LAMPIRAN

A. Perhitungan

– Pembuatan asam nitrat 0,5 % v/v

Digunakan asam nitrat pekat dengan konsentrasi 65 %

$$V1 \times M1 = V2 \times M2$$
$$1000\ ml \times 0{,}5\ \% = V2 \times 65\ \%$$
$$500 = V2 \times 65\ \%$$
$$7{,}7\ ml = V2$$

– Pembuatan larutan baku 1000 ppm

$$1000\ ppm = \frac{1000\ mg}{1\ L}$$
$$= \frac{100\ mg}{100\ ml}$$
$$= \frac{0{,}1\ g}{100\ ml}$$

– Pembuatan larutan standar 5 ppm

$$V1 \times M1 = V2 \times M2$$
$$100\ ml \times 5\ ppm = V2 \times 1000\ ppm$$
$$500 = V2 \times 1000\ ppm$$
$$0{,}5\ ml = V2$$

– Pembuatan larutan standar 10 ppm

$$V1 \times M1 = V2 \times M2$$
$$100\ ml \times 10\ ppm = V2 \times 1000\ ppm$$
$$1000 = V2 \times 1000\ ppm$$
$$1\ ml = V2$$

– Pembuatan larutan standar 20 ppm

$$V1 \times M1 = V2 \times M2$$
$$100\ ml \times 20\ ppm = V2 \times 1000\ ppm$$
$$2000 = V2 \times 1000\ ppm$$
$$2\ ml = V2$$

– Pembuatan larutan standar 30 ppm

$$V1 \times M1 = V2 \times M2$$

100 ml × 30 ppm = V2 × 1000 ppm

3000 = V2 × 1000 ppm

3 ml = V2

– Pembuatan larutan standar 50 ppm

V1 × M1 = V2 × M2

100 ml × 50 ppm = V2 × 1000 ppm

5000 = V2 × 1000 ppm

5 ml = V2

– Pembuatan magnesium nitrat 50 % sebanyak 100 ml

50 % $= \frac{50\ g}{100\ ml}$

– Pembuatan asam klorida 6 M sebanyak 50 ml

Digunakan asam klorida pekat dengan konsentrasi 12 M

V1 × M1 = V2 × M2

50 ml × 6 M = V2 × 12 M

300 = V2 × 12 M

25 ml = V2

– Perhitungan Kadar sampel A

➢ Replikasi 1

y = 0,0082x + 0,0005

0,0179 = 0,0082x + 0,0005

0,0179 – 0,0005 = 0,0082x

0,0174 = 0,0082x

X = 2,12195

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{2{,}12195\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 42,439 mg/kg

➢ Replikasi 2

y = 0,0082x + 0,0005

0,0187 = 0,0082x + 0,0005

0,0187 – 0,0005 = 0,0082x

0,0182 = 0,0082x

X = 2,21951

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{2{,}21951\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 44,390 mg/kg

- Replikasi 3

y = 0,0082x + 0,0005

0,016 = 0,0082x + 0,0005

0,016 – 0,0005 = 0,0082x

0,0155 = 0,0082x

X = 1,89024

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{1{,}89024\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 37,804 mg/kg

– Perhitungan Kadar sampel B

- Replikasi 1

y = 0,0082x + 0,0005

0,0154 = 0,0082x + 0,0005

0,0154 – 0,0005 = 0,0082x

0,0149 = 0,0082x

X = 1,81707

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{1{,}81707\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 36,341 mg/kg

- Replikasi 2

y = 0,0082x + 0,0005

0,0164 = 0,0082x + 0,0005

0,0164 – 0,0005 = 0,0082x

0,0159 = 0,0082x

X = 1,93902

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{1{,}93902\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 38,780 mg/kg

- Replikasi 3

y = 0,0082x + 0,0005

0,0153 = 0,0082x + 0,0005

0,0153 – 0,0005 = 0,0082x

0,0148 = 0,0082x

X = 1,80487

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{1{,}80487\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 36,097 mg/kg

– Perhitu ngan Kadar sampel C

- Replikasi 1

y = 0,0082x + 0,0005

0,0157 = 0,0082x + 0,0005

0,0157 – 0,0005 = 0,0082x

0,0152 = 0,0082x

X = 1,85365

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{1{,}85365\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 37,073 mg/kg

- Replikasi 2

y = 0,0082x + 0,0005

0,0173 = 0,0082x + 0,0005

0,0173 – 0,0005 = 0,0082x

0,0168 = 0,0082x

X = 2,04878

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{2{,}04878\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 40,975 mg/kg

