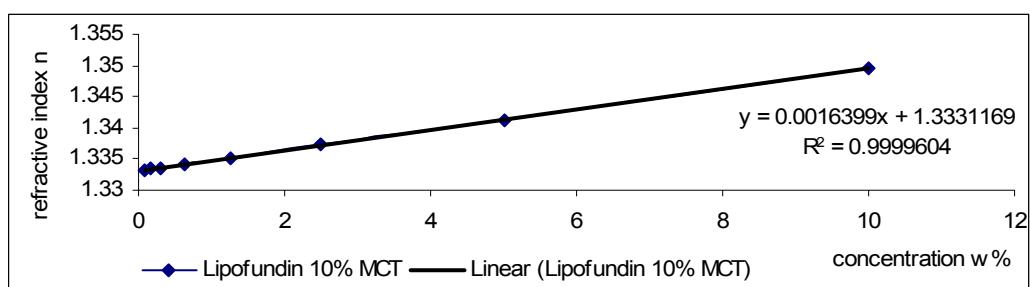


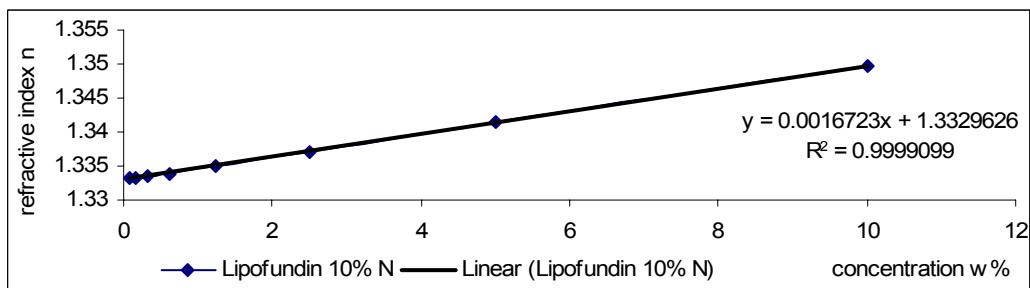
12 Appendix

12.1 Diagrams for the determination of the dn/dc (Chapter 5, Table 5-11, p.123)

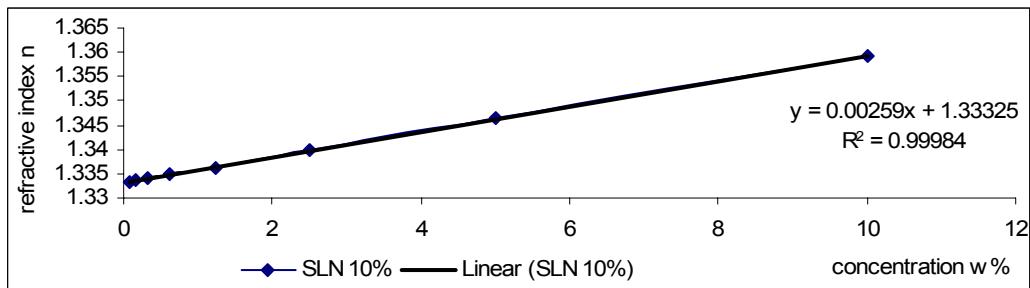
12.1.1 Emulsions and SLN stabilised with lecithin



$$dn/dc = 0.164$$

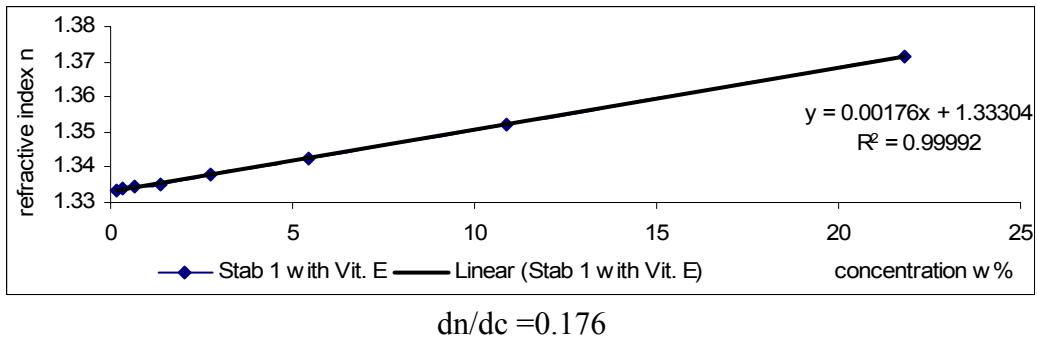
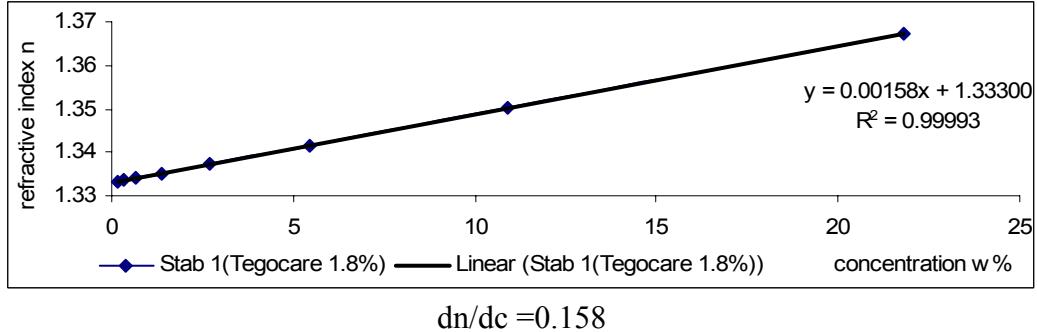
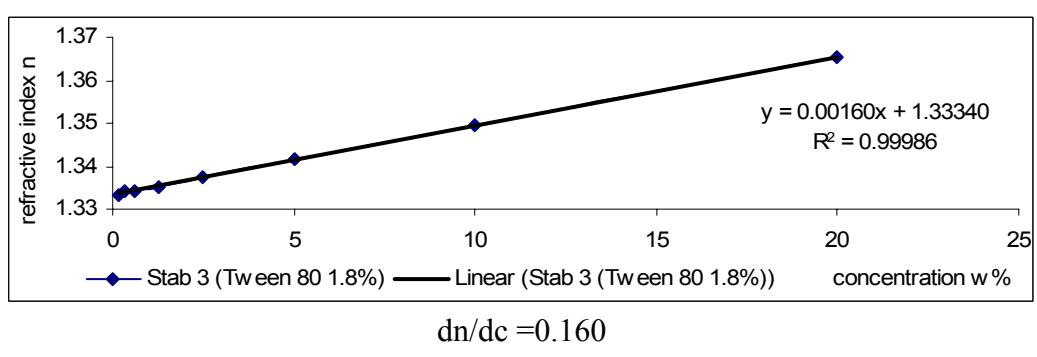
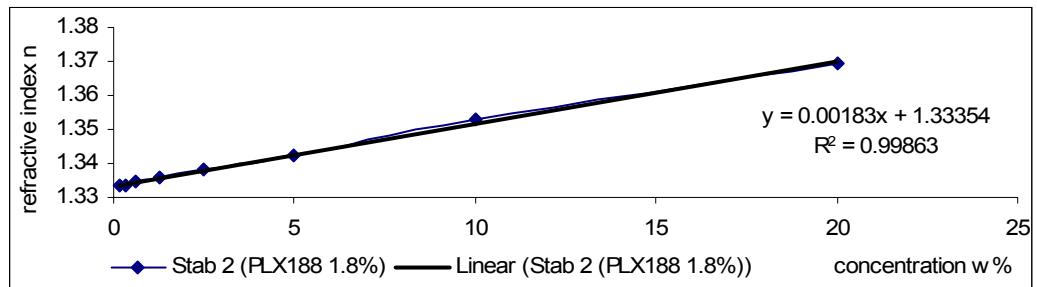


