# LAMPIRAN

Lampiran 1.

| No. | Sampel | Absorbansi sampel | | Absorbansi rata-rata |
|---|---|---|---|---|
| 1. | A | 0,425 | 0,517 | 0,471 |
| 2. | B | 0,727 | 0,747 | 0,737 |
| 3. | C | 0,350 | 0,337 | 0,343 |
| 4. | D | 0,363 | 0,296 | 0,329 |
| 5. | E | 0,484 | 0,473 | 0,478 |
| 6. | F | 0,490 | 0,536 | 0,513 |
| 7. | G | 0,800 | 0,713 | 0,756 |

**Konsentrasi asam benzoat dalam sampel**

- Sampel A

  Diketahui: persamaan regresi y = 0,0203x + 0,1894
  Y = 0,471

  Y = bx + a
  Y = 0,0203x + 0,1894
  0,471 = 0,0203x + 0,1894
  $x = \frac{0,471-0,1894}{0,0203}$
  = 13,871 ppm

- Sampel B

  Diketahui: persamaan regresi y = 0,0203x + 0,1894
  Y = 0,737

  Y = bx + a
  Y = 0,0203x + 0,1894
  0,737 = 0,0203x + 0,1894
  $x = \frac{0,737-0,1894}{0,0203}$
  = 26,975 ppm

- Sampel C

  Diketahui: persamaan regresi y = 0,0203x + 0,1894
  Y = 0,343

  Y = bx + a
  Y = 0,0203x + 0,1894
  0,343 = 0,0203x + 0,1894
  $x = \frac{0,343-0,1894}{0,0203}$

= 7, 566 ppm

- Sampel D

  Diketahui: persamaan regresi y = 0,0203x + 0,1894
  Y = 0,329

  Y = bx + a
  Y = 0,0203x + 0,1894
  0,329 = 0,0203x + 0,1894
  $x = \frac{0,329-0,1894}{0,0203}$
  = 6, 876 ppm

- Sampel E

  Diketahui: persamaan regresi y = 0,0203x + 0,1894
  Y = 0,478

  Y = bx + a
  Y = 0,0203x + 0,1894
  0,478 = 0,0203x + 0,1894
  $x = \frac{0,478-0,1894}{0,0203}$
  = 14,216 ppm

- Sampel F

  Diketahui: persamaan regresi y = 0,0203x + 0,1894
  Y = 0,513

  Y = bx + a
  Y = 0,0203x + 0,1894
  0,513 = 0,0203x + 0,1894
  $x = \frac{0,513-0,1894}{0,0203}$
  = 15,940 ppm

- Sampel G

  Diketahui: persamaan regresi y = 0,0203x + 0,1894
  Y = 0,756

  Y = bx + a
  Y = 0,0203x + 0,1894
  0,756 = 0,0203x + 0,1894
  $x = \frac{0,756-0,1894}{0,0203}$
  = 27,911 ppm

