

LAMPIRAN

- Pembuatan Alkohol 50%

Diketahui :

$$K1 = 96\%$$

$$K2 = 50\%$$

$$V2 = 100 \text{ mL}$$

Ditanya : $V1$?

Jawab :

$$K1 \times V1 = K2 \times V2$$

$$96\% \times V1 = 50\% \times 100 \text{ mL}$$

$$V1 = \frac{50\% \times 100 \text{ mL}}{96\%}$$

$$V1 = 52 \text{ mL}$$

- Pembuatan larutan ammonia 2%

Diketahui :

$$K1 = 25\%$$

$$K2 = 2\%$$

$$V2 = 100 \text{ mL}$$

Ditanya : $V1$?

Jawab :

$$K1 \times V1 = K2 \times V2$$

$$25\% \times V1 = 2\% \times 100 \text{ mL}$$

$$V1 = \frac{2\% \times 100 \text{ mL}}{25\%}$$

$$V1 = 8 \text{ mL}$$

- Pembuatan larutan ammonia 10%

Diketahui :

$$K1 = 25\%$$

$$K2 = 10\%$$

$$V2 = 100 \text{ mL}$$

Ditanya : $V1$?

Jawab :

$$K1 \times V1 = K2 \times V2$$

$$25\% \times V1 = 10\% \times 100 \text{ mL}$$

$$V1 = \frac{10\% \times 100 \text{ mL}}{25\%}$$

$$V1 = 40 \text{ mL}$$

- Pembuatan larutan asam asetat 10%

Diketahui :

$$K1 = 100\%$$

$$K2 = 10\%$$

$$V2 = 100 \text{ mL}$$

Ditanya : V1?

Jawab :

$$K1 \times V1 = K2 \times V2$$

$$100\% \times V1 = 10\% \times 100 \text{ mL}$$

$$V1 = \frac{10\% \times 100 \text{ mL}}{100\%}$$

$$V1 = 10 \text{ mL}$$

- Pembuatan larutan standar Rhodamin B

Diketahui :

$$\text{Massa} = 10 \text{ mg}$$

$$\text{Uk. Labu ukur} = 10 \text{ mL}$$

Ditanya : Konsentrasi?

Jawab :

$$\frac{\text{Massa}}{\text{Volume}} \times 1000 =$$

$$\frac{\text{Massa}}{\text{Volume}} \times 1000 = 1000 \text{ ppm}$$

- Perhitungan nilai Rf standar optimasi eluen 1 (N-butanol: asam asetat: akuades, 5:4:1)

Diketahui :

$$\text{Jarak tempuh noda} = 9,6 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{9,6 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,96$$

- Perhitungan nilai Rf standar optimasi eluen 3 (NaCl 2% dalam alkohol 50%)

Diketahui :

$$\text{Jarak tempuh noda} = 5 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,5$$

- Perhitungan nilai Rf sampel warna merah optimasi eluen 3 (NaCl 2% dalam alkohol 50%)

Diketahui :

$$\text{Jarak tempuh noda} = 2,7 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{2,7 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,27$$

- Perhitungan nilai Rf sampel warna jingga optimasi eluen 3 (NaCl 2% dalam alkohol 50%)

Diketahui :

$$\text{Jarak tempuh noda} = 2,3 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{2,3 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,23$$

- Perhitungan nilai Rf standar optimasi eluen 5 (N-butanol: asam asetat: akuades, 4:2:2,4)

Diketahui :

$$\text{Jarak tempuh noda} = 6,8 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 7 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{6,8 \text{ cm}}{7 \text{ cm}}$$

$$\text{Nilai Rf} = 0,97$$

- Perhitungan nilai Rf sampel warna merah optimasi eluen 5 (N-butanol: asam asetat: akuades, 4:2:2,4)

Diketahui :

$$\text{Jarak tempuh noda} = 0,14 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 7 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{0,14 \text{ cm}}{7 \text{ cm}}$$

$$\text{Nilai Rf} = 0,02$$

- Perhitungan nilai Rf sampel warna jingga optimasi eluen 5 (N-butanol: asam asetat: akuades, 4:2:2,4)

Diketahui :

$$\text{Jarak tempuh noda} = 2,8 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 7 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{2,8 \text{ cm}}{7 \text{ cm}}$$

$$\text{Nilai Rf} = 0,40$$

- Perhitungan nilai Rf standar optimasi eluen campuran (N-butanol: ammonia: asam asetat, 11:5:4)

