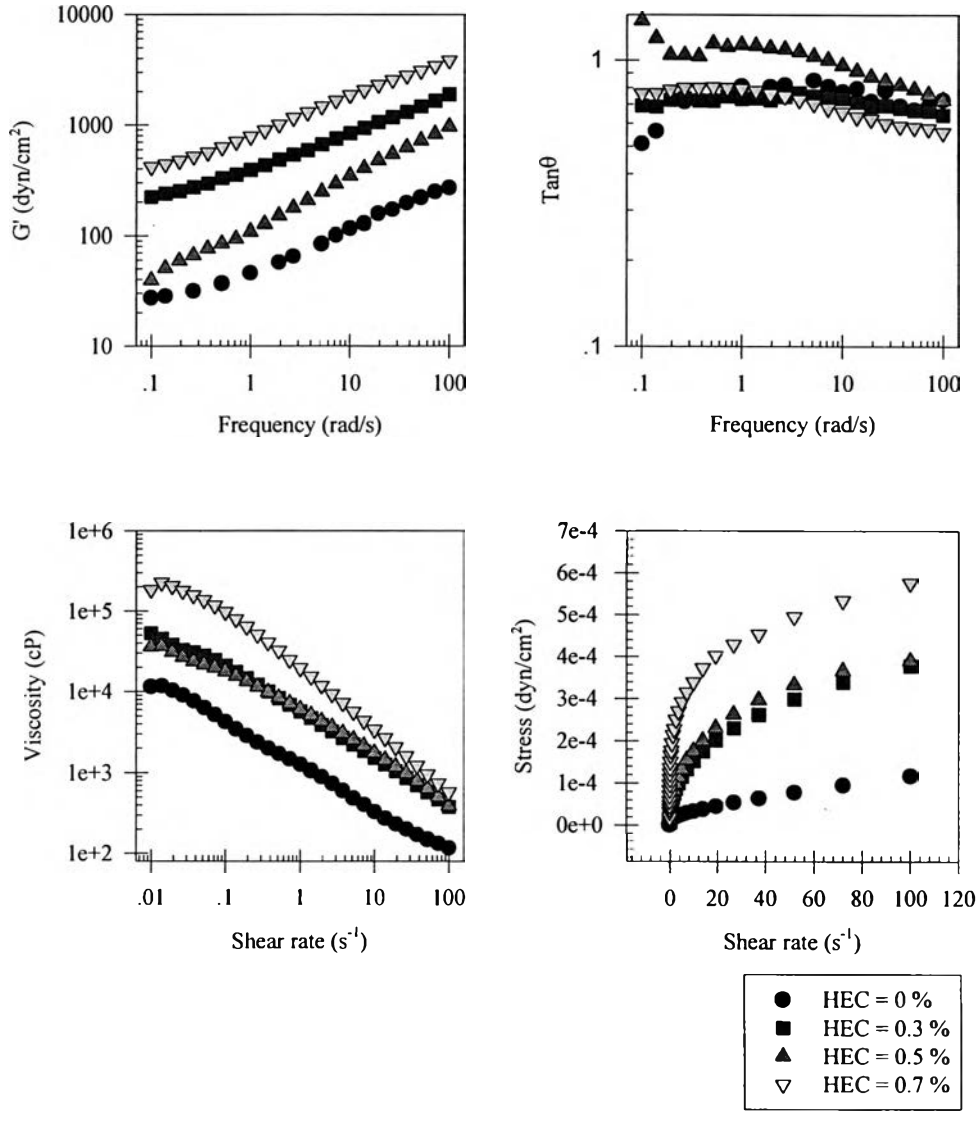
I.35 Emulsion of CTAC/FA = 0.7/y% Systems as a function of FA concentration



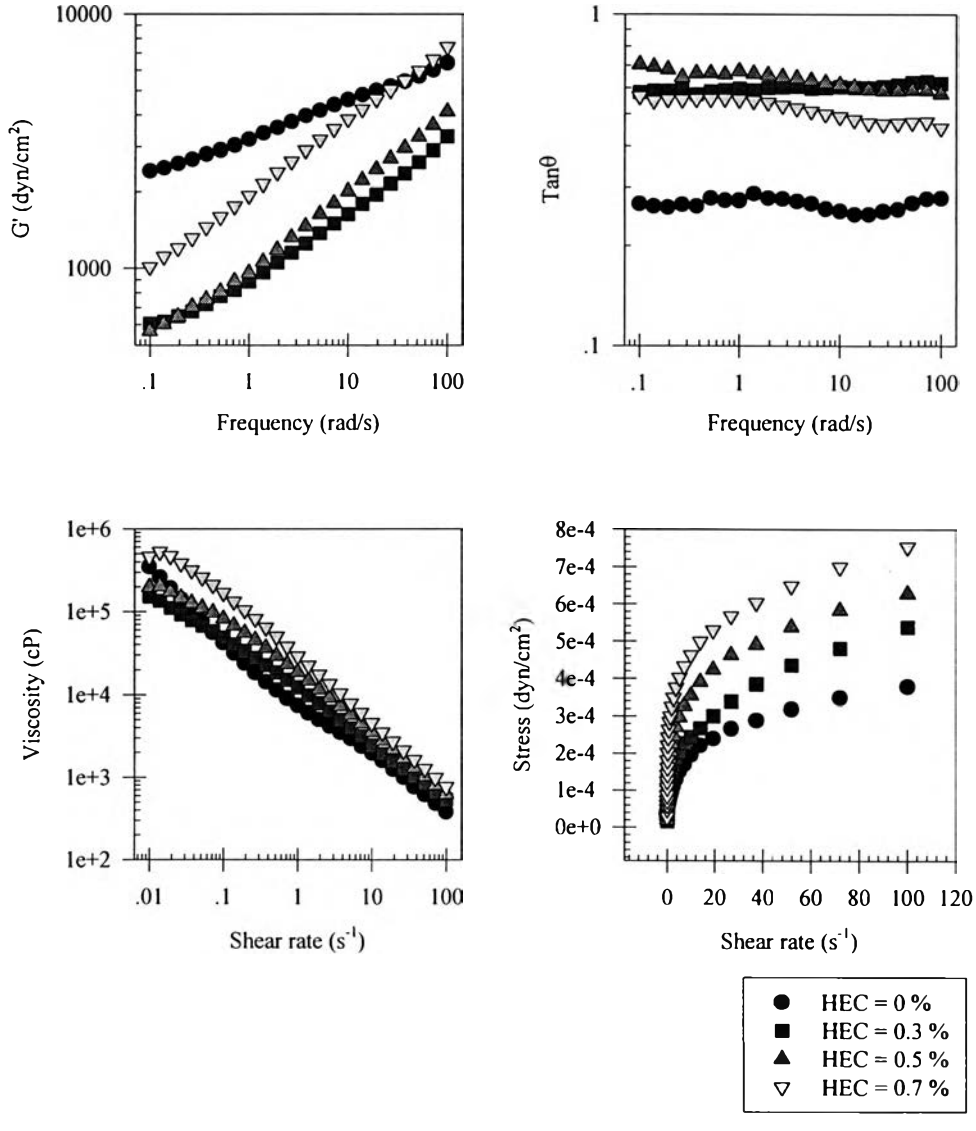
I.36 Emulsion of CTAC/FA = 1.05/y% Systems as a function of FA concentration



