

LAMPIRAN

Lampiran 1. Perhitungan Densitas

$$\rho = \frac{\text{piknometer berisi produk} - \text{piknometer kosong}}{\text{volume piknometer}}$$

Dimana:

Berat piknometer kosong = 15,80 gram

Volume piknometer = 25 ml

1. Suhu 55°C

- Menit ke-0

$$\rho = \frac{41,35 \text{ gr} - 15,80 \text{ gr}}{25 \text{ ml}}$$

$$\rho = 1,0220 \text{ gr/ml}$$

- Menit ke-10

$$\rho = \frac{41,38 \text{ gr} - 15,80 \text{ gr}}{25 \text{ ml}}$$

$$\rho = 1,0232 \text{ gr/ml}$$

- Menit ke-20

$$\rho = \frac{41,40 \text{ gr} - 15,80 \text{ gr}}{25 \text{ ml}}$$

$$\rho = 1,0243 \text{ gr/ml}$$

2. Suhu 60°C

- Menit ke-0

$$\rho = \frac{41,35 \text{ gr} - 15,80 \text{ gr}}{25 \text{ ml}}$$

$$\rho = 1,0220 \text{ gr/ml}$$

- Menit ke-10

$$\rho = \frac{41,41 \text{ gr} - 15,80 \text{ gr}}{25 \text{ ml}}$$

$$\rho = 1,0244 \text{ gr/ml}$$

- Menit ke-20

$$\rho = \frac{41,44 \text{ gr} - 15,80 \text{ gr}}{25 \text{ ml}}$$

$$\rho = 1,0256 \text{ gr/ml}$$

3. Suhu 65°C

- Menit ke-0

$$\rho = \frac{41,35 \text{ gr} - 15,80 \text{ gr}}{25 \text{ ml}}$$

$$\rho = 1,0220 \text{ gr/ml}$$

- Menit ke-10

$$\rho = \frac{41,37 \text{ gr} - 15,80 \text{ gr}}{25 \text{ ml}}$$

$$\rho = 1,0228 \text{ gr/ml}$$

- Menit ke-20

$$\rho = \frac{41,38 \text{ gr} - 15,80 \text{ gr}}{25 \text{ ml}}$$

$$\rho = 1,0232 \text{ gr/ml}$$

Lampiran 2. Perhitungan Viskositas

$$\mu = \frac{t_x \cdot d_x}{t_o \cdot d_o} \cdot \mu_o$$

Dimana:

t_x = Waktu produk

d_x = Densitas produk

t_o = Waktu air

d_o = Densitas air

1. Suhu 55°C

- Menit ke-0

$$\mu = \frac{0,88 \cdot 1,0220 \text{ gr/ml}}{1 \cdot 1 \text{ gr/ml}} \cdot 1 \text{ Cp}$$

$$\mu = 0,8994 \text{ Cp}$$

- Menit ke-10

$$\mu = \frac{0,91 \cdot 1,0232 \text{ gr/ml}}{1 \cdot 1 \text{ gr/ml}} \cdot 1 \text{ Cp}$$

$$\mu = 0,9311 \text{ Cp}$$

- Menit ke-20

$$\mu = \frac{1,05 \cdot 1,0243 \text{ gr/ml}}{1 \cdot 1 \text{ gr/ml}} \cdot 1 \text{ Cp}$$

$$\mu = 1,0755 \text{ Cp}$$

2. Suhu 60°C

- Menit ke-0

$$\mu = \frac{0,88 \cdot 1,0220 \text{ gr/ml}}{1 \cdot 1 \text{ gr/ml}} \cdot 1 \text{ Cp}$$

$$\mu = 0,8994 \text{ Cp}$$

- Menit ke-10

$$\mu = \frac{0,93 \cdot 1,0244 \text{ gr/ml}}{1 \cdot 1 \text{ gr/ml}} \cdot 1 \text{ Cp}$$

$$\mu = 0,9527 \text{ Cp}$$

- Menit ke-20

$$\mu = \frac{1,05 \cdot 1,0256 \text{ gr/ml}}{1 \cdot 1 \text{ gr/ml}} \cdot 1 \text{ Cp}$$

$$\mu = 1,0769 \text{ Cp}$$

3. Suhu 65°C

- Menit ke-0

$$\mu = \frac{0,88 \cdot 1,0220 \text{ gr/ml}}{1 \cdot 1 \text{ gr/ml}} \cdot 1 \text{ Cp}$$

$$\mu = 0,8994 \text{ Cp}$$

- Menit ke-10

$$\mu = \frac{0,90 \cdot 1,0228 \text{ gr/ml}}{1 \cdot 1 \text{ gr/ml}} \cdot 1 \text{ Cp}$$



$$\mu = 0,9205 \text{ Cp}$$






- Menit ke-20

$$\mu = \frac{1,03 \cdot 1,0232 \text{ gr/ml}}{1 \cdot 1 \text{ gr/ml}} \cdot 1 \text{ Cp}$$

$$\mu = 1,0539 \text{ Cp}$$

Lampiran 3. Foto Praktikum

Keterangan	Foto
Ekstraksi	
Evaporasi	

Variabel	Foto
1. Suhu 55°C	
• Menit ke-0	
• Menit ke-10	
• Menit ke-20	
2. Suhu 60°C	
• Menit ke-0	
• Menit ke-10	

- Menit ke-20



3. Suhu 65°C

- Menit ke-0



- Menit ke-10



- Menit ke-20