**Kadar asam benzoat dalam sampel**

- Sampel A

Diketahui: C = 13,871 mg/L
V = 0,1 L
Fp = 100/25 = 4

Kadar = $\frac{C \ x \ V \ x \ Fp}{W}$

= $\frac{13{,}871 \ mg/l \ x \ 0{,}1L \ x \ 4}{0{,}005 \ kg}$

= 1.109 mg/kg

= 1,109 g/kg

- Sampel B

Diketahui: C = 26,975 mg/L
V = 0,1 L
Fp = 100/25 = 4

Kadar = $\frac{C \ x \ V \ x \ Fp}{W}$

= $\frac{26{,}975 \ mg/l \ x \ 0{,}1L \ x \ 4}{0{,}005 \ kg}$

= 2.158 mg/kg

= 2,158 g/kg

- Sampel C

Diketahui: C = 7,566 mg/L
V = 0,1 L
Fp = 100/25 = 4

Kadar = $\frac{C \ x \ V \ x \ Fp}{W}$

= $\frac{7{,}566 \ mg/l \ x \ 0{,}1L \ x \ 4}{0{,}005 \ kg}$

= 605 mg/kg

= 0,605 g/kg

- Sampel D

Diketahui: C = 6,876 mg/L
V = 0,1 L
Fp = 100/25 = 4

Kadar = $\frac{C \ x \ V \ x \ Fp}{W}$

= $\frac{6{,}876 \ mg/l \ x \ 0{,}1L \ x \ 4}{0{,}005 \ kg}$

= 550 mg/kg

= 0,550 g/kg

- Sampel E

Diketahui: C = 14,216 mg/L
V = 0,1 L

Fp = 100/25 = 4

Kadar = $\frac{C \ x \ V \ x \ Fp}{W}$

= $\frac{14{,}216 \ mg/l \ x \ 0{,}1L \ x \ 4}{0{,}005 \ kg}$

= 1.137 mg/kg

= 1,137 g/kg

- Sampel F

Diketahui: C = 15,940 mg/L

V = 0,1 L

Fp = 100/25 = 4

Kadar = $\frac{C \ x \ V \ x \ Fp}{W}$

= $\frac{15{,}940 \ mg/l \ x \ 0{,}1L \ x \ 4}{0{,}005 \ kg}$

= 1.275 mg/kg

= 1,275 g/kg

- Sampel G

Diketahui: C = 27,911 mg/L

V = 0,1 L

Fp = 100/25 = 4

Kadar = $\frac{C \ x \ V \ x \ Fp}{W}$

= $\frac{27{,}911 \ mg/l \ x \ 0{,}1L \ x \ 4}{0{,}005 \ kg}$

= 2.232 mg/kg

= 2,232 g/kg

**Kadar natrium benzoat dalam sampel**

- Sampel A

Diketahui: Kadar Asam Benzoat dalam sampel = 1.109 mg/kg

BM Natrium Benzoat = 144,11

BM Asam Benzoat = 122,12

Kadar = kadar As. Benzoat x $\frac{BM \ Na.Benzoat}{BM \ As.Benzoat}$

= 1.109 mg/kg x $\frac{144{,}11}{122{,}12}$

= 1.308,62 mg/kg

- Sampel B

  Diketahui: Kadar Asam Benzoat dalam sampel = 2.158 mg/kg
  BM Natrium Benzoat = 144,11
  BM Asam Benzoat = 122,12

  Kadar = kadar As. Benzoat x $\frac{BM\ Na.Benzoat}{BM\ As.Benzoat}$

  = 2.158 mg/kg x $\frac{144,11}{122,12}$
  = 2.546,44 mg/kg

- Sampel C

  Diketahui: Kadar Asam Benzoat dalam sampel = 605 mg/kg
  BM Natrium Benzoat = 144,11
  BM Asam Benzoat = 122,12

  Kadar = kadar As. Benzoat x $\frac{BM\ Na.Benzoat}{BM\ As.Benzoat}$

  = 605 mg/kg x $\frac{144,11}{122,12}$
  = 713,9 mg/kg

- Sampel D

  Diketahui: Kadar Asam Benzoat dalam sampel = 550 mg/kg
  BM Natrium Benzoat = 144,11
  BM Asam Benzoat = 122,12

  Kadar = kadar As. Benzoat x $\frac{BM\ Na.Benzoat}{BM\ As.Benzoat}$

  = 550 mg/kg x $\frac{144,11}{122,12}$
  = 649 mg/kg

- Sampel E

  Diketahui: Kadar Asam Benzoat dalam sampel = 1.137 mg/kg
  BM Natrium Benzoat = 144,11
  BM Asam Benzoat = 122,12

  Kadar = kadar As. Benzoat x $\frac{BM\ Na.Benzoat}{BM\ As.Benzoat}$

  = 1.137 mg/kg x $\frac{144,11}{122,12}$
  = 1.341,66 mg/kg

- Sampel F

  Diketahui: Kadar Asam Benzoat dalam sampel = 1.1275 mg/kg
  BM Natrium Benzoat = 144,11
  BM Asam Benzoat = 122,12

  Kadar = kadar As. Benzoat x $\frac{BM\ Na.Benzoat}{BM\ As.Benzoat}$

  = 1.275 mg/kg x $\frac{144,11}{122,12}$
  = 1.504,5 mg/kg

- Sampel G

  Diketahui: Kadar Asam Benzoat dalam sampel = 2.232 mg/kg
  BM Natrium Benzoat = 144,11
  BM Asam Benzoat = 122,12

  Kadar = kadar As. Benzoat x $\frac{BM\ Na.Benzoat}{BM\ As.Benzoat}$

  = 2.232 mg/kg x $\frac{144,11}{122,12}$
  = 2.633,76 mg/kg