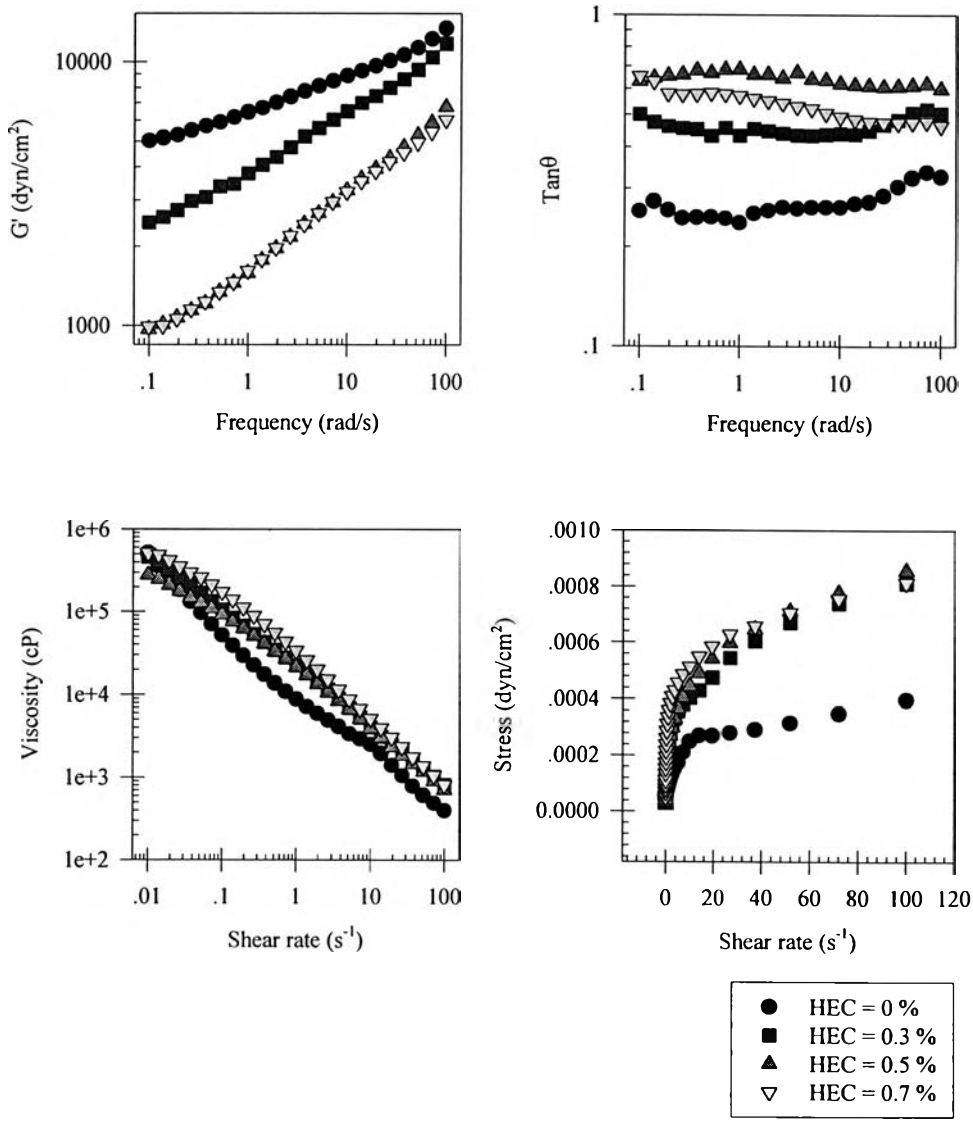
I.37 Emulsion of CTAC/FA/HEC = 0.7/2.3/Z% Systems as a function of HEC concentration



