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APPENDICES

Appendix 1- Date of investigation of the properties of latex samples and details of the prepared samples

- Properties Investigated: i. MST
 ii. VFA No:
 iii. Alkalinity
 vi. Viscosity
 v. pH
 vi. Conductivity

Batch	Sample code	Date of investigate the properties.
1	S 1,0	21-10-2009, 24-10-2009, 27-10-2009, 30-10-2009, 02-11-2009, 05-11-2009, 08-11-2009, 11-11-2009, 16-11-2009
	S 1,1	21-10-2009, 24-10-2009, 27-10-2009, 30-10-2009, 02-11-2009, 05-11-2009, 08-11-2009, 11-11-2009, 16-11-2009
	S 1,2	21-10-2009, 24-10-2009, 27-10-2009, 30-10-2009, 02-11-2009, 05-11-2009, 08-11-2009, 11-11-2009, 16-11-2009
	S 1,3	21-10-2009, 24-10-2009, 27-10-2009, 30-10-2009, 02-11-2009, 05-11-2009, 08-11-2009, 11-11-2009, 16-11-2009
	S 1,4	21-10-2009, 24-10-2009, 27-10-2009, 30-10-2009, 02-11-2009, 05-11-2009, 08-11-2009, 11-11-2009, 16-11-2009
2	S 2,0	02-12-2009, 05-12-2009, 09-12-2009, 12-12-2009, 15-12-2009, 18-12-2009, 21-12-2009, 24-12-2009, 28-12-2009
	S 2,1	02-12-2009, 05-12-2009, 09-12-2009, 12-12-2009, 15-12-2009, 18-12-2009, 21-12-2009, 24-12-2009, 28-12-2009
	S 2,2	02-12-2009, 05-12-2009, 09-12-2009, 12-12-2009, 15-12-2009, 18-12-2009, 21-12-2009, 24-12-2009, 28-12-2009
	S 2,3	02-12-2009, 05-12-2009, 09-12-2009, 12-12-2009, 15-12-2009, 18-12-2009, 21-12-2009, 24-12-2009, 28-12-2009
	S 2,4	02-12-2009, 05-12-2009, 09-12-2009, 12-12-2009, 15-12-2009, 18-12-2009, 21-12-2009, 24-12-2009, 28-12-2009

Appendix 2 – Effect of Aeration on the properties upon maturation

Appendix 2- 1.1 Response to MST for 1st batch of latex

Maturity (days)	Mechanical Stability Time (seconds)				
	Sample S1,0	Sample S1,1	Sample S1,2	Sample S1,3	Sample S1,4
2	65	65	65	65	65
5	170	220	250	270	480
9	300	420	420	550	750
12	520	620	685	720	1020
15	685	780	875	980	1250
18	880	1000	1020	1200	1440
21	980	1100	1240	1320	1550
24	1095	1250	1380	1430	1600
28	1200	1380	1480	1550	1600

Appendix 2- 1.2 Response to MST for 2nd batch of latex

Maturity (days)	Mechanical Stability Time (seconds)				
	Sample S1,0	Sample S1,1	Sample S1,2	Sample S1,3	Sample S1,4
2	70	70	70	70	70
5	175	220	260	285	460
9	305	420	445	540	740
12	500	600	660	710	890
15	660	740	850	920	1050
18	835	945	1020	1045	1220
21	950	1100	1120	1200	1350
24	1000	1190	1250	1320	1460
28	1100	1300	1360	1440	1480

Appendix 2- 2.1 Response to VFA No for 1st batch of latex

Maturity (days)	Volatile Fatty Acid Number (VFA No.)				
	Sample S1,0	Sample S1,1	Sample S1,2	Sample S1,3	Sample S1,4
2	0.0175	0.0175	0.0175	0.0175	0.0175
5	0.0191	0.0201	0.0214	0.0251	0.0188
9	0.0226	0.0248	0.0264	0.0281	0.0213
12	0.0311	0.0328	0.0333	0.0336	0.0290
15	0.0335	0.0327	0.0370	0.0344	0.0324
18	0.0343	0.0337	0.0333	0.0339	0.0342
21	0.0366	0.0374	0.0370	0.0341	0.0347
24	0.0379	0.0388	0.0372	0.0401	0.0418
28	0.0395	0.0390	0.0379	0.0422	0.0415

Appendix 2- 2.2 Response to VFA No. for 2nd batch of latex

Maturity (days)	Volatile Fatty Acid Number (VFA No.)				
	Sample S1,0	Sample S1,1	Sample S1,2	Sample S1,3	Sample S1,4
2	0.0133	0.0133	0.0133	0.0133	0.0133
5	0.0140	0.0137	0.0138	0.0145	0.0135
9	0.015	0.0151	0.0162	0.0180	0.0196
12	0.0165	0.0169	0.0180	0.0186	0.208
15	0.0199	0.0207	0.0237	0.0255	0.0271
18	0.0236	0.0250	0.0259	0.0285	0.0322
21	0.0290	0.0305	0.0322	0.0334	0.0346
24	0.0310	0.0320	0.0336	0.0266	0.0375
28	0.0342	0.0348	0.0375	0.0393	0.0401