$$dn/dc = 0.167$$

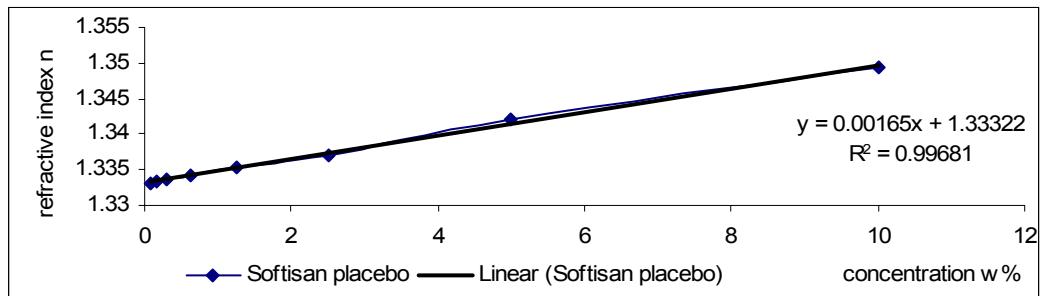


$$dn/dc = 0.259$$

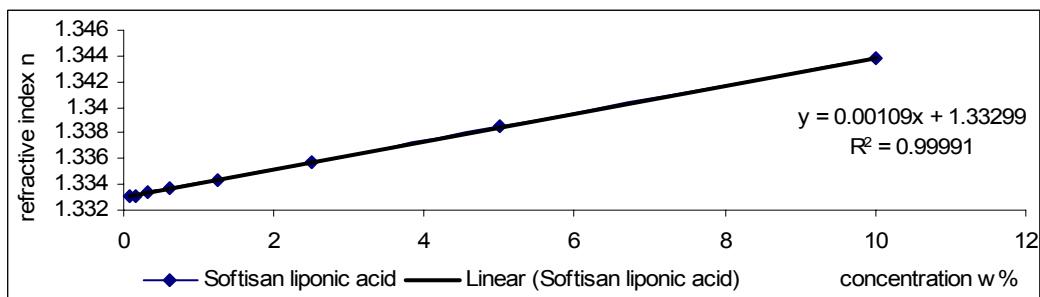
12.1.2 Cetylpalmitate NLC - identical in lipid composition, different in stabiliser of incorporated drugphase with different stabilisers



12.1.3 Softisan SLN - identical in lipid composition – different in incorporated drug

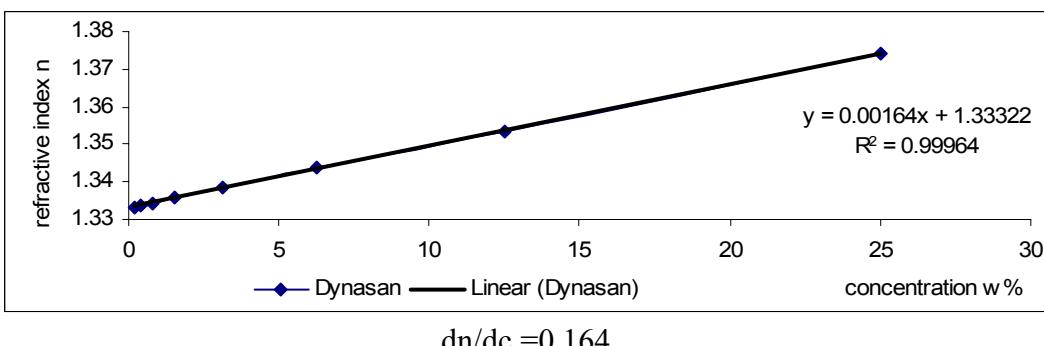
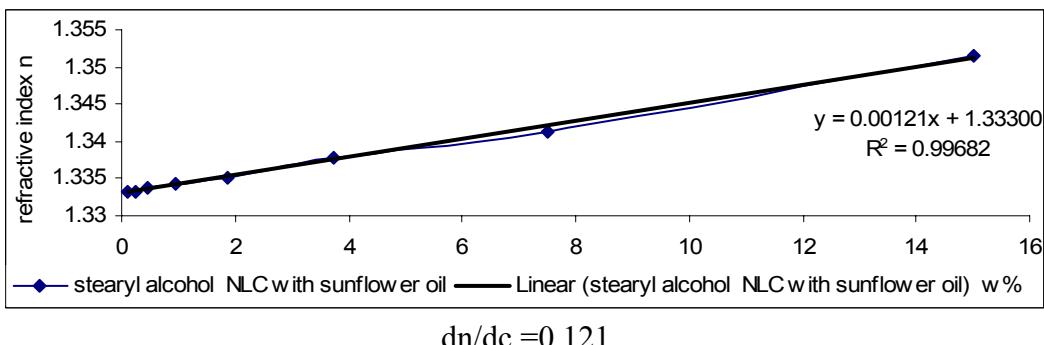
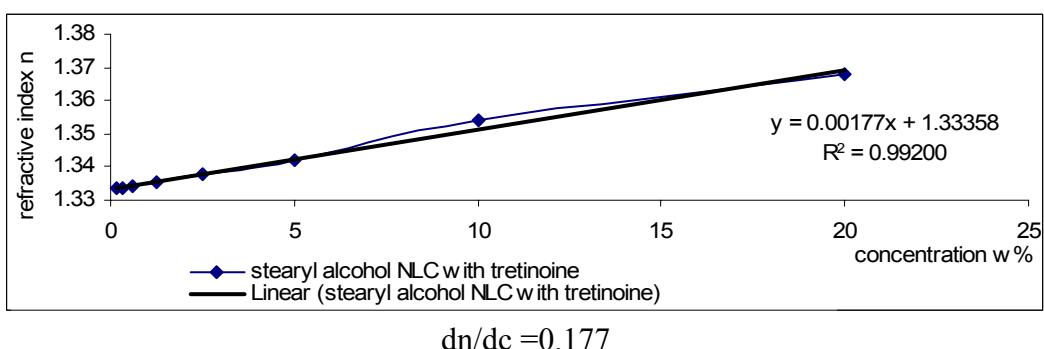
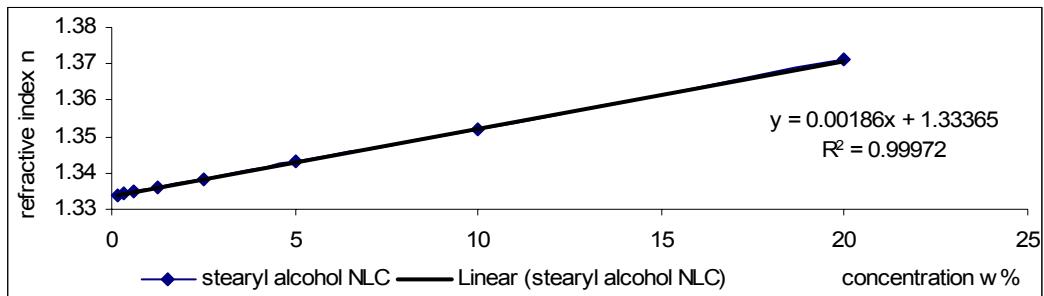