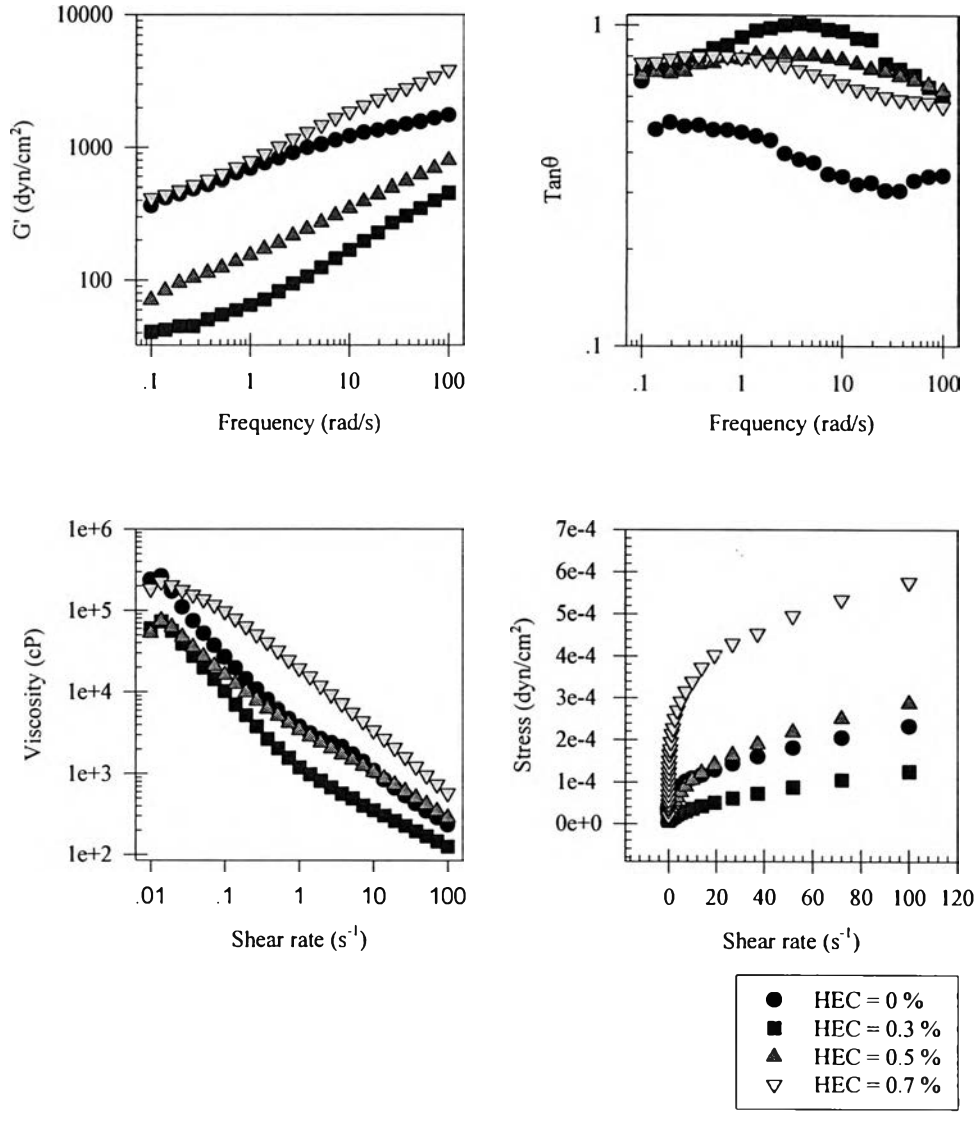
I.38 Emulsion of CTAC/FA/HEC = 0.7/3.3/Z% Systems as a function of HEC concentration



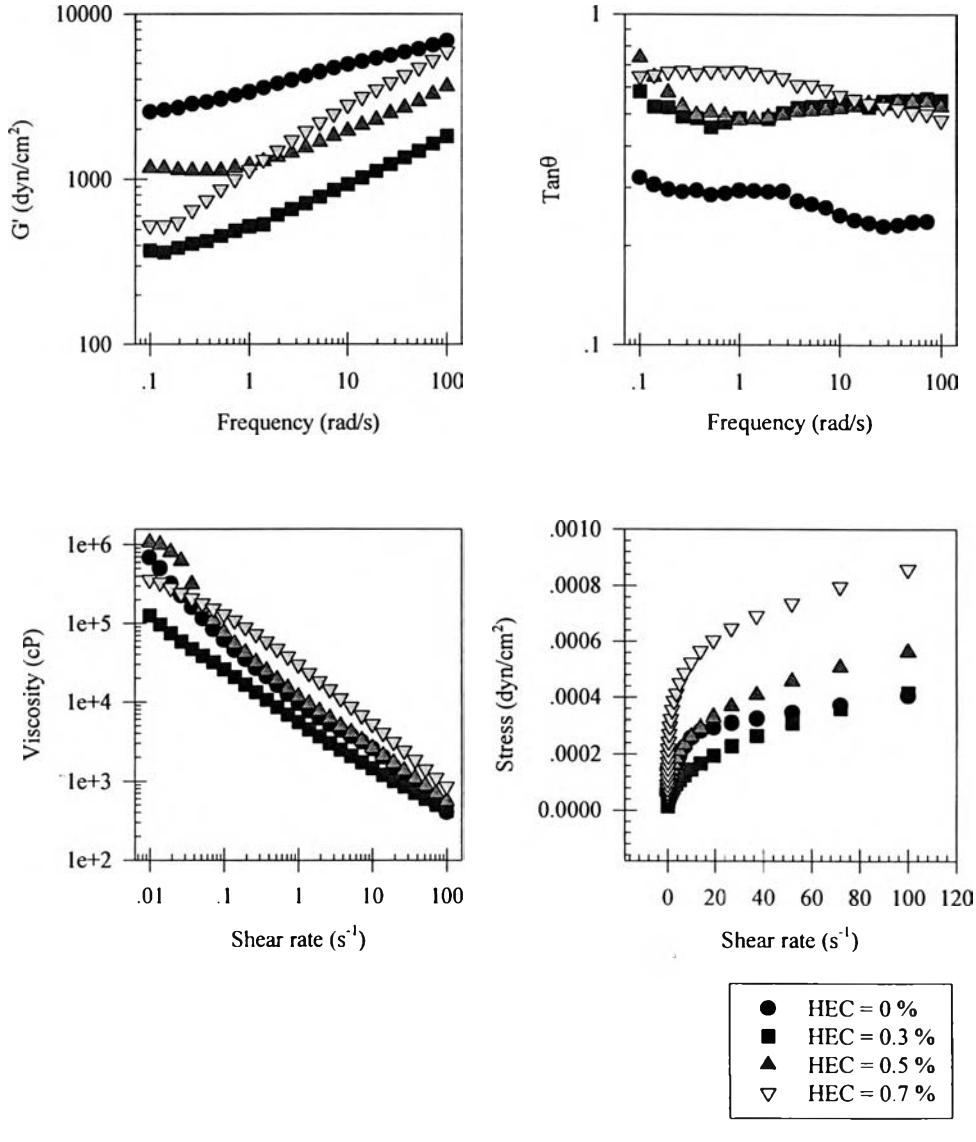
I.39 Emulsion of CTAC/FA/HEC = 0.7/4.0/Z% Systems as a function of HEC concentration



