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APPENDIX



Table 10. The Absorbance of Standard Solution of Paracetamol at 244 nm.

Concentration, mg %	Absorbance
0.25	0.17
0.50	0.32
0.75	0.48
1.00	0.65
1.50	0.97
2.50	1.54

Table 11. Dissolution Data by the Method of Nogami et al. in 50 ml of 0.1 N HCl at 37° from a Disk of 1.5 cm in Diameter Rotating at 200 rpm.

Minutes	Concentration, mg/ml
15	1.94
30	3.73
45	5.32
60	6.82
75	8.17
90	9.52
105	10.63
120	11.74
135	12.85

Table 12. Dissolution Profiles of Paracetamol Compressed at 2,000, 3,000, and 4,000 lb Using Compression Die Assembly.

Minutes	Amount Dissolved, mg		
	2,000 lb	3,000 lb	4,000 lb
5	4.76	5.45	5.36
10	9.75	10.17	10.49
15	14.57	15.12	15.66
20	19.76	19.81	21.03
25	24.41	24.79	25.45
30	28.76	29.19	29.78

Table 13. Dissolution Profiles of Paracetamol from Paracetamol-Lactose
Mixtures Compressed at 2,000, 3,000, and 4,000 lb.

Minutes	Amount Dissolved .mg.								
	10 % Lactose			20 % Lactose			30 % Lactose		
	2,000 lb	3,000 lb	4,000 lb	2,000 lb	3,000 lb	4,000 lb	2,000 lb	3,000 lb	4,000 lb
5	4.49	4.30	4.37	4.56	4.56	4.50	4.04	4.30	4.43
10	9.02	8.80	9.10	9.10	8.90	9.10	8.83	8.83	9.09
15	12.92	13.03	13.89	13.10	13.56	13.76	12.99	12.83	13.78
20	17.29	17.36	18.58	17.30	17.84	18.49	17.23	17.50	18.49
25	21.76	21.64	23.02	21.67	22.23	22.83	21.64	21.63	22.84
30	25.91	25.96	27.36	25.99	26.14	26.97	25.96	25.97	27.10

Table 14. Dissolution Profiles of Paracetamol from Paracetamol-Microcrystalline Cellulose Mixtures Compressed at 2,000, 3,000, and 4,000 lb.

Minutes	Amount Dissolved, mg								
	10 % Microcrystalline Cellulose			20 % Microcrystalline Cellulose			30 % Microcrystalline Cellulose		
	2,000 lb	3,000 lb	4,000 lb	2,000 lb	3,000 lb	4,000 lb	2,000 lb	3,000 lb	4,000 lb
5	3.76	3.90	3.64	3.31	3.24	3.17	2.98	2.78	2.78
10	7.56	7.24	7.63	6.24	5.91	5.65	5.58	4.87	4.59
15	11.03	10.44	11.10	8.85	7.78	7.58	7.79	6.39	6.19
20	13.98	13.91	14.40	11.25	9.85	9.39	9.65	7.85	7.39
25	17.50	16.98	17.37	13.38	11.78	11.05	11.39	9.12	8.52
30	20.24	19.90	20.64	15.05	13.85	12.39	12.92	10.13	9.53

Table 15. Dissolution Profiles of Paracetamol from Paracetamol-Magnesium Stearate Mixtures Compressed at 2,000, 3,000, and 4,000 lb.

Minutes	Amount Dissolved, mg					
	0.5 % Magnesium Stearate			1 % Magnesium Stearate		
	2,000 lb	3,000 lb	4,000 lb	2,000 lb	3,000 lb	4,000 lb
5	4.56	4.56	4.56	3.64	3.84	4.03
10	8.57	8.77	8.77	7.17	7.44	7.37
15	12.77	12.57	12.77	10.77	10.84	10.44
20	16.77	16.37	16.57	14.17	14.04	13.90
25	20.77	20.37	20.57	17.04	17.30	16.78
30	24.57	23.97	24.37	19.19	20.18	20.11

Table 15. (Continued) Dissolution Profiles of Paracetamol from Paracetamol-Magnesium Stearate Mixtures Compressed at 2,000, 3,000, and 4,000 lb.