Appendix 2- 3.1 Response to Alkalinity for 1st batch of latex

Maturity (days)	Alkalinity				
	Sample S1,0	Sample S1,1	Sample S1,2	Sample S1,3	Sample S1,4
2	0.680	0.680	0.680	0.680	0.680
5	0.669	0.610	0.609	0.619	0.599
9	0.665	0.612	0.600	0.598	0.600
12	0.657	0.603	0.597	0.597	0.591
15	0.652	0.599	0.602	0.603	0.599
18	0.657	0.599	0.598	0.586	0.548
21	0.649	0.550	0.569	0.565	0.498
24	0.653	0.531	0.545	0.519	0.490
28	0.653	0.649	0.550	0.490	0.490

Appendix 2- 3.2 Response to Alkalinity for 2nd batch of latex

Maturity (days)	Alkalinity				
	Sample S1,0	Sample S1,1	Sample S1,2	Sample S1,3	Sample S1,4
2	0.570	0.570	0.570	0.570	0.570
5	0.571	0.567	0.552	0.550	0.547
9	0.568	0.559	0.547	0.548	0.515
12	0.560	0.558	0.545	0.542	0.510
15	0.558	0.549	0.542	0.531	0.501
18	0.550	0.549	0.541	0.524	0.498
21	0.551	0.541	0.540	0.518	0.475
24	0.550	0.534	0.530	0.507	0.461
28	0.548	0.531	0.526	0.500	0.462

Appendix 2- 4.1 Response to Conductivity for 1st batch of latex

Maturity (days)	Conductivity(mS/S)				
	Sample S1,0	Sample S1,1	Sample S1,2	Sample S1,3	Sample S1,4
2	3.61	3.61	3.61	3.61	3.61
5	3.68	3.63	3.62	3.63	3.90
9	3.75	3.73	3.75	4.06	3.90
12	3.71	3.73	3.72	3.74	3.77
15	3.82	3.80	3.91	3.85	3.84
18	3.87	3.86	3.88	3.93	4.17
21	3.91	3.92	3.89	3.95	4.07
24	3.90	3.98	3.90	3.81	4.10
28	3.88	3.82	3.93	4.10	3.98

University of Moratuwa, Sri Lanka.
Appendix 2- 4.2 Response to Conductivity for 2nd batch of latex

Maturity (days)	Conductivity(mS/S)				
	Sample S1,0	Sample S1,1	Sample S1,2	Sample S1,3	Sample S1,4
2	3.61	3.61	3.61	3.61	3.61
5	3.68	3.63	6.62	3.63	3.77
9	3.75	3.73	3.75	3.85	3.84
12	3.71	3.73	3.72	3.74	3.90
15	3.82	3.80	3.91	3.85	3.84
18	3.87	3.86	3.88	3.93	4.08
21	3.91	3.92	3.95	3.95	4.17
24	3.90	3.93	3.96	4.00	4.19
28	3.96	3.98	4.00	4.10	4.16

Appendix 2- 5.1 Response to Viscosity for 1st batch of latex

Maturity (days)	Viscosity(cp)				
	Sample S1,0	Sample S1,1	Sample S1,2	Sample S1,3	Sample S1,4
2	162	162	162	162	162
5	150	148	158	162	162
9	150	150	156	158	164
12	148	152	152	158	160
15	148	150	152	156	156
18	144	144	146	154	160
21	148	148	154	158	164
24	142	148	150	156	156
28	142	142	152	154	158

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Appendix 2- 5.2 Response to Viscosity for 2nd batch of latex

Maturity (days)	Viscosity(cp)				
	Sample S1,0	Sample S1,1	Sample S 1,2	Sample S1,3	Sample S1,4
2	164	164	164	164	164
5	156	158	160	162	164
9	154	156	158	160	162
12	154	154	156	158	160
15	152	152	156	158	160
18	150	152	152	154	156
21	146	150	152	152	156
24	146	148	150	150	156
28	146	148	148	150	152



Appendix 2- 1.1 Response to pH for 1st batch of latex

Maturity (days)	pH				
	Sample S1,0	Sample S1,1	Sample S1,2	Sample S1,3	Sample S1,4
2	10.20	10.20	10.20	10.20	10.20
5	10.48	10.28	10.25	10.25	10.20
9	10.32	10.22	10.50	10.43	10.34
12	11.24	11.18	10.92	10.60	10.68
15	10.35	10.36	10.34	10.36	10.45
18	10.41	10.42	10.48	10.39	10.33
21	10.35	10.48	10.60	10.68	10.34
24	10.36	10.34	10.34	10.33	10.43
28	10.33	10.43	10.44	10.48	10.41

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Appendix 2- 1.1 Response to pH for 2nd batch of latex

Maturity (days)	pH				
	Sample S1,0	Sample S1,1	Sample S 1,2	Sample S1,3	Sample S1,4
2	10.30	10.30	10.30	10.30	10.30
5	10.25	10.25	10.25	10.25	10.20
9	10.24	10.22	10.25	10.20	10.12
12	10.20	10.15	10.20	10.18	10.12
15	10.19	10.15	10.13	10.18	10.10
18	10.20	10.13	10.12	10.14	10.05
21	10.15	10.10	10.10	10.12	10.00
24	10.15	10.10	10.10	10.00	9.95
28	10.12	10.00	9.90	9.95	9.90