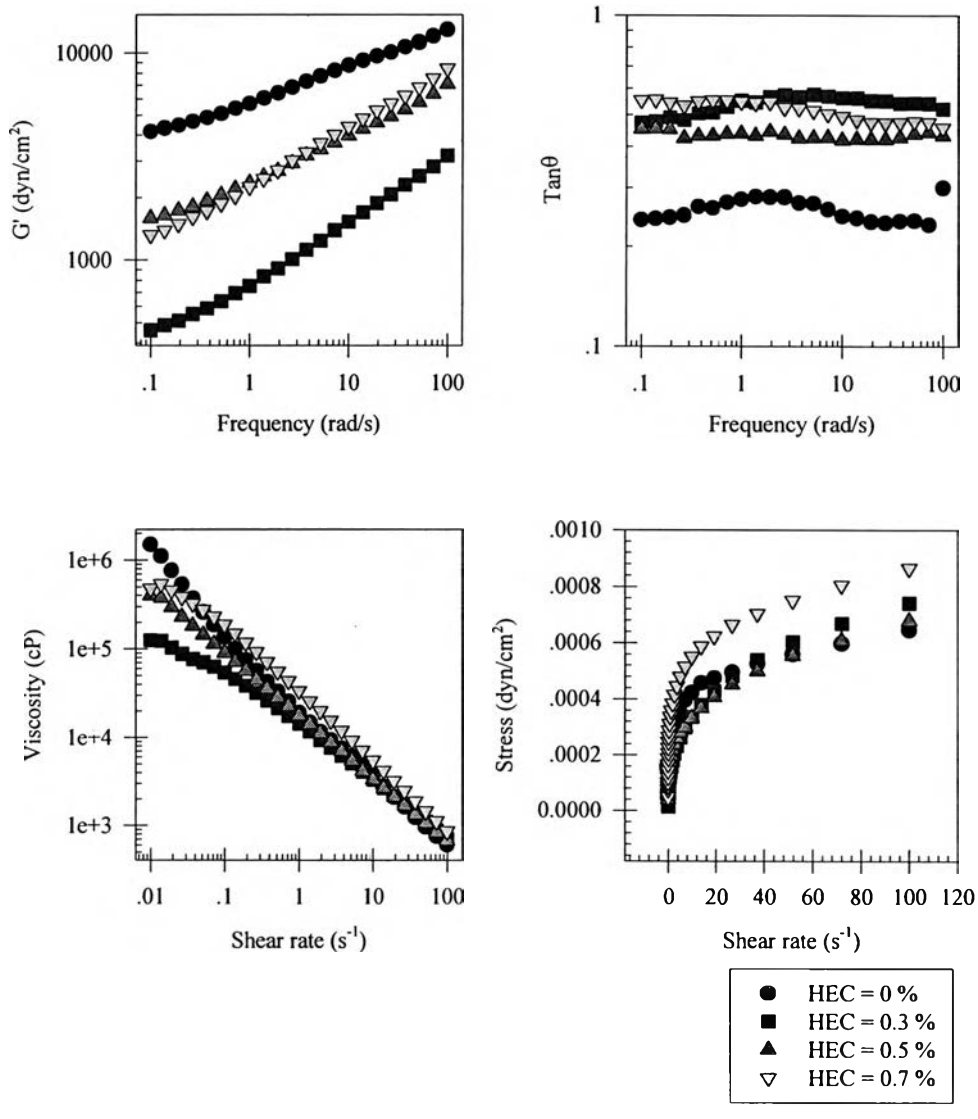
I.40 Emulsion of CTAC/FA/HEC = 1.05/2.3/Z% Systems as a function of HEC concentration