- Replikasi 3

y = 0,0082x + 0,0005

0,0167 = 0,0082x + 0,0005

0,0167 – 0,0005 = 0,0082x

0,0162 = 0,0082x

X = 1,97560

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{1{,}97560\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 39,512 mg/kg

– Perhitungan Kadar sampel D

- Replikasi 1

y = 0,0082x + 0,0005

0,0131 = 0,0082x + 0,0005

0,0131 – 0,0005 = 0,0082x

0,0126 = 0,0082x

X = 1,53658

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{1{,}53658\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 30,731 mg/kg

- Replikasi 2

y = 0,0082x + 0,0005

0,0394 = 0,0082x + 0,0005

0,0394 – 0,0005 = 0,0082x

0,0389 = 0,0082x

X = 4,74390

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{4{,}74390\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 94,878 mg/kg

- Replikasi 3

y = 0,0082x + 0,0005

0,0118 = 0,0082x + 0,0005

0,0118 – 0,0005 = 0,0082x

0,0113 = 0,0082x

X = 1,37804

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{1{,}37804\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 27,560 mg/kg

– Perhitungan Kadar sampel E

- Replikasi 1

y = 0,0082x + 0,0005

0,0126 = 0,0082x + 0,0005

0,0126 – 0,0005 = 0,0082x

0,0121 = 0,0082x

X = 1,47560

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{1{,}47560\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 29,512 mg/kg

- Replikasi 2

y = 0,0082x + 0,0005

0,0125 = 0,0082x + 0,0005

0,0125 – 0,0005 = 0,0082x

0,012 = 0,0082x

X = 1,46341

Kadar Pb $= \frac{C \times V}{W}$

$= \frac{1{,}46341\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 29,268 mg/kg

- Replikasi 3

y = 0,0082x + 0,0005

0,0137 = 0,0082x + 0,0005

0,0137 – 0,0005 = 0,0082x

0,0132 = 0,0082x

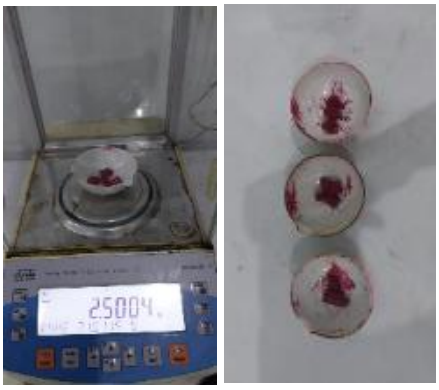
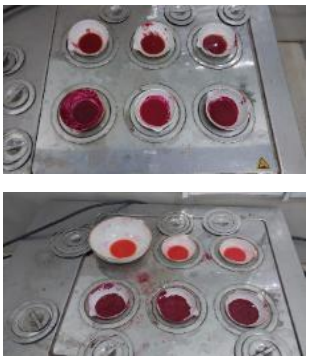
X = 1,60975

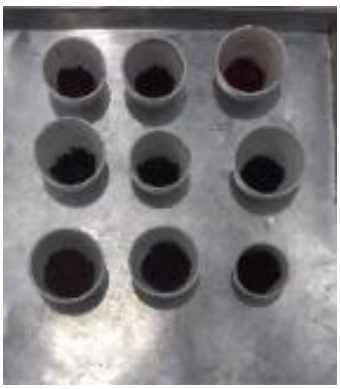
Kadar Pb $= \frac{C \times V}{W}$

$= \frac{1{,}60975\ mg/l \times 0{,}05\ l}{0{,}0025\ kg}$

= 32,195 mg/kg

B. Dokumentasi

<table>
<tr>
<td>
Pembuatan Magnesium Nitrat 50%</td>
<td>
Penimbangan sampel sebanyak 2,5 gram</td>
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<tr>
<td>
Penambahan Magnesium Nitrat 50% sebanyak 3 ml</td>
<td>
Penguapan sampel dengan penangas air</td>
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<td>
Persiapan Crussible</td>
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Pemanasan sampel dengan heating mantle	
 Pemanasan dengan tanur	 Pengenceran HCl pekat menjadi 6 M
  Penambahan HCl 6M sebanyak 25 ml	  Penyaringan menggunakan kertas Whattman no.1
 Penyaringan menggunakan kertas whattman no. 40	  Ditandabataskan sampel menggunakan aqua demineralisasi pada labu ukur 50 ml