$$dn/dc = 0.165$$

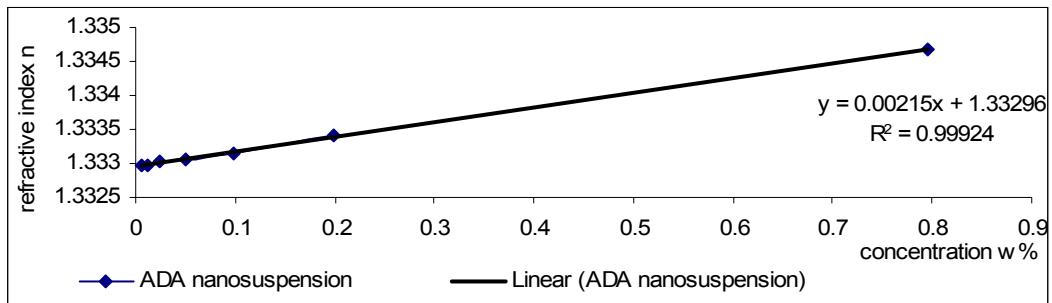


$$dn/dc = 0.109$$

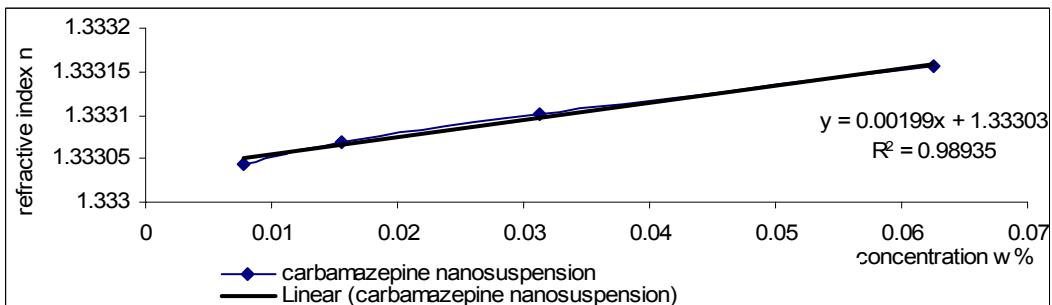
12.1.4 Stearyl alcohol NLC - identical in lipid composition – different in incorporated drug and Dynasan NLC



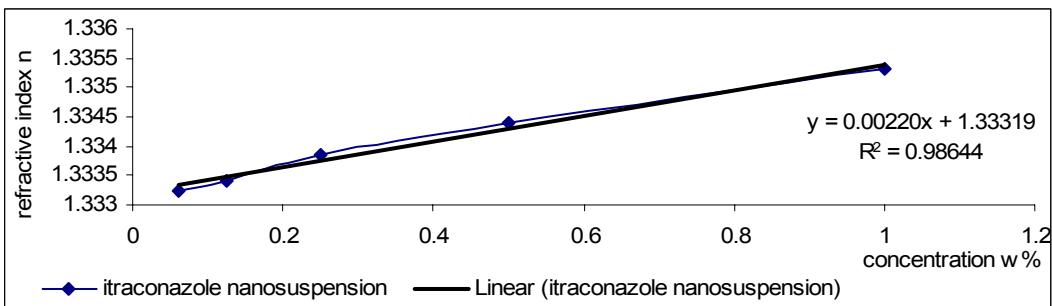
12.1.5 Nanosuspensions – different in drug – similar in stabiliser (Tween 80)



$$dn/dc = 0.215$$

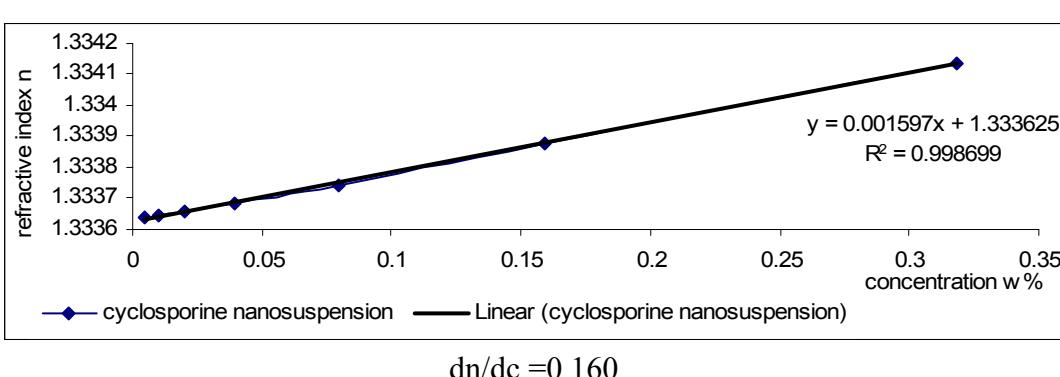
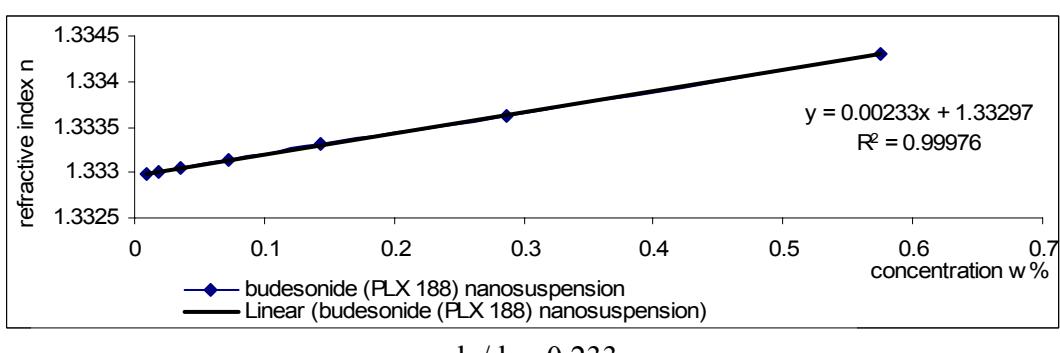
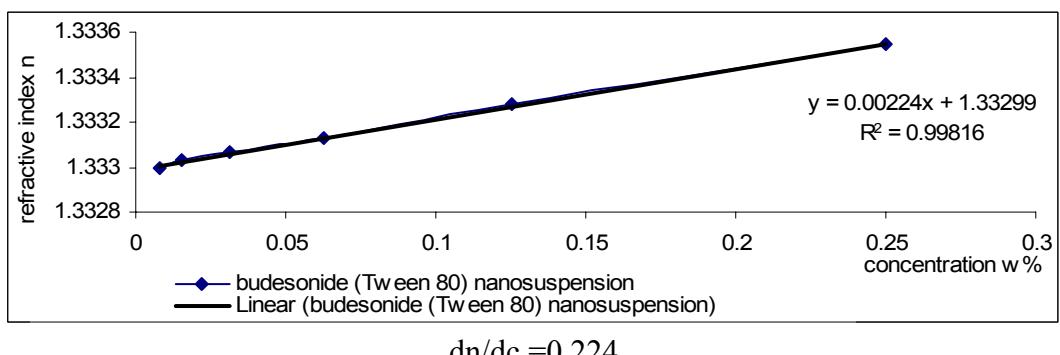
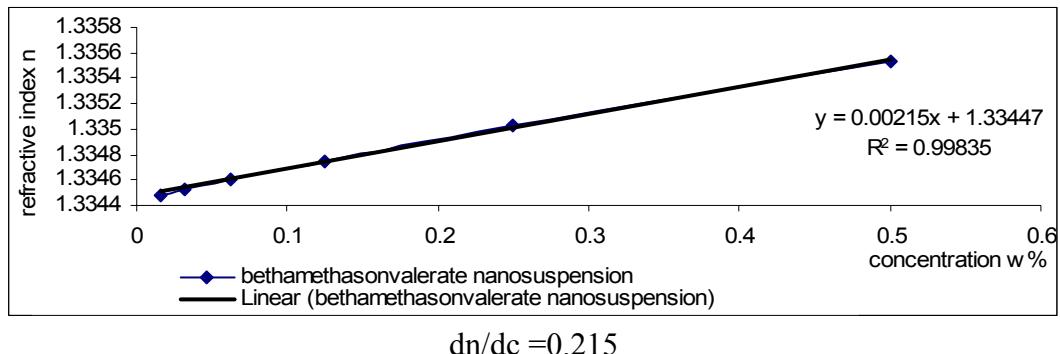