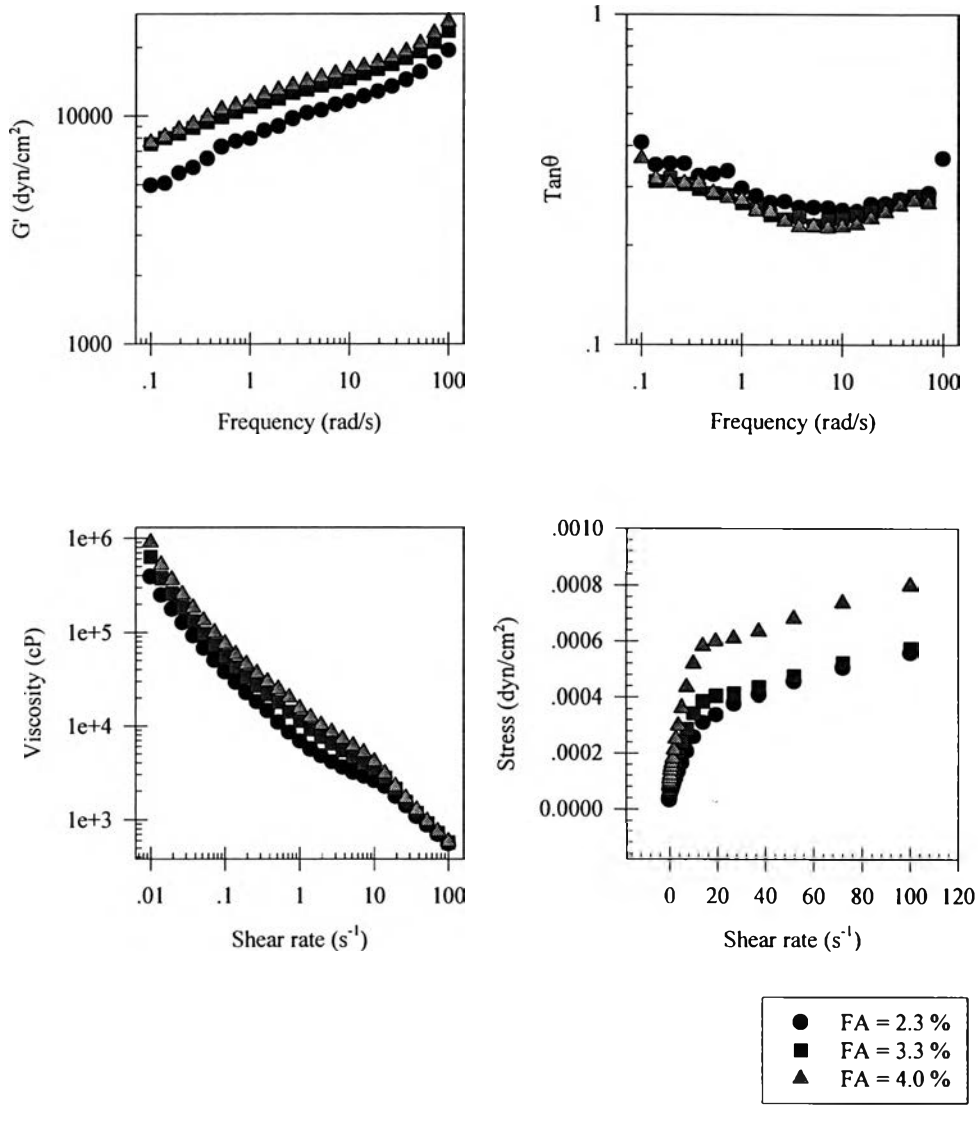
I.41 Emulsion of CTAC/FA/HEC = 1.05/3.3/Z% Systems as a function of HEC concentration



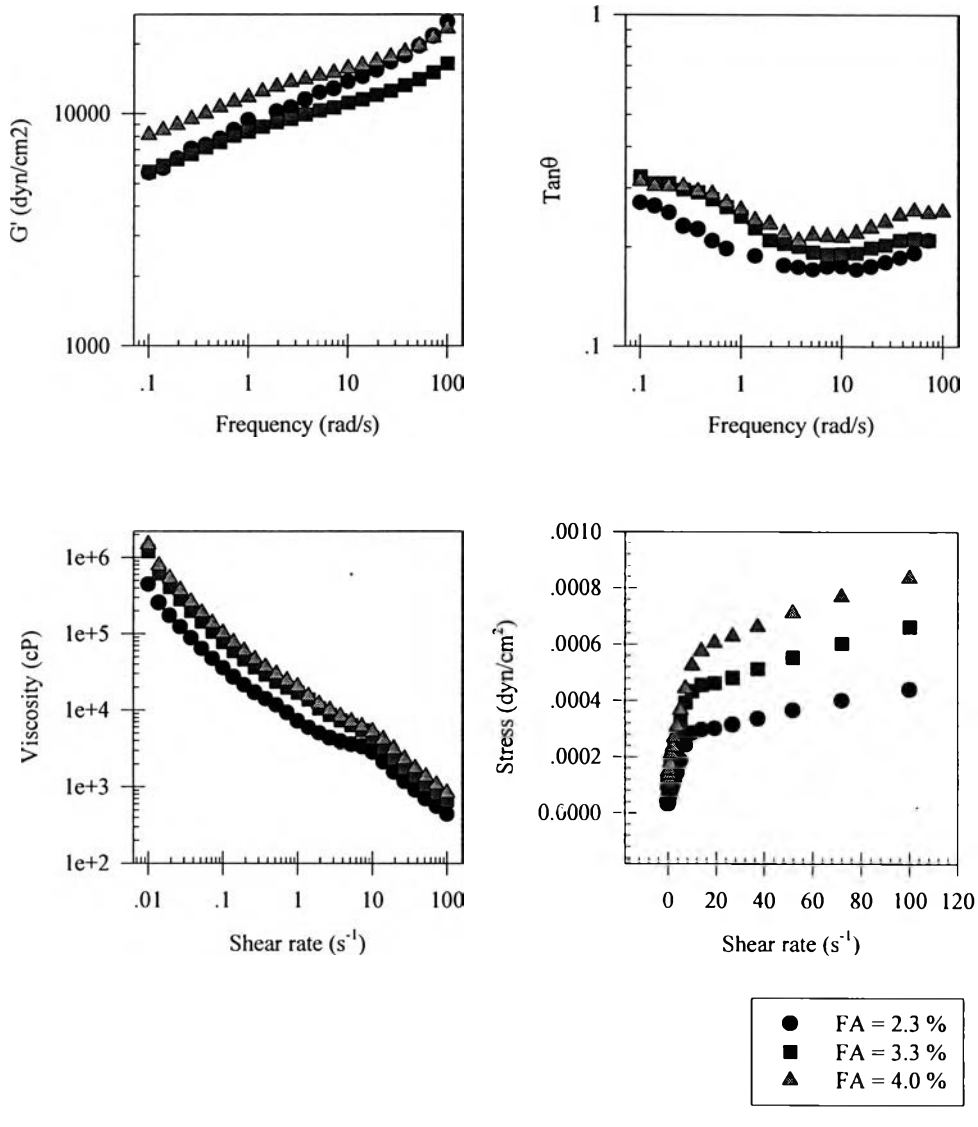
I.42 Emulsion of CTAC/FA/HEC = 1.05/4.0/Z% Systems as a function of HEC concentration