Diketahui :

$$\text{Jarak tempuh noda} = 7,8 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 8 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{7,8 \text{ cm}}{8 \text{ cm}}$$

$$\text{Nilai Rf} = 0,97$$

- Perhitungan nilai Rf sampel warna merah optimasi eluen campuran (N-butanol: ammonia: asam asetat, 11:5:4)

Diketahui :

$$\text{Jarak tempuh noda} = 1,3 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 8 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{1,3 \text{ cm}}{8 \text{ cm}}$$

$$\text{Nilai Rf} = 0,16$$

- Perhitungan nilai Rf sampel warna jingga optimasi eluen campuran (N-butanol: ammonia: asam asetat, 11:5:4)

Diketahui :

$$\text{Jarak tempuh noda} = 3,1 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 8 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{3,1 \text{ cm}}{8 \text{ cm}}$$

$$\text{Nilai Rf} = 0,39$$

- Perhitungan nilai Rf standar kontrol (Adisi awal)

Diketahui :

$$\text{Jarak tempuh noda} = 5 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,50$$

- Perhitungan nilai Rf sampel kontrol positif (Adisi awal)

Diketahui :

$$\text{Jarak tempuh noda} = 5 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,50$$

- Perhitungan nilai Rf standar kontrol (Adisi akhir)

Diketahui :

$$\text{Jarak tempuh noda} = 5,1 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,51$$

- Perhitungan nilai Rf sampel kontrol positif (Adisi akhir)

Diketahui :

$$\text{Jarak tempuh noda} = 5,2 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5,2 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,52$$

- Perhitungan nilai Rf sampel kontrol negatif (Adisi akhir)

Diketahui :

$$\text{Jarak tempuh noda} = 8,8 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{8,8 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,88$$

- Perhitungan nilai Rf standar A1

Diketahui :

$$\text{Jarak tempuh noda} = 5 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,50$$

- Perhitungan nilai Rf sampel A1 warna merah

Diketahui :

$$\text{Jarak tempuh noda} = 2,7 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{2,7 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,27$$

- Perhitungan nilai Rf sampel A1 warna jingga

Diketahui :

$$\text{Jarak tempuh noda} = 2,3 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{2,3 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,23$$

- Perhitungan nilai Rf standar A2

Diketahui :

$$\text{Jarak tempuh noda} = 5,1 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5,1 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,51$$

- Perhitungan nilai Rf sampel A2 warna merah

Diketahui :

$$\text{Jarak tempuh noda} = 2,8 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{2,8 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,28$$

- Perhitungan nilai Rf sampel A2 warna jingga

Diketahui :

$$\text{Jarak tempuh noda} = 2,4 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{2,4 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,24$$

- Perhitungan nilai Rf standar A3

Diketahui :

$$\text{Jarak tempuh noda} = 5,1 \text{ cm}$$

Jarak tempuh eluen = 10 cm

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5,1 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,51$$

- Perhitungan nilai Rf sampel A3 warna merah

Diketahui :

Jarak tempuh noda = 2,8 cm

Jarak tempuh eluen = 10 cm

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{2,8 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,28$$

- Perhitungan nilai Rf sampel A3 warna jingga

Diketahui :

Jarak tempuh noda = 2,5 cm

Jarak tempuh eluen = 10 cm

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{2,5 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,25$$

- Perhitungan *mean* nilai Rf standar sampel A

Diketahui :

Nilai Rf standar A1 = 0,50

Nilai Rf standar A2 = 0,51

$$\text{Nilai Rf standar A3} = 0,51$$

Ditanya : *Mean* nilai Rf?

Jawab :

$$\text{Mean} = \frac{\text{Nilai Rf std A1} + \text{Nilai Rf std A2} + \text{Nilai Rf std A3}}{\text{Jumlah data}}$$

$$\text{Mean} = \frac{0,50 + 0,51 + 0,51}{3}$$

$$\text{Mean} = 0,51$$

- Perhitungan *mean* nilai Rf sampel A warna merah

Diketahui :

$$\text{Nilai Rf standar A1} = 0,23$$

$$\text{Nilai Rf standar A2} = 0,24$$

$$\text{Nilai Rf standar A3} = 0,25$$

Ditanya : *Mean* nilai Rf?

