

LAMPIRAN
PERHITUNGAN HASIL ANALISA

Tabel x. Hasil Analisa Cake

Variabel Waktu	Cawan	Cawan Basah			Cawan Kering		
		I	II	III	I	II	III
12	I	180,93	160,27	157,24	178,26	158,60	155,30
	II	210,97	180,81	173,50	209,92	177,8	170,44
	III	203,67	177,90	175,30	200,15	176,5	173,80
15	I	249,84	245,61	225,54	246,11	243,36	223,20
	II	249,41	231,82	230,31	245,70	230,90	226,80
	III	258,70	187,13	209,09	255,15	186,04	206,22

Tabel x. Hasil Analisa Densitas dan Viskositas

Variabel Waktu	M (piknometer isi)		tx (waktu alir)	
	Sebelum	Sesudah	Sebelum	Sesudah
12	47,15	46,17	1,10	0,95
15	47,66	46,88	1,25	1,05

1. Perhitungan Hasil Analisa

1.1. Cake Basah

Rumus :

$$\text{Cake} = \text{Cawan Basah (isi)} - \text{Cawan Kosong}$$

1.1.2. Variabel Waktu 12 Menit

a. Plate I

I. $\text{Cake} = 180,93 - 50,91 = 130,02$

II. $\text{Cake} = 210,97 - 50,36 = 160,61$

III. Cake = $203,67 - 50,20 = 153,47$

Total = 444,1

b. Plate II

I. Cake = $160,27 - 47,26 = 113,01$

II. Cake = $180,81 - 43,97 = 136,84$

III. Cake = $177,90 - 44,50 = 133,4$

Total = 383,25

c. Plate III

I. Cake = $157,24 - 43,90 = 103,34$

II. Cake = $173,50 - 47,41 = 136,09$

III. Cake = $175,30 - 44,50 = 130,8$

Total = 370,23

1.1.3. Variabel Waktu 15 Menit

a. Plate I

I. Cake = $249,84 - 43,90 = 205,94$

II. Cake = $249,41 - 36,77 = 212,64$

III. Cake = $258,70 - 44,19 = 214,51$

Total = 633,09

b. Plate II

I. Cake = $245,61 - 43,82 = 201,79$

II. Cake = $231,82 - 43,63 = 188,19$

III. Cake = $187,13 - 44,53 = 142,6$

Total = 532,58

c. Plate III

I. Cake = $225,54 - 47,30 = 178,24$

II. Cake = $230,31 - 49,15 = 181,16$

III. Cake = $209,09 - 42,28 = 166,81$

Total = 526,21

1.2. Cake Kering

Rumus :

Cake = Cawan kering (isi) – Cawan Kosong

1.2.2. Variabel Waktu 12 Menit

a. Plate I

I. Cake = $178,26 - 50,91 = 127,35$

II. Cake = $209,92 - 50,36 = 159,56$

III. Cake = $200,15 - 50,20 = 149,95$

Total = 436,86

b. Plate II

I. Cake = $158,60 - 47,26 = 111,34$

II. Cake = $177,8 - 43,97 = 133,83$

III. Cake = $176,5 - 44,50 = 132$

Total = 377,17

c. Plate III

I. Cake = $155,30 - 43,90 = 111,4$

II. Cake = $170,44 - 47,41 = 123,03$

III. Cake = $173,80 - 44,50 = 129,3$

Total = 363,73

1.2.3. Variabel Waktu 15 Menit

a. Plate I

I. Cake = $246,11 - 43,90 = 202,21$

II. Cake = $245,70 - 36,77 = 208,93$

III. Cake = $255,15 - 44,19 = 210,96$

Total = 622,1

b. Plate II

I. Cake = $243,36 - 43,82 = 199,54$

II. Cake = $230,90 - 43,63 = 187,27$

III. Cake = $186,04 - 44,53 = 141,51$

Total = 528,32

c. Plate III

I. Cake = $223,20 - 47,30 = 175,9$

II. Cake = $226,80 - 49,15 = 177,65$

III. Cake = $206,22 - 42,28 = 163,94$

Total = 517,49

1.3. Kadar H₂O

Rumus : Berat Total Cawan Basah – Berat Total Cawan Kering

1.3.1 . Variabel Waktu 12 Menit

$$\text{Plate I} \quad \text{Cake} = 444,1 - 436,86 = 7,24$$

$$\text{Plate II} \quad \text{Cake} = 383,25 - 377,17 = 6,08$$

$$\text{Plate III} \quad \text{Cake} = 370,23 - 363,73 = 6,5$$

1.3.2. Variabel Waktu 15 Menit

$$\text{Plate I} \quad \text{Cake} = 633,09 - 622,1 = 10,99$$

$$\text{Plate II} \quad \text{Cake} = 532,58 - 528,32 = 4,26$$

$$\text{Plate III} \quad \text{Cake} = 526,21 - 517,49 = 8,72$$

1.4. Densitas

$$\rho = \frac{m}{v}$$

1.3.1. Variabel Waktu 12 Menit

a. Sebelum

$$\rho = \frac{47,15 - 22,96}{25} = 0,967 \text{ gram/ml}$$

b. Sesudah

$$\rho = \frac{46,17 - 22,96}{25} = 0,928 \text{ gram/ml}$$

1.3.2. Variabel Waktu 12 Menit

a. Sebelum

$$\rho = \frac{47,66 - 22,96}{25} = 0,988 \text{ gram/ml}$$

b. Sesudah

$$\rho = \frac{46,88 - 22,96}{25} = 0,957 \text{ gram/ml}$$

1.5. Viskositas

$$\mu_x = \frac{dx \cdot tx}{do \cdot to} \mu_o$$

1.4.1. Variabel Waktu 12 Menit

a. Sebelum

$$\mu_x = \frac{1,10 \cdot 0,967}{1 \cdot 1} 1 = 1,06 \text{ cp}$$

b. Sesudah

$$\mu_x = \frac{0,95 \cdot 0,9548}{1 \cdot 1} 1 = 0,907 \text{ cp}$$

1.4.2. Variabel Waktu 15 Menit

a. Sebelum

$$\mu_x = \frac{1,25 \cdot 0,988}{1 \cdot 1} 1 = 1,23 \text{ cp}$$

b. Sesudah

$$\mu_x = \frac{1,05 \cdot 0,957}{1 \cdot 1} 1 = 1,0048 \text{ cp}$$