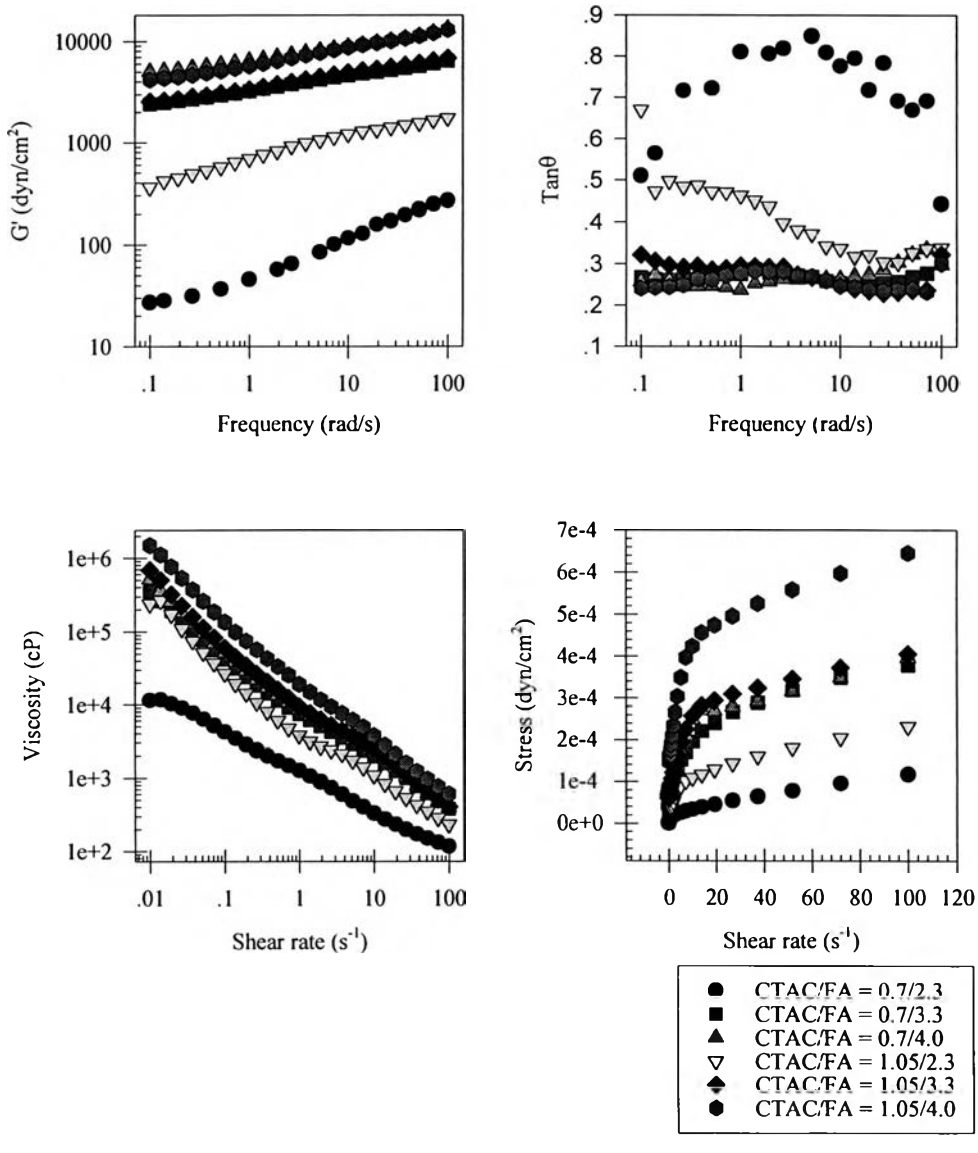
I.43 Emulsion of BTAC/FA = 0.7/y% Systems as a function of FA concentration



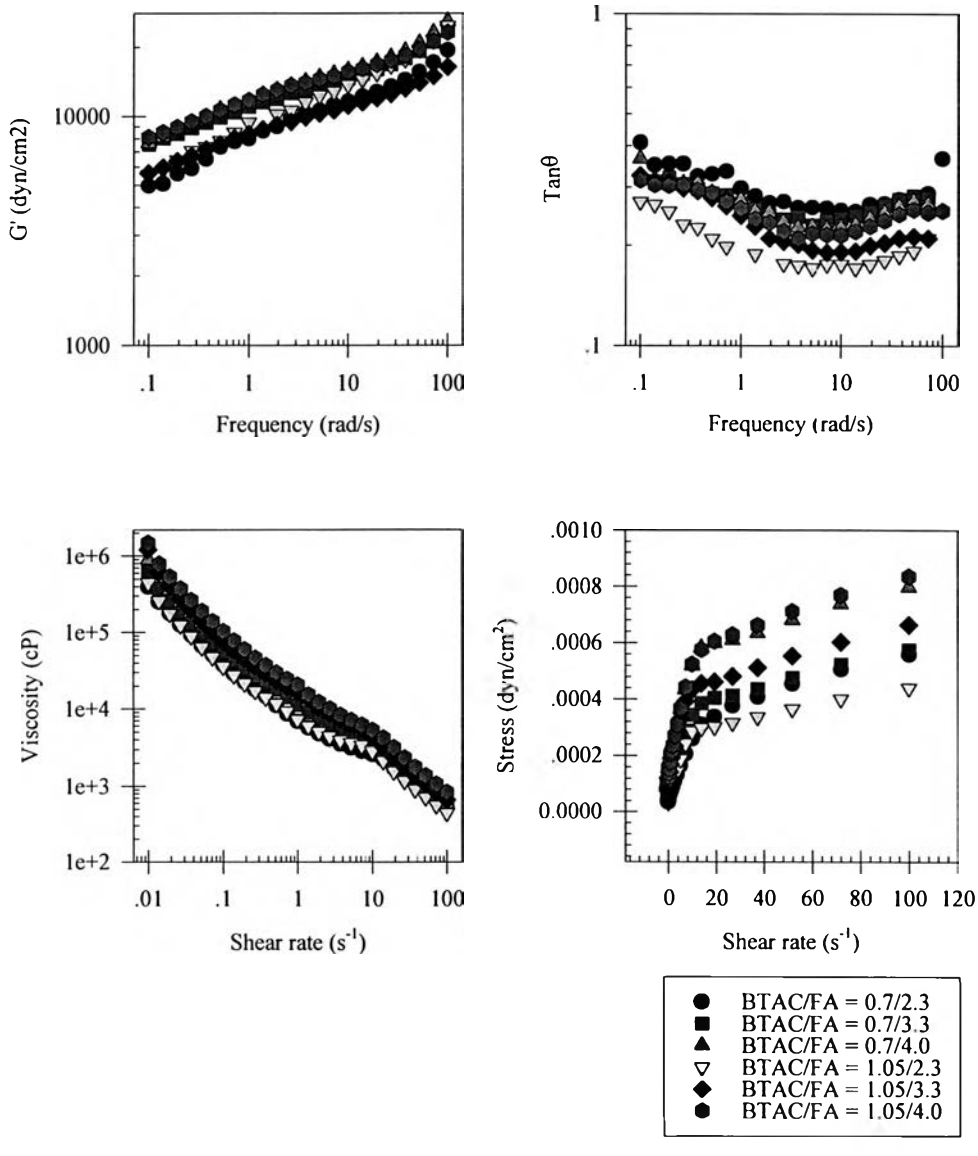
I.44 Emulsion of BTAC/FA = 1.05/y% Systems as a function of FA concentration