Jawab :

$$\text{Mean} = \frac{\text{Nilai Rf spl A1} + \text{Nilai Rf spl A2} + \text{Nilai Rf spl A3}}{\text{Jumlah data}}$$

$$\text{Mean} = \frac{0,27 + 0,28 + 0,28}{3}$$

$$\text{Mean} = 0,27$$

- Perhitungan *mean* nilai Rf sampel A warna jingga

Diketahui :

$$\text{Nilai Rf standar A1} = 0,23$$

$$\text{Nilai Rf standar A2} = 0,24$$

$$\text{Nilai Rf standar A3} = 0,25$$

Ditanya : *Mean* nilai Rf?

Jawab :

$$\text{Mean} = \frac{\text{Nilai Rf spl A1} + \text{Nilai Rf spl A2} + \text{Nilai Rf spl A3}}{\text{Jumlah data}}$$

$$\text{Mean} = \frac{0,23 + 0,24 + 0,25}{3}$$

$$\text{Mean} = 0,24$$

- Perhitungan nilai Rf standar B1

Diketahui :

$$\text{Jarak tempuh noda} = 5 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,50$$

- Perhitungan nilai Rf sampel B1

Diketahui :

$$\text{Jarak tempuh noda} = 3,9 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{3,9 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,39$$

- Perhitungan nilai Rf standar B2

Diketahui :

$$\text{Jarak tempuh noda} = 5 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,50$$

- Perhitungan nilai Rf sampel B2

Diketahui :

$$\text{Jarak tempuh noda} = 4 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{4 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,40$$

- Perhitungan nilai Rf standar B3

Diketahui :

$$\text{Jarak tempuh noda} = 5,1 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5,1 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,51$$

- Perhitungan nilai Rf sampel B3

Diketahui :

$$\text{Jarak tempuh noda} = 4,1 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{4,1 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,41$$

- Perhitungan *mean* nilai Rf standar sampel B

Diketahui :

$$\text{Nilai Rf standar B1} = 0,50$$

$$\text{Nilai Rf standar B2} = 0,50$$

$$\text{Nilai Rf standar B3} = 0,51$$

Ditanya : *Mean* nilai Rf?

Jawab :

$$\text{Mean} = \frac{\text{Nilai Rf std B1} + \text{Nilai Rf std B2} + \text{Nilai Rf std B3}}{\text{Jumlah data}}$$

$$\text{Mean} = \frac{0,50 + 0,50 + 0,51}{3}$$

$$\text{Mean} = 0,50$$

- Perhitungan *mean* nilai Rf sampel B

Diketahui :

$$\text{Nilai Rf standar B1} = 0,39$$

$$\text{Nilai Rf standar B2} = 0,40$$

$$\text{Nilai Rf standar B3} = 0,41$$

Ditanya : *Mean* nilai Rf?

Jawab :

$$\text{Mean} = \frac{\text{Nilai Rf spl B1} + \text{Nilai Rf spl B2} + \text{Nilai Rf spl B3}}{\text{Jumlah data}}$$

$$\text{Mean} = \frac{0,39 + 0,40 + 0,41}{3}$$

$$\text{Mean} = 0,40$$

- Perhitungan nilai Rf standar C1

Diketahui :

$$\text{Jarak tempuh noda} = 5 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,50$$

- Perhitungan nilai Rf sampel C1

Diketahui :

$$\text{Jarak tempuh noda} = 1 \text{ cm}$$

Jarak tempuh eluen = 10 cm

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{1 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,10$$

- Perhitungan nilai Rf standar C2

Diketahui :

Jarak tempuh noda = 5 cm

Jarak tempuh eluen = 10 cm

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,50$$

- Perhitungan nilai Rf sampel C2

Diketahui :

Jarak tempuh noda = 0,9 cm

Jarak tempuh eluen = 10 cm

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{4 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,09$$

- Perhitungan nilai Rf standar C3

Diketahui :

Jarak tempuh noda = 5 cm

Jarak tempuh eluen = 10 cm

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{5 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,50$$

- Perhitungan nilai Rf sampel C3

Diketahui :

$$\text{Jarak tempuh noda} = 0,9 \text{ cm}$$

$$\text{Jarak tempuh eluen} = 10 \text{ cm}$$

Ditanya : Nilai Rf?