$$dn/dc = 0.199$$

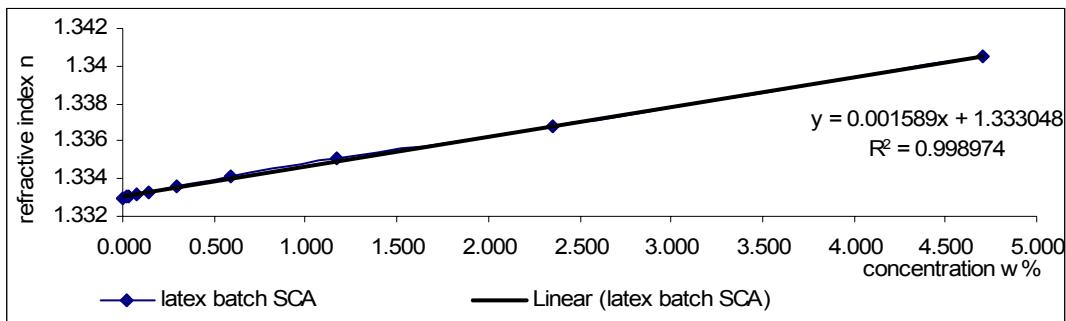


$$dn/dc = 0.220$$

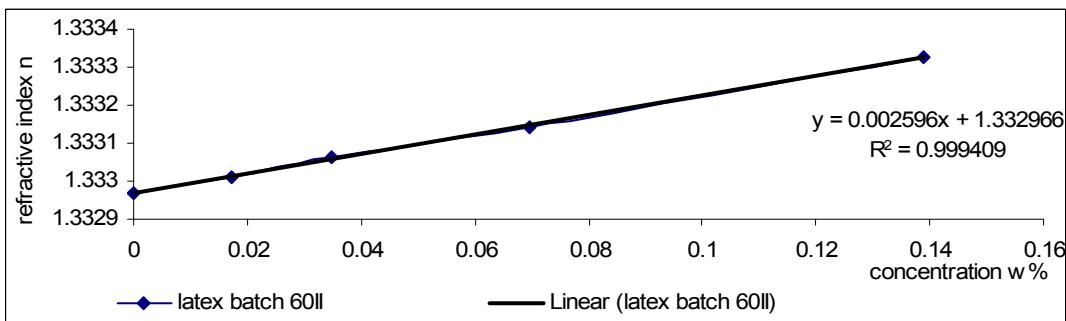
12.1.6 Nanosuspensions – different in drug – similar in stabiliser (PLX 188)



12.1.7 Latex dispersions

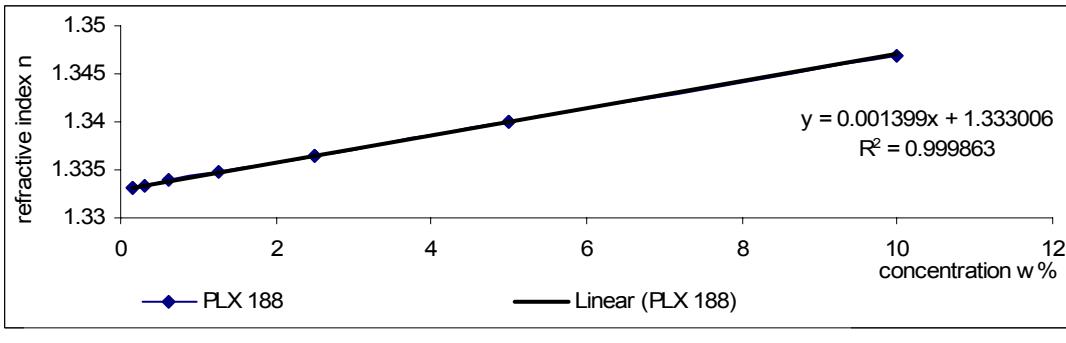


$$dn/dc = 0.159$$

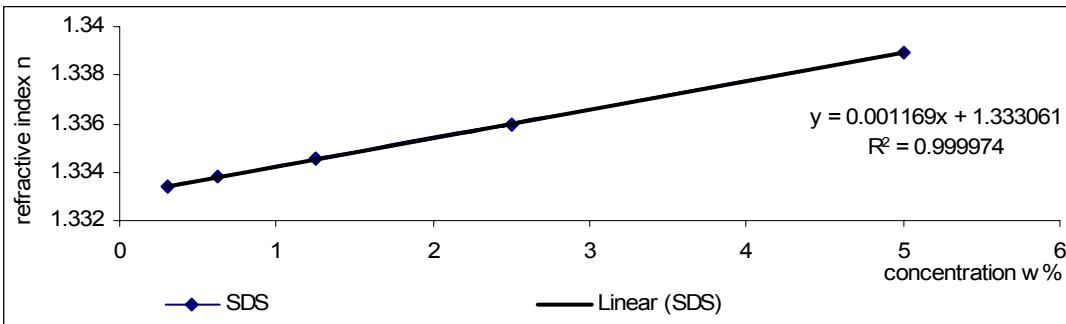


$$dn/dc = 0.260$$

12.1.8 Stabilisers



$$dn/dc = 0.140$$



$$dn/dc = 0.170$$

Liquids were determined directly.

12.2 LD data for cyclosporine nanosuspensions

(Chapter 6.1.2.2. - Stabiliser screening without subsequent dilution)

12.2.1 LD data of the suspensions measured analysed with the optimised LD method

PLX 188 room temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.543	0.686	0.516	0.495
	LD 50	1.161	1.195	1.152	1.051
	LD 90	1.808	1.835	1.83	1.609
	LD 95	2.009	2.045	2.037	1.78
	LD 99	2.686	3.195	9.436	2.348
	LD 100	4.311	4.311	15.65	3.695
d1	LD 10	0.678	0.601	0.678	0.601
	LD 50	1.192	1.184	1.192	1.107
	LD 90	1.832	2.642	1.832	4.202
	LD 95	2.04	4.755	2.04	10.46
	LD 99	3.158	18.4	10.46	17.5
	LD 100	4.311	48.73	28.52	28.52
d7	LD 10	0.897	1.728	0.611	0.594
	LD 50	1.63	3.384	1.2	1.107
	LD 90	2.645	6.781	2.877	3.656
	LD 95	17.46	58.41	5.288	12.37
	LD 99	49.5	67.27	24.08	32.74
	LD 100	67.2	75.1	48.73	50.34
d28	LD 10	1.203	1.732	0.645	0.624
	LD 50	2.161	3.224	1.203	1.173
	LD 90	4.149	11.38	4.594	2.629
	LD 95	13.67	30.32	14.4	6.67
	LD 99	35.6	88.18	37.52	27.16
	LD 100	54.53	154.8	59.86	45.25