Minutes	Amount Dissolved, mg					
	3 % Magnesium Stearate			5 % Magnesium Stearate		
	2,000 lb	3,000 lb	4,000 lb	2,000 lb	3,000 lb	4,000 lb
5	3.30	3.57	3.51	3.24	3.44	3.31
10	6.18	6.38	6.18	5.91	5.98	5.91
15	8.58	8.85	8.65	7.92	8.18	7.98
20	10.98	10.98	10.78	9.92	10.05	9.98
25	13.05	13.25	13.05	11.65	11.79	11.65
30	15.12	15.12	14.92	13.25	13.19	13.25

- Table 16. Dissolution Profiles of Paracetamol from Paracetamol-Talc Mixtures
Compressed at 2,000, 3,000, and 4,000 lb.

Minutes	Amount Dissolved, mg					
	1 % Talc			3 % Talc		
	2,000 lb)	3,000 lb)	4,000 lb)	2,000 lb	3,000 lb)	4,000 lb)
5	4.56	4.36	4.56	3.97	3.90	4.17
10	8.96	8.76	8.96	8.10	7.97	8.17
15	13.56	13.16	13.56	12.19	11.97	12.10
20	18.16	17.96	17.96	16.07	15.77	16.10
25	22.37	22.17	22.36	20.10	19.70	19.84
30	26.37	25.97	26.17	23.77	23.40	23.44

Table 16. (Continued) Dissolution Profiles of Paracetamol from Paracetamol
-Talc Mixtures Compressed at 2,000, 3,000, and 4,000 lb.

Minutes	Amount Dissolved, mg					
	5 % Talc			7 % Talc		
	2,000 lb	3,000 lb	4,000 lb	2,000 lb	3,000 lb	4,000 lb
5	3.70	3.84	3.70	3.64	3.64	3.57
10	7.44	7.57	7.37	7.11	7.04	7.24
15	11.10	11.37	11.04	10.70	10.64	10.63
20	14.83	15.04	14.64	14.30	14.04	14.17
25	18.37	18.77	18.17	17.77	17.57	17.18
30	21.77	22.11	21.57	21.17	20.91	20.97

Table 17. Dissolution Profiles of Paracetamol from Paracetamol-Starch Paste
(10 % w/w) Mixtures Compressed at 2,000, 3,000, and 4,000 lb.

Minutes	Amount Dissolved, mg					
	1 % Starch*			2 % Starch*		
	2,000 lb	3,000 lb	4,000 lb	2,000 lb	3,000 lb	4,000 lb
5	3.37	3.17	3.57	3.44	3.50	3.57
10	6.77	6.57	6.77	5.98	6.24	6.31
15	10.37	9.97	10.37	8.23	8.46	8.45
20	13.38	12.98	13.18	10.28	10.45	10.38
25	16.57	16.17	16.37	12.38	12.17	12.05
30	19.97	19.18	20.17	14.12	13.98	13.79

*quantity of dry mass in starch paste (10 % w/w) mixed with drug.

Table 17. (Continued) Dissolution Profiles of Paracetamol from Paracetamol-Starch Paste (10 % w/w) Mixtures Compressed at 2,000, 3,000 and 4,000 lb.

Minutes	Amount Dissolved, mg					
	3 % Starch*			4 % Starch*		
	2,000 lb	3,000 lb	4,000 lb	2,000 lb	3,000 lb	4,000 lb
5	3.50	3.31	3.57	3.17	3.24	3.31
10	5.71	5.71	5.98	5.45	5.58	5.51
15	7.72	7.78	8.05	7.28	7.38	7.52
20	9.58	9.25	9.79	8.99	8.99	8.05
25	11.19	10.97	11.39	10.39	10.52	10.65
30	12.65	12.65	12.66	11.59	11.86	11.92

* quantity of dry mass in starch paste (10 % w/w) mixed with durg.