Jawab :

$$\text{Nilai Rf} = \frac{\text{Jarak tempuh noda}}{\text{Jarak tempuh eluen}}$$

$$\text{Nilai Rf} = \frac{0,9 \text{ cm}}{10 \text{ cm}}$$

$$\text{Nilai Rf} = 0,09$$

- Perhitungan *mean* nilai Rf standar C

Diketahui :

$$\text{Nilai Rf standar C1} = 0,50$$

$$\text{Nilai Rf standar C2} = 0,50$$

$$\text{Nilai Rf standar C3} = 0,50$$

Ditanya : *Mean* nilai Rf?

Jawab :

$$\text{Mean} = \frac{\text{Nilai Rf std C1} + \text{Nilai Rf std C2} + \text{Nilai Rf std C3}}{\text{Jumlah data}}$$

$$\text{Mean} = \frac{0,50 + 0,50 + 0,50}{3}$$

$$\text{Mean} = 0,50$$

- Perhitungan *mean* nilai Rf sampel C

Diketahui :

$$\text{Nilai Rf standar C1} = 0,10$$

$$\text{Nilai Rf standar C2} = 0,09$$

Nilai Rf standar C3 = 0,09

Ditanya : *Mean* nilai Rf?

Jawab :

$$\text{Mean} = \frac{\text{Nilai Rf spl C1} + \text{Nilai Rf spl C2} + \text{Nilai Rf spl C3}}{\text{Jumlah data}}$$

$$\text{Mean} = \frac{0,10 + 0,09 + 0,09}{3}$$

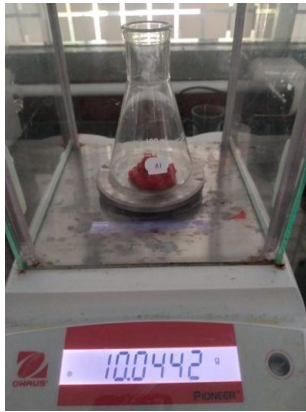
$$\text{Mean} = 0,09$$

- Tabel Hasil Pengujian

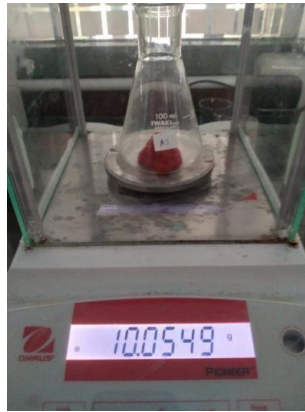
No.	Sampel	Jarak Eluen (cm)	Jarak Noda (cm)	
			Standar	Sampel
1.	Kontrol positif (Adisi awal)	10	5,00	5,00
2.	Kontrol positif (Adisi akhir)	10	5,10	5,10
3.	Kontrol negatif (Adisi akhir)	10	5,10	8,80
4.	Sampel A1	10	5,00	2,70 (M1)
				2,30 (J1)
5.	Sampel A2	10	5,10	2,80 (M2)
				2,40 (J2)
6.	Sampel A3	10	5,10	2,80 (M3)
				2,50 (J3)
7.	Sampel B1	10	5,00	3,90
8.	Sampel B2	10	5,00	4,00
9.	Sampel B3	10	5,10	4,10
10.	Sampel C1	10	5,00	1,00
11.	Sampel C2	10	5,00	0,90
12.	Sampel C3	10	5,00	0,90

Ket : M = Merah, J = Jingga

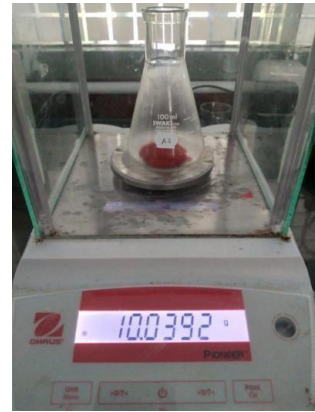
- Dokumentasi Penelitian



Gambar 1.
Penimbangan sampel
A1



Gambar 2.
Penimbangan sampel
A2



Gambar 3.
Penimbangan sampel
A3



Gambar 4.
Penimbangan sampel
B1



Gambar 5.
Penimbangan sampel
B2



Gambar 6.
Penimbangan sampel
B3



Gambar 7.
Penimbangan sampel
C1



Gambar 8.
Penimbangan sampel
C2



Gambar 9.
Penimbangan sampel
C3



Gambar 10.
Penimbangan
standar (Untuk
adisi awal)