PLX 188 cold temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.543	0.686	0.516	0.495
	LD 50	1.161	1.195	1.152	1.051
	LD 90	1.808	1.835	1.83	1.609
	LD 95	2.009	2.045	2.037	1.78
	LD 99	2.686	3.195	9.436	2.348
	LD 100	4.311	4.311	15.65	3.695
d1	LD 10	1.728	2.592	0.506	0.6
	LD 50	3.373	4.452	1.136	1.052
	LD 90	6.615	7.553	1.813	1.813
	LD 95	10.1	12.64	2.7	12.56
	LD 99	16.7	24.95	6.365	18.87
	LD 100	25.98	35.65	9.392	31.31
d7	LD 10	2.643	2.626	0.604	0.574
	LD 50	4.58	4.534	1.187	1.077
	LD 90	8.106	8.711	2.584	2.291
	LD 95	112.3	117.3	4.621	5.823
	LD 99	129.4	140	15.59	24.05
	LD 100	144.4	174	44.39	41.77
d28	LD 10	10.41	2.13	0.624	0.651
	LD 50	65.02	5.977	1.173	1.199
	LD 90	183.5	316.9	2.629	4.551
	LD 95	206.3	408.8	6.67	14.89
	LD 99	244.4	504	27.16	40.71
	LD 100	339.9	705.2	45.25	72.14

Appendix

PLX 407 room temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.752	0.89	0.745	0.707
	LD 50	1.476	1.512	1.442	1.436
	LD 90	2.382	2.379	2.385	2.688
	LD 95	2.646	2.623	2.648	3.04
	LD 99	3.126	3.054	3.128	3.668
	LD 100	4.241	3.863	4.241	5.611
d1	LD 10	0.815	0.817	0.807	0.835
	LD 50	1.472	1.545	1.467	1.602
	LD 90	2.405	2.369	2.391	3.04
	LD 95	2.677	2.607	2.651	3.814
	LD 99	3.161	3.009	3.127	8.813
	LD 100	4.656	3.863	4.241	15.65
d7	LD 10	0.821	0.852	0.798	0.813
	LD 50	1.527	1.642	1.461	1.595
	LD 90	3.112	19.75	2.415	3.11
	LD 95	17.23	31.49	2.705	3.98
	LD 99	28.56	55.5	3.196	9.039
	LD 100	52.63	83.9	4.656	15.65
d28	LD 10	2.315	1.955	0.785	0.863
	LD 50	19.05	3.48	1.644	1.701
	LD 90	1,015	486.7	2.581	3.728
	LD 95	1,166	589.6	2.837	7.425
	LD 99	1,348	716.6	3.267	10.65
	LD 100	1,660	948.3	4.241	15.65

PLX 407 cold temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.752	0.89	0.745	0.707
	LD 50	1.476	1.512	1.442	1.436
	LD 90	2.382	2.379	2.385	2.688
	LD 95	2.646	2.623	2.648	3.04
	LD 99	3.126	3.054	3.128	3.668
	LD 100	4.241	3.863	4.241	5.611
d1	LD 10	0.772	0.786	0.785	0.839
	LD 50	1.485	1.502	1.489	1.594
	LD 90	2.343	2.368	2.34	2.932
	LD 95	2.579	2.609	2.575	3.541
	LD 99	2.957	3.021	2.942	7.903
	LD 100	3.863	3.863	3.863	15.65
d7	LD 10	0.806	0.734	0.859	0.832
	LD 50	1.508	1.389	1.482	1.581
	LD 90	2.369	2.329	2.23	2.915
	LD 95	2.608	2.602	2.425	3.534
	LD 99	3.02	3.09	2.774	8.06
	LD 100	3.863	4.241	3.519	14.26
d28	LD 10	2.279	0.994	0.805	0.862
	LD 50	8.738	2.469	1.662	1.75
	LD 90	601.3	144.1	2.599	4.699
	LD 95	775.2	153.7	2.856	8.136
	LD 99	1,004	167.5	3.301	11.25
	LD 100	1,377	194.2	4.241	17.18

Appendix

Tween 80 room temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.837	0.867	0.807	0.792
	LD 50	1.404	1.462	1.39	1.347
	LD 90	2.223	2.357	2.148	2.347
	LD 95	2.482	2.652	2.4	3.051
	LD 99	2.947	3.17	2.833	4.441
	LD 100	4.057	4.453	4.057	15.65
d1	LD 10	0.841	0.766	0.736	0.768
	LD 50	1.422	1.457	1.435	1.575
	LD 90	2.249	2.397	2.394	3.014
	LD 95	2.5	2.658	2.658	3.75
	LD 99	2.96	3.135	3.148	8.851
	LD 100	4.057	4.241	4.656	15.65
d7	LD 10	0.742	0.762	0.867	0.748
	LD 50	1.474	1.534	1.462	1.561
	LD 90	2.866	11.32	2.357	2.659
	LD 95	13.27	21.67	2.652	3.86
	LD 99	26.32	36.28	3.17	9.078
	LD 100	47.94	57.77	4.453	15.65
d28	LD 10	0.215	0.381	0.779	0.799
	LD 50	2.405	6.307	3.576	1.645
	LD 90	17.89	148.5	163.4	3.311
	LD 95	24.68	167.2	183.9	4.121
	LD 99	38.89	193.8	212.9	5.718
	LD 100	57.77	256.9	282.1	9.819

Tween 80 cold temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.837	0.867	0.807	0.792
	LD 50	1.404	1.462	1.39	1.347
	LD 90	2.223	2.357	2.148	2.347
	LD 95	2.482	2.652	2.4	3.051
	LD 99	2.947	3.17	2.833	4.441
	LD 100	4.057	4.453	4.057	15.65
d1	LD 10	0.867	0.752	0.774	0.755
	LD 50	1.462	1.44	1.568	1.454
	LD 90	2.357	2.384	2.911	2.42
	LD 95	2.652	2.648	3.497	2.709
	LD 99	3.17	3.129	7.866	3.195
	LD 100	4.453	4.241	15.65	4.656
d7	LD 10	0.805	0.782	0.765	0.671
	LD 50	1.477	1.477	1.552	1.338
	LD 90	2.279	2.265	2.896	2.313
	LD 95	2.855	2.466	3.49	2.591
	LD 99	4.229	2.807	8.06	3.083
	LD 100	5.367	3.519	15.65	4.241
d28	LD 10	0.209	0.774	0.724	1.593
	LD 50	1.863	1.575	1.693	2.027
	LD 90	5.547	3.041	5.345	3.513
	LD 95	16.36	3.858	12.5	4.55
	LD 99	23.43	6.186	16.52	14.12
	LD 100	36.24	14.64	24.95	27.39

Appendix

TPGS room temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.762	0.796	0.76	0.738
	LD 50	1.156	1.187	1.124	1.017
	LD 90	2.417	2.262	2.41	2.365
	LD 95	2.709	2.475	2.697	2.633
	LD 99	3.202	2.834	3.194	3.116
	LD 100	4.656	3.519	6.159	4.241
d1	LD 10	0.710	0.735	0.75	0.744
	LD 50	1.154	1.195	1.125	1.017
	LD 90	2.242	2.366	2.418	2.4
	LD 95	2.501	2.642	2.68	2.695
	LD 99	2.931	3.149	3.14	3.205
	LD 100	3.863	4.241	4.241	4.241
d7	LD 10				
	LD 50	0.712	0.693	0.715	0.668
	LD 90	1.239	1.263	1.127	1.073
	LD 95	2.197	2.189	2.192	2.136
	LD 99	2.441	2.43	2.426	2.381
	LD 100	2.876	2.869	2.854	2.821
		4.241	4.241	3.863	3.863
d28	LD 10				
	LD 50	0.772	0.702	0.707	0.676
	LD 90	1.298	1.346	1.135	1.098
	LD 95	2.39	2.162	2.163	2.077
	LD 99	2.633	2.399	2.397	2.284
	LD 100	3.064	2.831	2.827	2.613