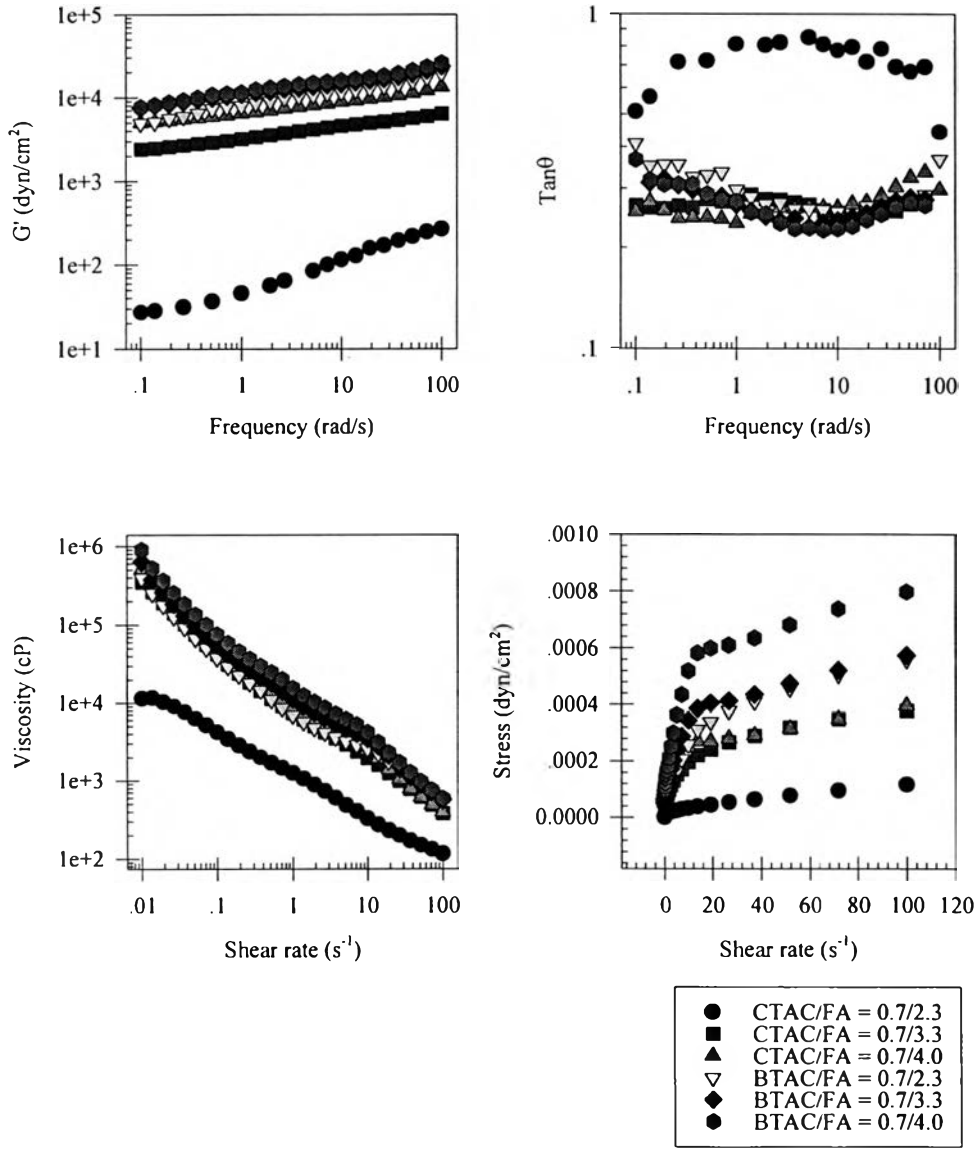
I.45 Emulsion of CTAC/FA = 0.7/y, 1.05/y% Systems as a function of CTAC and FA concentration