Table 18. Dissolution Profiles of Paracetamol from Paracetamol
 -Polyvinylpyrrolidone (in Solution) Mixtures Compressed at
 3,000 and 4,000 lb.

Minutes	Amount Dissolved, ml					
	3 % Polyvinylpyrrolidone		4 % Polyvinylpyrrolidone		5 % Polyvinylpyrrolidone	
	3,000 lb	4,000 lb	3,000 lb	4,000 lb	3,000 lb	4,000 lb
5	4.50	4.36	4.56	4.43	4.36	4.36
10	9.16	9.09	9.23	9.03	8.90	9.03
15	13.89	13.83	14.03	13.76	13.63	13.76
20	18.63	18.56	18.63	18.56	18.29	18.49
25	23.09	23.01	23.01	22.96	22.76	22.76
30	27.76	27.56	27.50	27.23	26.97	26.97

Table 19. Dissolution Profiles of Paracetamol from Paracetamol-Polyvinylpyrrolidone (Dry Adding) Compressed at 3,000 and 4,000 lb.

Minutes	Amount Dissolved, mg					
	3 % Polyvinylpyrrolidone		4 % Polyvinylpyrrolidone		5 % Polyvinylpyrrolidone	
	3,000 lb	4,000 lb	3,000 lb	4,000 lb	3,000 lb	4,000 lb
5	4.36	4.56	4.36	4.36	4.56	4.56
10	9.36	9.12	9.16	9.36	9.36	9.16
15	14.16	13.96	13.96	13.96	13.96	14.16
20	18.76	18.76	18.56	18.76	18.56	18.65
25	23.56	22.96	22.96	23.17	23.21	22.96
30	27.76	27.56	27.36	27.56	27.56	27.56

Table 20. Dissolution Profiles of Paracetamol from Granule-Dry Corn Starch
Mixtures Compressed at 2,000, 3,000 and 4,000 lb.

Minutes	Amount Dissolved, mg								
	1 % Starch			3 % Starch			5 % Starch		
	2,000 lb	3,000 lb	4,000 lb	2,000 lb	3,000 lb	4,000 lb	2,000 lb	3,000 lb	4,000 lb
5	2.98	2.98	2.98	2.78	2.98	2.78	2.58	2.58	2.58
10	5.18	5.18	4.78	4.78	5.18	5.18	4.78	4.58	4.78
15	6.98	6.98	6.98	6.78	6.99	6.78	6.78	6.58	6.58
20	8.73	8.59	8.39	8.39	8.79	8.73	8.58	8.19	8.58
25	10.19	10.39	10.39	10.18	10.12	10.12	10.19	9.59	10.19
30	11.59	11.39	11.39	11.59	11.59	11.59	11.58	10.99	11.58

Table 21. Dissolution Profile of Paracetamol from Granule-Lubricants
Mixture (Combination of Magnesium Stearate and Talc) Compressed
at 2,000 and 3,000 lb.

Minutes	Amount Dissolved, mg							
	0.3% Magnesium Stearate + 3% Talc		0.3% Magnesium Stearate + 5% Talc		1% Magnesium Stearate + 3% Talc		1% Magnesium Stearate + 5% Talc	
	2,000 lb	3,000 lb	2,000 lb	3,000 lb	2,000 lb	3,000 lb	2,000 lb	3,000 lb
5	3.37	3.37	2.98	2.98	2.98	3.17	2.78	2.78
10	5.75	5.56	5.16	5.36	5.16	5.56	5.16	5.16
15	7.54	7.54	6.00	7.14	6.94	7.14	6.94	6.94
20	9.13	9.13	8.53	8.53	8.53	8.73	8.13	8.33
25	10.32	10.52	9.92	9.92	9.92	19.12	9.72	9.72
30	11.71	11.90	11.50	11.11	11.31	11.51	10.91	11.11

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