

LAMPIRAN
PERHITUNGAN HASIL ANALISA

Tabel 6. Data Analisa Cake

Variabel Konsentrasi	Cawan	Cawan Basah			Cawan Kering		
		I	II	III	I	II	III
2,5	I	103,34	102,01	75,55	90,4	67,5	53,92
	II	136,09	126,84	126,84	123,03	98,63	98,1
	Jumlah	239,43	228,8	215,65	213,43	166,13	152,02
4	I	178,24	201,79	105,94	148,9	179,54	92,21
	II	201,16	198,19	192,64	166,81	121,51	168,93
	III	166,81	142,6	214,51	166,81	121,51	180,96
	IV	205,93			631,92		
	Jumlah	752,14	542,58	513,09	631,92	479,32	442,1

Tabel 7. Data Analisa Densitas dan Viskositas

Variabel Konsentrasi	ρ	μ
2,5	0,928 gram/ml	0,907 cp
4	0,957 gram/ml	1,0048 cp

1. Perhitungan Hasil
Analisa

1.1. Cake Basah

Rumus :

Cake = Cawan Basah (isi) – Cawan Kosong

1.1.1. Variabel Konsentrasi 2,5 Kg dalam 40 Liter

a. Plate I

I. $\text{Cake} = 147,24 - 43,90 = 103,34$

II. $\text{Cake} = 183,50 - 47,41 = 136,09$

Total = 239,43

b. Plate II

I. $\text{Cake} = 149,27 - 47,26 = 102,01$

II. $\text{Cake} = 170,81 - 43,97 = 126,84$

Total = 228,8

c. Plate III

I. $\text{Cake} = 126,46 - 50,91 = 75,55$

II. $\text{Cake} = 190,46 - 50,36 = 140,1$

Total = 215,65

1.1.2. Variabel Konsentrasi 4 Kg dalam 40 liter

a. Plate I

I. $\text{Cake} = 225,54 - 47,30 = 178,24$

II. $\text{Cake} = 250,31 - 49,15 = 201,16$

III. $\text{Cake} = 209,09 - 42,28 = 166,81$

IV. $\text{Cake} = 256,29 - 50,36 = 205,93$

Total = 752,14

b. Plate II

I. $\text{Cake} = 245,61 - 43,82 = 201,79$

II. $\text{Cake} = 241,82 - 43,63 = 198,19$

III. $\text{Cake} = 187,13 - 44,53 = 142,6$

Total = 542,58

c. Plate III

I. $\text{Cake} = 149,84 - 43,90 = 105,94$

II. Cake = $229,41 - 36,77 = 192,64$

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

Total = 513,09

1.2. Cake Kering

Rumus :

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

1.2.1. Variabel Konsentrasi 2,5 Kg dalam 40 Liter

a. Plate I

I. Cake = $115,01 - 43,90 = 90,4$

II. Cake = $145,44 - 47,41 = 123,03$

Total = 213,43

b. Plate II

I. Cake = $114,76 - 47,26 = 67,5$

II. Cake = $142,60 - 43,97 = 98,63$

Total = 166,13

c. Plate III

I. Cake = $104,83 - 50,91 = 53,92$

II. Cake = $148,46 - 50,36 = 98,1$

Total = 152,02

1.2.2. Variabel Konsentrasi 4 Kg dalam 40 liter

a. Plate I

I. Cake = $196,20 - 47,30 = 148,9$

II. Cake = $215,80 - 49,15 = 166,65$

III. Cake = $186,22 - 42,28 = 143,94$

IV. Cake = $222,79 - 50,36 = 172,43$

Total = 631,92

b. Plate II

- I. Cake = 223,36 – 43,82 = 179,54
 - II. Cake = 221,90 – 43,63 = 178,27
 - III. Cake = 166,04 – 44,53 = 121,51
- Total = 479,32

c. Plate III

- I. Cake = 136,11 – 43,90 = 92,21
 - II. Cake = 205,70 – 36,77 = 168,93
 - III. Cake = 225,15 – 44,19 = 180,96
- Total = 442,1

1.3. Densitas

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

1.3.1. Variabel 2,5 Kg dalam 40 Liter

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

1.3.2. Variabel 4 Kg dalam 40 Liter

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

1.4. Viskositas

$$\pi x = \frac{dx \cdot tx}{do \cdot to} \mu o$$

1.4.1. Variabel 2,5 Kg dalam 40 Liter

$$\pi x = \frac{1,01 \cdot 0,928}{1 \cdot 1} 1 = 0,937 \text{ cp}$$

1.4.2. Variabel 4 Kg dalam 40 Liter

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

1.5. Perhitungan Kadar Air

$$\text{Nilai Kadar Air} = \frac{B - C}{B} \times 100\%$$

1.5.1. Variabel 2,5 kg dalam 40 L

I. $\text{Nilai Kadar Air} = \frac{330,74 - 260,45}{330,74} \times 100\% = 21,25\%$

II. $\text{Nilai Kadar Air} = \frac{320,08 - 255,36}{320,08} \times 100\% = 20,21\%$

III. $\text{Nilai Kadar Air} = \frac{316,92 - 253,29}{316,92} \times 100\% = 20\%$

1.5.2. Variabel 4 Kg dalam 40 Liter

I. $\text{Nilai Kadar Air} = \frac{941,23 - 821,01}{941,23} \times 100\% = 12,77\%$

II. $\text{Nilai Kadar Air} = \frac{674,56 - 611,3}{674,56} \times 100\% = 9,37\%$

III. $\text{Nilai Kadar Air} = \frac{637,95 - 566,96}{637,95} \times 100\% = 11,13\%$