TPGS cold temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.762	0.796	0.76	0.738
	LD 50	1.156	1.187	1.124	1.017
	LD 90	2.417	2.262	2.41	2.365
	LD 95	2.709	2.475	2.697	2.633
	LD 99	3.202	2.834	3.194	3.116
	LD 100	4.656	3.519	6.159	4.241
d1	LD 10	0.731	0.725	0.775	0.746
	LD 50	1.147	1.185	1.065	1.017
	LD 90	2.203	2.355	2.403	2.315
	LD 95	2.442	2.634	2.672	2.551
	LD 99	2.863	3.149	3.351	2.914
	LD 100	3.863	4.241	4.241	3.863
d7	LD 10				
	LD 50	0.738	0.742	0.712	0.666
	LD 90	1.184	1.215	1.108	1.118
	LD 95	2.261	2.255	2.217	2.135
	LD 99	2.514	2.506	2.47	2.382
	LD 100	2.934	2.919	2.898	2.824
		4.241	4.241	4.241	3.863
d28	LD 10				
	LD 50	0.793	0.729	0.710	0.667
	LD 90	1.298	1.357	1.121	1.117
	LD 95	2.398	2.198	2.177	2.114
	LD 99	2.659	2.434	2.412	2.361
	LD 100	3.295	2.859	2.843	2.801

Appendix

SDS room temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.606	0.718	0.549	0.4
	LD 50	1.154	1.197	1.123	0.932
	LD 90	2.071	1.901	1.915	2.422
	LD 95	2.371	2.093	2.058	3.016
	LD 99	2.97	2.389	2.99	3.867
	LD 100	4.241	2.92	4.248	5.479
d1	LD 10	0.606	0.629	0.506	0.473
	LD 50	1.154	1.162	1.117	0.914
	LD 90	2.071	2.163	1.923	2.51
	LD 95	2.371	2.842	2.154	3.654
	LD 99	2.97	4.445	5.125	4.758
	LD 100	5.111	8.164	7.519	7.03
d7	LD 10	0.627	0.592	0.644	0.496
	LD 50	1.217	1.231	1.144	0.993
	LD 90	2.147	5.213	1.95	2.141
	LD 95	2.487	9.13	2.174	3.858
	LD 99	4.516	16.88	6.254	5.948
	LD 100	6.159	22.73	14.863	7.437
d28	LD 10	0.735	63.92	0.647	0.629
	LD 50	1.341	90.17	1.208	1.162
	LD 90	2.22	108.9	2.139	2.163
	LD 95	2.583	113.4	2.416	2.542
	LD 99	3.858	120.8	6.91	5.904
	LD 100	8.164	133.7	14.25	8.734

SDS cold temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.606	0.718	0.549	0.4
	LD 50	1.154	1.197	1.123	0.932
	LD 90	2.071	1.901	1.915	2.422
	LD 95	2.371	2.093	2.058	3.016
	LD 99	2.97	2.389	2.99	3.867
	LD 100	4.241	2.92	4.248	5.479
d1	LD 10	0.562	0.599	0.608	0.4
	LD 50	1.069	1.118	1.026	0.932
	LD 90	1.81	2.027	1.218	1.723
	LD 95	1.981	2.433	2.187	2.847
	LD 99	2.91	4.081	3.711	3.768
	LD 100	4.25	5.611	6.159	6.644
d7	LD 10	0.385	0.619	0.631	0.407
	LD 50	1.301	1.395	1.165	0.98
	LD 90	4.327	6.149	2.076	2.368
	LD 95	6.363	18.57	3.713	3.241
	LD 99	23.23	25.97	4.616	4.758
	LD 100	33.01	51.39	6.769	7.03
d28	LD 10	0.426	0.979	0.646	0.4
	LD 50	1.867	78.49	1.211	0.993
	LD 90	134.4	215.2	2.187	2.879
	LD 95	148.2	239.1	2.52	3.527
	LD 99	169.2	277.4	3.397	4.445
	LD 100	224.8	373.1	7.437	8.164

12.2.2 LD data of the suspensions measured and analysed with the conventional LD method

PLX 188 room temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.687	0.671	0.66	0.662
	LD 50	1.177	1.137	1.169	1.137
	LD 90	2.081	2.068	2.08	2.064
	LD 95	2.307	2.304	2.303	2.298
	LD 99	2.635	2.641	2.631	2.636
	LD 100	3.205	3.205	3.205	3.205
d1	LD 10	0.57	0.58	0.544	0.631
	LD 50	1.126	1.237	1.198	1.286
	LD 90	2.07	2.114	2.113	2.132
	LD 95	2.366	2.366	2.378	2.374
	LD 99	2.879	2.813	2.855	2.809
	LD 100	4.24	3.863	4.241	3.863
d7	LD 10	0.759	0.977	0.746	0.765
	LD 50	1.331	1.404	1.304	1.294
	LD 90	2.043	2.078	2.02	2.027
	LD 95	2.248	2.295	2.221	2.233
	LD 99	2.595	2.653	2.576	2.588
	LD 100	3.206	3.519	3.206	3.206
d28	LD 10	0.965	0.89	1.01	0.973
	LD 50	1.392	1.448	1.422	1.398
	LD 90	2.065	2.025	2.098	2.066
	LD 95	2.267	2.289	2.311	2.27
	LD 99	2.607	4.129	2.656	2.612
	LD 100	3.206	5.61	3.519	3.206

PLX 188 cold temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.687	0.671	0.66	0.662
	LD 50	1.177	1.137	1.169	1.137
	LD 90	2.081	2.068	2.08	2.064
	LD 95	2.307	2.304	2.303	2.298
	LD 99	2.635	2.641	2.631	2.636
	LD 100	3.205	3.205	3.205	3.205
d1	LD 10	0.657	0.601	0.599	0.577
	LD 50	1.124	1.232	1.278	1.235
	LD 90	2.07	2.11	2.137	2.112
	LD 95	2.323	2.364	2.38	2.363
	LD 99	2.719	2.813	2.819	2.81
	LD 100	3.519	3.863	3.863	3.863
d7	LD 10	0.851	0.883	0.737	0.703
	LD 50	1.348	1.424	1.305	1.291
	LD 90	2.067	1.958	2.024	2.012
	LD 95	2.267	2.116	2.23	2.221
	LD 99	2.599	2.384	2.586	2.585
	LD 100	3.206	2.92	3.206	3.206
d28	LD 10	1	0.933	0.991	0.949
	LD 50	1.42	1.381	1.403	1.382
	LD 90	2.094	2.042	2.075	2.062
	LD 95	2.294	2.246	2.279	2.266
	LD 99	2.621	2.599	2.615	2.608
	LD 100	3.206	3.206	3.206	3.206

