

4 Nov

Experiment No 1

Tablet Formulation & powder characterization

Excipient Chemicals Required

lactose - 37.5 g	Notes
HPMC - 25.0 g	Pinus - 13 Flak
Talc - 1.25 g	Diameter - 13 mm
magnesium stearate - 0.625 g	lower - 6.5 mm
	punch height

Batch B

No. of Tablet	(g) Weight	(N) Hardness	(mm) Thickness
B1	2.46		
T1	0.48		
T2	0.47	?	?
T3	0.50		
T4	0.47		
T5	0.49		
B2	2.41		
T1	0.48	6N	3.62
T2	0.48	6N	3.51
T3	0.48	6N	3.49
T4	0.48	7N	3.60
T5	0.49	9N	3.61
B3	2.38		
T1	0.48	21N	3.15
T2	0.47	23N	3.12
T3	0.48	25	3.09
T4	0.48	23	3.07
T5	0.47	25	3.03

Broken Tablet	Weight	Hardness	Thickness
<u>B6</u>			
T ₁	0.48	63 N	3.16
T ₂	0.48	62 N	3.19
T ₃	0.47	42 N	3.18
T ₄	0.47	43 N	3.18
T ₅	0.48	43 N	3.20
<u>B5</u>	0.47		
T ₁	0.48	60 N	3.45
T ₂	0.52	56 N	3.43
T ₃	0.49	55 N	3.23
T ₄	0.48	54 N	3.3
T ₅	0.50	56 N	3.6

0.05

$$\frac{9.68}{20} = 0.474$$

~~Tablet~~ → ~~Hardness~~

B1 Tablet Hardness
 Thickness of powder not be
 increased because of the less compression
 force.

Chemicals

A group

lactose - 50g
 HPmc - 12.5g
 Talc - 1.25g
 magnesium stearate - 0.625g

Batches A1

Total weight - 2.95

No. of Tablet	(g) Weight	(N) Hardness	(mm) Thickness
01	0.47	0	4.00
02	0.46	0	3.85
03	0.48	0	4.13
04	0.47	0	3.80
05	0.48	0	3.89

Batches A2

Total weight - 2.46

1	0.49	8	3.15
2	0.46	8	3.38
3	0.51	8	3.30
4	0.49	8	3.50
5	0.51	8	3.38

Batches A3

Total weight - 2.39

1	0.46	22	2.25
2	0.49	22	2.27
3	0.47	26	2.74
4	0.48	27	2.82
5	0.47	24	2.38

Total weight - 2.58

Batches A5

1	0.50	47	2.35
2	0.54	62	2.27
3	0.52	42	2.74
4	0.49	46	2.82
5	0.52	42	2.55

Batches A5

Total weight - 2.58

1	0.50	67	3.35
2	0.54	62	3.36
3	0.52	62	3.47
4	0.49	69	3.27
5	0.52	61	3.48

Batches A8

Total weight - 2.37

1	0.48	22	3.3
2	0.48	26	3.40
3	0.48	25	3.41
4	0.45	22	2.71
5	0.46	25	2.80

Batches A13

Total weight 2.37

1	0.48	30	2.27
2	0.47	27	2.11
3	0.46	30	2.5
4	0.47	29	2.15
5	0.48	30	2.73

2-35
2-27
2-74
82
2-85

Buckets A18

weight-
Total 242

1	0.49	26	3.39
2	0.50	30	3.39
3	0.68	30	3.28
4	0.47	28	2.78
5	0.45	26	2.80

3.35
3.36
3.47
3.27
3.48

3.3
3.40
3.41
2.71
2.80

2.27
2.11
2.5
2.15
2.73

~~at~~
A18