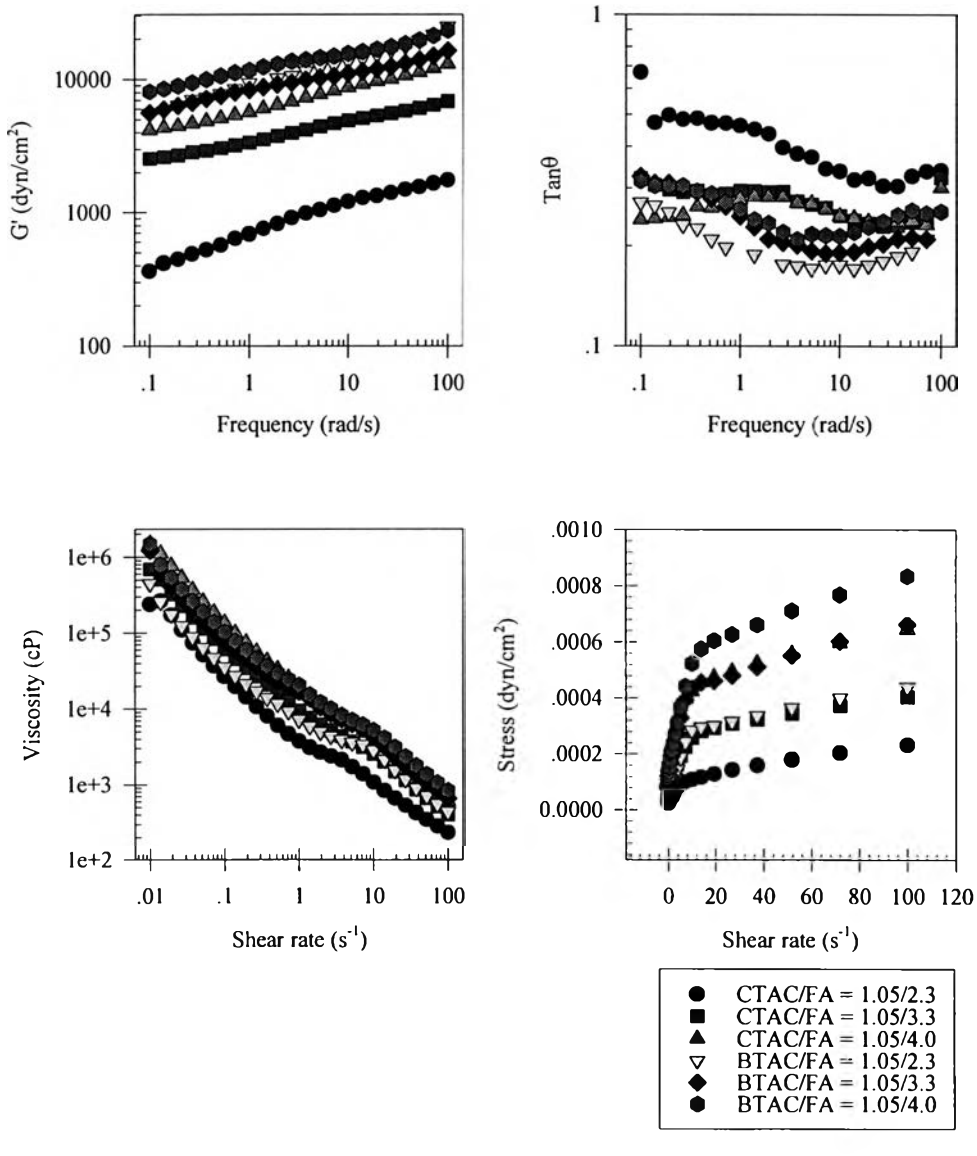
I.46 Emulsion of BTAC/FA = 0.7/y, 1.05/y% Systems as a function of BTAC and FA concentration



I.47 Emulsion of CTAC/FA = 0.7/y, BTAC/FA = 0.7/y% Systems as a function of type of cationic surfactant



I.48 Emulsion of CTAC/FA = 1.05/y, BTAC/FA = 1.05/y% Systems as a function of type of cationic surfactant



APPENDIX II

Optical Data

Each sample was placed on a glass slide and covered by the cover glass. The specimen was then placed on the objective lens in order to measure the structure of emulsion. The measurements were performed in transmitted-light mode using confocal option to reconstruct an image. The magnification is 1000 times, 10 magnification for the objective lens and 100 magnification for eyes piece lens. The picture were taken at the pin hole of 10 and enlargement of 7.

Formulations	File number	
	1 day	7 day
1. CTAC	-	CTAC1, CTAC2
2. CTAC/FA systems		
• 0.7/2.0	10720, 107201	70720, 707201
• 0.7/3.3	10733, 107331	70733, 707331
• 0.7/6.0	10760, 107601	70760, 707601
• 0.7/8.0	10780, 107801	70780, 707801
• 1.05/2.0	-	710520, 7105201
• 1.05/3.3	-	710533, 7105331
• 1.05/6.0	-	710560, 7105601
• 1.05/8.0	-	710580, 7105801
3. CTAC/FA/HEC systems		
• 0.7/3.3/0.05	P0733005	P-733005
• 0.7/3.3/0.075	P0733007	P-733007
• 0.7/3.3/0.1	P073301, P0733011	P7073301
• 0.7/3.3/0.3	P073303, P0733031	P7073303
• 0.7/3.3/0.7	P073307, P0733071	P7073307
• 0.7/3.3/1.0	P073310, P0733101	P7073310

Formulations	File number	
	1 day	7 day
1. BTAC	-	-
2. BTAC/FA systems		
• 0.7/2.0	B10720, B107201	B70720, B707201
• 0.7/3.3	B10733, B107331	B70733, B707331
• 0.7/6.0	B10760, B107601	B70760, B707601
• 0.7/8.0	B10780, B107801	B70780, B707801
• 1.05/2.0	-	B710520, B7105201
• 1.05/3.3	-	B710533, B7105331
• 1.05/6.0	-	B710560, B7105601
• 1.05/8.0	-	B710580, B7105801
3. CTAC/FA/modified HEC systems		
• 0.7/3.3/0.05	M0733005, M7330051	M-733005, M7733005
• 0.7/3.3/0.075	M0733007, M7330071	M-733007, M7733007
• 0.7/3.3/0.1	M073301, M0733011	M7073301, M7733011
• 0.7/3.3/0.3	M073303, M0733031	M7073303, M7733031
• 0.7/3.3/0.7	M073307, M0733071	M7073307, M7733071
• 0.7/3.3/1.0	M073310, M0733101	M7073310, M7733101

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