Appendix

PLX 407 room temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.633	0.595	0.664	0.671
	LD 50	1.269	1.295	1.275	1.279
	LD 90	2.06	2.037	2.056	2.054
	LD 95	2.233	2.204	2.23	2.228
	LD 99	2.509	2.481	2.509	2.507
	LD 100	2.92	2.92	2.92	2.92
d1	LD 10	0.481	0.72	0.086	0.613
	LD 50	1.297	1.286	0.234	1.238
	LD 90	2.017	2.32	1.801	2.048
	LD 95	2.191	2.591	1.955	2.219
	LD 99	2.456	3.066	2.203	2.497
	LD 100	2.92	4.241	2.92	2.92
d7	LD 10	0.736	0.658	0.508	0.409
	LD 50	1.274	1.281	1.245	1.202
	LD 90	2.146	2.23	2.026	2.23
	LD 95	2.379	2.521	2.195	2.496
	LD 99	2.798	3.016	2.461	2.947
	LD 100	3.862	4.241	2.92	4.241
d28	LD 10	0.66	0.81	0.689	0.721
	LD 50	1.307	1.568	1.368	1.401
	LD 90	2.305	2.779	2.411	2.462
	LD 95	2.6	3.155	2.733	2.791
	LD 99	3.108	3.808	3.271	3.35
	LD 100	4.241	5.611	4.656	4.656

PLX 407 cold temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.633	0.595	0.664	0.671
	LD 50	1.269	1.295	1.275	1.279
	LD 90	2.06	2.037	2.056	2.054
	LD 95	2.233	2.204	2.23	2.228
	LD 99	2.509	2.481	2.509	2.507
	LD 100	2.92	2.92	2.92	2.92
d1	LD 10	0.267	0.735	0.609	0.627
	LD 50	1.259	1.281	1.235	1.265
	LD 90	1.973	2.266	2.049	2.028
	LD 95	2.146	2.536	2.219	2.198
	LD 99	2.402	2.995	2.496	2.469
	LD 100	2.92	4.241	2.92	2.92
d7	LD 10	0.738	0.667	0.122	0.651
	LD 50	1.273	1.306	1.306	1.3
	LD 90	2.111	2.288	1.967	2.42
	LD 95	2.34	2.582	2.147	2.74
	LD 99	2.743	3.088	2.46	3.273
	LD 100	3.862	4.241	3.519	4.656
d28	LD 10	0.685	0.84	0.671	0.707
	LD 50	1.348	1.626	1.357	1.506
	LD 90	2.368	2.875	2.422	2.487
	LD 95	2.665	3.272	2.76	2.743
	LD 99	3.182	3.971	3.33	3.156
	LD 100	4.656	5.611	4.656	4.241

Appendix

Tween 80 room temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.654	0.655	0.494	0.586
	LD 50	0.946	1.043	0.932	0.995
	LD 90	1.904	1.645	1.635	1.64
	LD 95	2.297	1.851	1.864	1.861
	LD 99	2.781	2.283	2.298	2.305
	LD 100	3.862	3.862	3.862	3.862
d1	LD 10	0.704	0.686	0.69	0.66
	LD 50	1.078	1.046	1.078	1.054
	LD 90	1.641	1.644	1.637	1.639
	LD 95	1.825	1.836	1.808	1.815
	LD 99	2.195	2.196	2.14	2.154
	LD 100	3.519	3.206	3.206	3.206
d7	LD 10	0.723	0.729	0.737	0.734
	LD 50	1.052	1.04	1.047	1.044
	LD 90	1.657	1.673	1.66	1.666
	LD 95	1.914	1.982	1.965	1.978
	LD 99	2.366	2.457	2.441	2.468
	LD 100	3.519	3.519	3.519	3.862
d28	LD 10	0.67	0.701	0.682	0.679
	LD 50	1.308	1.387	1.313	1.32
	LD 90	2.423	2.526	2.393	2.434
	LD 95	2.874	5.166	2.8	2.869
	LD 99	4.038	6.683	3.78	3.953
	LD 100	6.158	8.147	6.158	6.158

Tween 80 cold temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.654	0.655	0.494	0.586
	LD 50	0.946	1.043	0.932	0.995
	LD 90	1.904	1.645	1.635	1.64
	LD 95	2.297	1.851	1.864	1.861
	LD 99	2.781	2.283	2.298	2.305
	LD 100	3.862	3.862	3.862	3.862
d1	LD 10	0.717	0.72	0.669	0.683
	LD 50	1.09	1.054	1.066	1.051
	LD 90	1.644	1.653	1.637	1.645
	LD 95	1.823	1.896	1.81	1.832
	LD 99	2.181	2.339	2.143	2.189
	LD 100	3.519	3.519	3.206	3.206
d7	LD 10	0.742	0.728	0.736	0.73
	LD 50	1.055	1.039	1.046	1.04
	LD 90	1.658	1.69	1.66	1.684
	LD 95	1.96	2.007	1.965	2.001
	LD 99	2.456	2.509	2.441	2.5
	LD 100	3.862	3.862	3.519	3.862
d28	LD 10	0.682	0.7	0.679	0.692
	LD 50	1.311	1.34	1.32	1.34
	LD 90	2.399	2.497	2.434	2.555
	LD 95	2.825	3.061	2.869	3.203
	LD 99	3.918	6.271	3.953	6.121
	LD 100	6.158	8.944	6.158	8.944

Appendix

TPGS room temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.677	0.698	0.688	0.7
	LD 50	1.155	0.973	1.039	1.02
	LD 90	2.026	2.028	1.982	1.995
	LD 95	2.211	2.194	2.17	2.175
	LD 99	2.503	2.503	2.483	2.482
	LD 100	2.92	3.205	3.205	3.205
d1	LD 10	0.663	0.486	0.591	0.697
	LD 50	0.87	1.007	0.811	1.12
	LD 90	2.11	1.859	2.035	2.172
	LD 95	2.279	2.053	2.202	2.386
	LD 99	2.577	2.383	2.517	2.764
	LD 100	3.205	3.206	3.205	3.863
d7	LD 10	0.595	0.575	0.74	0.446
	LD 50	1.036	1.17	1.113	1.151
	LD 90	2.032	1.956	2.045	2.058
	LD 95	2.2	2.139	2.213	2.32
	LD 99	2.514	2.423	2.534	2.769
	LD 100	3.206	3.206	3.206	3.863
d28	LD 10	0.59	0.493	0.676	0.475
	LD 50	1.032	1.027	1.113	1.181
	LD 90	2.02	1.868	2.008	2.083
	LD 95	2.195	2.061	2.192	2.342
	LD 99	2.508	2.387	2.514	2.791
	LD 100	3.206	3.206	3.206	3.863

TPGS cold temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.677	0.698	0.688	0.7
	LD 50	1.155	0.973	1.039	1.02
	LD 90	2.026	2.028	1.982	1.995
	LD 95	2.211	2.194	2.17	2.175
	LD 99	2.503	2.503	2.483	2.482
	LD 100	2.92	3.205	3.205	3.205
d1	LD 10	0.664	0.533	0.639	0.652
	LD 50	0.86	0.959	1.018	1.018
	LD 90	2.111	1.9	2.123	2.161
	LD 95	2.281	2.11	2.351	2.394
	LD 99	2.579	2.416	2.657	2.761
	LD 100	3.205	3.206	3.205	3.519
d7	LD 10	0.723	0.7	0.434	0.519
	LD 50	1.059	1.02	1.141	1.162
	LD 90	2.047	1.995	2.056	1.946
	LD 95	2.21	2.176	2.318	2.135
	LD 99	2.533	2.483	2.765	2.427
	LD 100	3.206	3.205	3.863	3.206
d28	LD 10	0.722	0.484	0.455	0.48
	LD 50	1.058	1.078	1.159	1.066
	LD 90	2.027	1.881	2.065	1.875
	LD 95	2.198	2.079	2.326	2.073
	LD 99	2.519	2.399	2.776	2.396
	LD 100	3.206	3.206	3.863	3.206