Gambar 11.
Penimbangan
kontrol positif



Gambar 12.
Penimbangan
kontrol negatif



Gambar 13. Standar
Rhodamin B



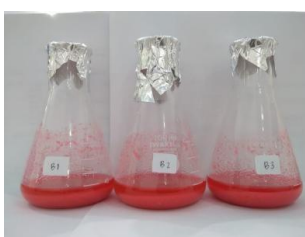
Gambar 14.
Penimbangan NaOH



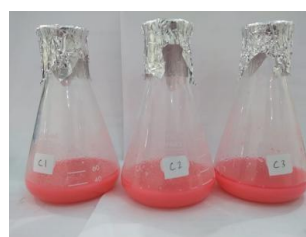
Gambar 15.
Penimbangan NaCl



Gambar 16.
Perendaman sampel A
dengan ammonia 2%



Gambar 17.
Perendaman sampel B
dengan ammonia 2%



Gambar 18.
Perendaman sampel C
dengan ammonia 2%



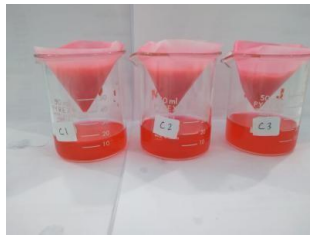
Gambar 19.
Perendaman kontrol
dengan ammonia 2%



Gambar 20.
Penyaringan sampel A
setelah perendaman



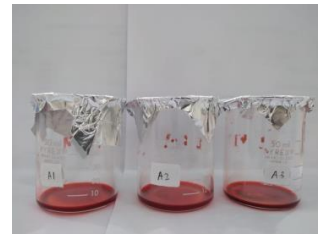
Gambar 21.
Penyaringan sampel B
setelah perendaman



Gambar 22.
Penyaringan sampel C
setelah perendaman



Gambar 23.
Penyaringan kontrol
setelah perendaman



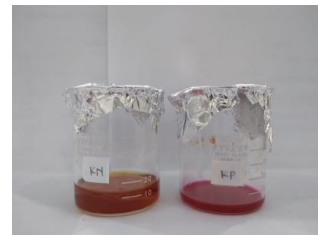
Gambar 24. Sampel A
setelah proses
pemanasan



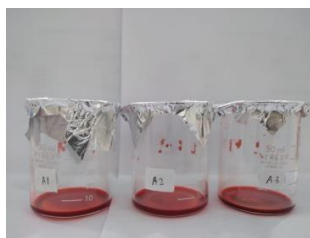
Gambar 25. Sampel B
setelah proses
pemanasan



Gambar 26. Sampel C
setelah proses
pemanasan



Gambar 27. Kontrol
setelah proses
pemanasan



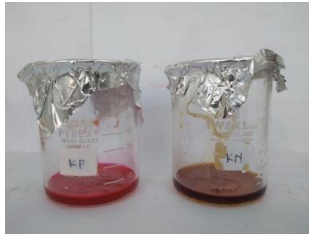
Gambar 28. Sampel A
setelah penambahan
asam asetat 10% +
benang wol dan
disertai pemanasan



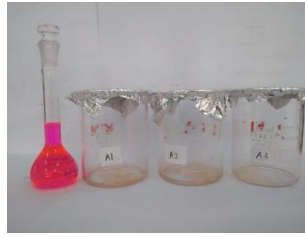
Gambar 29. Sampel B
setelah penambahan
asam asetat 10% +
benang wol dan
disertai pemanasan



Gambar 30. Sampel C
setelah penambahan
asam asetat 10% +
benang wol dan
disertai pemanasan



Gambar 31. Kontrol setelah penambahan asam asetat 10% + benang wol dan disertai pemanasan



Gambar 32. Hasil preparasi sampel A



Gambar 33. Hasil preparasi sampel B



Gambar 34. Hasil preparasi sampel C



Gambar 35. Hasil preparasi kontrol



Gambar 36. Hasil penotolan sampel A



Gambar 37. Hasil penotolan sampel B



Gambar 38. Hasil penotolan sampel C



Gambar 39. Hasil penotolan kontrol (adisi awal)



Gambar 40. Hasil penotolan kontrol (adisi akhir)



Gambar 41. Proses elusi sampel A



Gambar 42. Proses elusi sampel B



Gambar 43. Proses elusi sampel C



Gambar 44. Proses elusi kontrol