Appendix

SDS room temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.444	0.472	0.573	0.464
	LD 50	1.136	1.128	1.141	1.12
	LD 90	1.987	1.941	1.96	1.929
	LD 95	2.237	2.185	2.191	2.169
	LD 99	2.675	2.612	2.612	2.576
	LD 100	4.241	3.519	3.863	3.206
d1	LD 10	0.499	0.63	0.587	0.587
	LD 50	1.074	1.196	1.105	1.102
	LD 90	1.966	1.992	1.929	1.929
	LD 95	2.231	2.201	2.154	2.157
	LD 99	2.7	2.561	2.529	2.54
	LD 100	3.863	3.206	3.206	3.206
d7	LD 10	0.616	0.598	0.612	0.612
	LD 50	1.163	1.135	1.157	1.158
	LD 90	2.001	1.945	2.005	2.007
	LD 95	2.257	2.16	2.266	2.27
	LD 99	2.69	2.512	2.712	2.719
	LD 100	3.863	3.206	3.863	3.863
d28	LD 10	0.887	0.873	0.851	0.076
	LD 50	1.685	1.618	1.592	1.447
	LD 90	3.456	3.132	3.078	2.093
	LD 95	4.638	4.047	3.991	2.259
	LD 99	6.014	5.794	5.784	2.568
	LD 100	8.944	8.944	8.944	3.206

SDS cold temperature		original suspension non diluted	suspension diluted with stabiliser 1:1	suspension diluted with glycerol 1:1	suspension diluted and homogenised
d0	LD 10	0.444	0.472	0.573	0.464
	LD 50	1.136	1.128	1.141	1.12
	LD 90	1.987	1.941	1.96	1.929
	LD 95	2.237	2.185	2.191	2.169
	LD 99	2.675	2.612	2.612	2.576
	LD 100	4.241	3.519	3.863	3.206
d1	LD 10	0.505	0.631	0.587	0.668
	LD 50	1.077	1.19	1.104	1.239
	LD 90	1.968	1.983	1.931	2.047
	LD 95	2.236	2.198	2.159	2.294
	LD 99	2.708	2.571	2.539	2.735
	LD 100	3.863	3.206	3.206	4.241
d7	LD 10	0.612	0.598	0.612	0.598
	LD 50	1.157	1.133	1.157	1.136
	LD 90	2.005	1.943	2.005	1.942
	LD 95	2.266	2.16	2.266	2.155
	LD 99	2.712	2.514	2.712	2.497
	LD 100	3.863	3.206	3.863	3.206
d28	LD 10	0.961	0.873	0.829	0.851
	LD 50	1.531	1.618	1.56	1.592
	LD 90	2.15	3.132	3	3.078
	LD 95	2.314	4.047	3.933	3.991
	LD 99	2.6	5.794	5.758	5.784
	LD 100	3.206	8.944	8.944	8.944

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- Keck, C., et al. (2005).** Formulation of Caffeine for Dermal Application Annual Meeting of the American Association of Pharmaceutical Scientists (AAPS), Nashville
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- Keck, C., et al. (2004).** Oral Drug Nanocrystals - Effect Of Potential Aggregation On Bioavailability. Annual Meeting of the American Association of Pharmaceutical Scientists (AAPS), Baltimore.
- Keck, C., et al. (2004).** Production and optimisation of oral cyclosporine nanocrystals. Annual Meeting of the American Association of Pharmaceutical Scientists (AAPS), Baltimore.
- Keck, C. and R. H. Müller** (2004). Size analysis by laser diffractometry - how valid are the data? Annual Meeting of the American Association of Pharmaceutical Scientists (AAPS), Baltimore.

Acknowledgements

Acknowledgements

The work of this thesis was performed at the institute of pharmaceutical technology at the Free University of Berlin, under the supervision of Prof. Dr. Rainer H. Müller.

I would like to thank Prof. Dr. Rainer H. Müller for the opportunity to undertake my PhD in that challenging and outstanding topic. I wish to express my gratitude for his help and his scientific support.

I would like to thank Dr. Andrew Davey and Dr. Nicola Tyres for their kind supervision during my time at the School of Pharmacy in Dunedin. I am grateful for the financial support by the Pharmacy School of the Otago University (Dunedin, New Zealand) during this time.

Special thanks I would like to express to Dr. R. Nitzsche, Dr. D. Griffiths and Dr. A. Rawle for the kind support regarding laser diffractometry and refractive indices.

I thank Dr. Bernd Paulke for providing the latex dispersions and especially for his critical but very fruitful comments.

I thank Mr. Trebbing from Beckman-Coulter for the scientific advice and his kind help with the LS 230, where problems preferentially occurred on Friday afternoon.

Dr. Reinhard Sigel, Dr. Andreas Erbe and their colleagues from the Max Planck institute (MPI) in Potsdam-Golm I thank for the introduction into dn/dc measurements and the kind scientific discussions.

Dr. Helmut Cölfen, Antje Völkel and Margit Barth, also from the MPI in Potsdam-Golm I would like to thank for their help and the particle size characterisation of my samples with the ultra centrifuge.

I am very thankful to PD Dr. Lothar Jäger, Martin-Luther-University Halle-Wittenberg, Department of Chemistry, for taking the electron micrographs of my samples.

I thank my colleagues at the FU Berlin, who supported me and the created kind atmosphere. Special thanks go to Marc Muchow for his computational support and to Alfred Protz for his kind and restless helpfulness.

I sincerely wish to thank Marlen for her kind support and understanding.

My warmest thanks I would like to express to my family, especially to my mother for their love, positivism and support in every way.

Last but not least I thank Signor Gucci and Señor Nelo for their restless and creative “help” with my thesis.

Curriculum Vitae

Curriculum vitae

Name	Cornelia Margarete Keck	
Date of birth	25.01. 1976 in Dresden, Germany	
Work experience	10/2004 - now	Teaching Assistant, Free University of Berlin, Germany
	12/2002 - 08/2004	Manager Product Development, PharmaSol GmbH, Berlin, Germany
	11/2002 - 2/2003	Pharmacist, “Regenbogen Apotheke“, Berlin, Germany
	02/2002 - 06/2002	Teaching Assistant, School of Pharmacy, Otago University, Dunedin, New Zealand
Education	07/2003 - now	PhD Thesis, Free University Berlin, Germany
	06/2003	„Postgraduate Certificate in Pharmacy“ Otago University, Dunedin, New Zealand
	03/2003 - 06/2003	Postgraduate Student, School of Pharmacy, Otago University, Dunedin, New Zealand
	08/09 2002	Registration as Pharmacist
	12/2001 - 06/2002	2 nd Part of the Registration Year for Pharmacists, School of Pharmacy, Otago University, Dunedin, New Zealand
	02/2001 - 11/2001	1 st Part of the Registration Year for Pharmacists, “Flora Apotheke seit 1880”, Berlin, Germany
	01/2001	2 nd Final State Exam in Pharmacy
	04/1996 - 01/2001	Study of Pharmacy, Free University of Berlin, Germany
	10/1994 - 03/1996	Study of Biology, Technical University of Dresden, Germany
	09/1994 - 02/1995	Guest visit Philadelphia - PA/USA
	08/1994	2 nd Final School Exam
Scholarships	03/2003 - 06/2003	Scholarships of School of Pharmacy, Otago University, Dunedin, New Zealand