

LAMPIRAN

Lampiran 1

PERHITUNGAN PEMBUATAN LARUTAN

Perhitungan Standar

Baku Induk I (1000 ppm)

$$\text{Formaldehid } 1000 \text{ ppm} = 1000 \frac{\text{mg}}{\text{L}} = \frac{1\text{g}}{1000\text{mL}} = \frac{0,1\text{g}}{100\text{mL}} = 0,1\%$$

$$V_1 \times M_1 = V_2 \times M_2$$

$$V_1 \times 37\% = 100 \text{ mL} \times 0,1\%$$

$$V_1 = 0,27 \text{ mL (270 } \mu\text{l)}$$

Jadi volume larutan yang dipipet untuk membuat larutan 1000 ppm sebanyak 0,27 ml.

Baku Induk II (100 ppm)

$$V_1 \times M_1 = V_2 \times M_2$$

$$V_1 \times 1000 \text{ ppm} = 25 \text{ mL} \times 100 \text{ ppm}$$

$$V_1 = 2,5 \text{ mL}$$

Jadi volume larutan yang dipipet untuk membuat larutan 100 ppm sebanyak 2,5 ml.

Baku Kerja = 1 ppm, 1.5 ppm, 2 ppm, 2.5 ppm, 3 ppm (5 titik)

Konsentrasi standar

- 1 ppm

$$V_1 \times M_1 = V_2 \times M_2$$

$$V_1 \times 100 \text{ ppm} = 25 \text{ mL} \times 1 \text{ ppm}$$

$$V_1 = 0,250 \text{ mL}$$

Jadi volume larutan yang dipipet untuk membuat larutan 1 ppm sebanyak 0,250 ml.

- 1,5 ppm

$$V_1 \times M_1 = V_2 \times M_2$$

$$V_1 \times 100 \text{ ppm} = 25 \text{ mL} \times 1,5 \text{ ppm}$$

$$V_1 = 0,375 \text{ mL}$$

Jadi volume larutan yang dipipet untuk membuat larutan 1,5 ppm sebanyak 0,375 ml.

- 2 ppm

$$V_1 \times M_1 = V_2 \times M_2$$

$$V_1 \times 100 \text{ ppm} = 25 \text{ mL} \times 2 \text{ ppm}$$

$$V_1 = 0,500 \text{ mL}$$

Jadi volume larutan yang dipipet untuk membuat larutan 2 ppm sebanyak 0,500 ml.

- 2,5 ppm

$$V_1 \times M_1 = V_2 \times M_2$$

$$V_1 \times 100 \text{ ppm} = 25 \text{ mL} \times 2,5 \text{ ppm}$$

$$V_1 = 0,625 \text{ mL}$$

Jadi volume larutan yang dipipet untuk membuat larutan 2,5 ppm sebanyak 0,625 ml.

- 3 ppm

$$V_1 \times M_1 = V_2 \times M_2$$

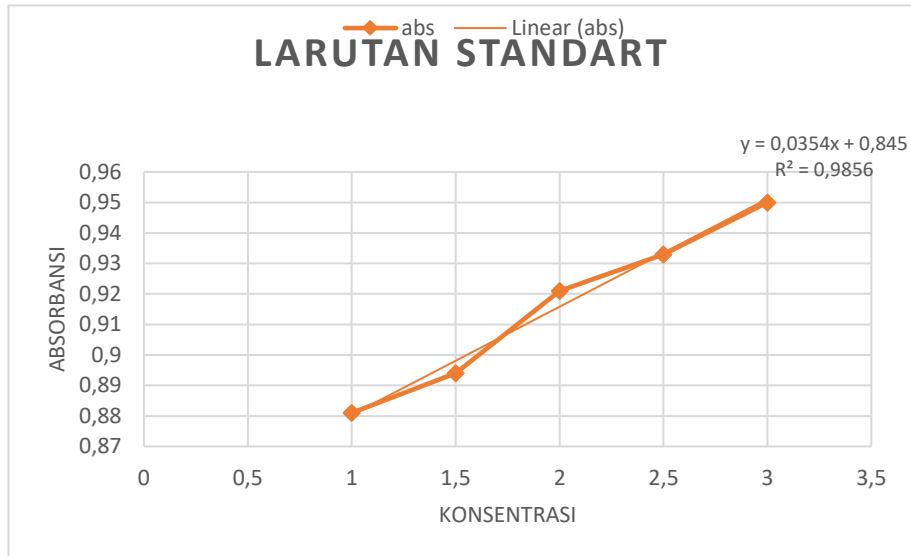
$$V_1 \times 100 \text{ ppm} = 25 \text{ mL} \times 3 \text{ ppm}$$

$$V_1 = 0,750 \text{ mL}$$

Jadi volume larutan yang dipipet untuk membuat larutan 3 ppm sebanyak 0,750 ml.

Lampiran 2

PERHITUNGAN KADAR



- Kurva Kalibrasi

$$y = ax + b \quad r^2 = 1$$

$$y = 0,0354x + 0,845 \quad r^2 = 0,9856$$

- Kadar Sampel A1

$$y = 0,0354x + 0,845$$

$$0,666 = 0,0354x + 0,845$$

$$0,666 - 0,845 = 0,0354x$$

$$\frac{-0,179}{0,0354} = x$$

$$- 5,0565 = x$$

- Kadar Sampel A2

$$y = 0,0354x + 0,845$$

$$0,654 = 0,0354x + 0,845$$

$$0,654 - 0,845 = 0,0354x$$

$$\frac{-0,191}{0,0354} = x$$

$$- 5,395 = x$$

- Kadar Sampel B1

$$y = 0,0354x + 0,845$$

$$0,600 = 0,0354x + 0,845$$

$$0,600 - 0,845 = 0,0354x$$

$$\frac{-0,245}{0,0354} = x$$

$$- 6,920 = x$$

- Kadar Sampel B2

$$y = 0,0354x + 0,845$$

$$0,640 = 0,0354x + 0,845$$

$$0,640-0,845 = 0,0354x$$

$$\frac{-0,205}{0,0354} = x$$

$$- 5,791 = x$$

- Kadar Sampel C1

$$y = 0,0354x + 0,845$$

$$0,645 = 0,0354x + 0,845$$

$$0,645-0,845 = 0,0354x$$

$$\frac{-0,200}{0,0354} = x$$

$$- 5,650 = x$$

- Kadar Sampel C2

$$y = 0,0354x + 0,845$$

$$0,604 = 0,0354x + 0,845$$

$$0,604-0,845 = 0,0354x$$

$$\frac{-0,241}{0,0354} = x$$

$$- 6,808 = x$$

Lampiran 3



Sampel A



destilasi sampel A



Proses destilasi sampel A



Hasil destilasi sampel A



sampel B



destilasi sampel B



Proses destilasi sampel A



Hasil destilasi sampel A



sampel C



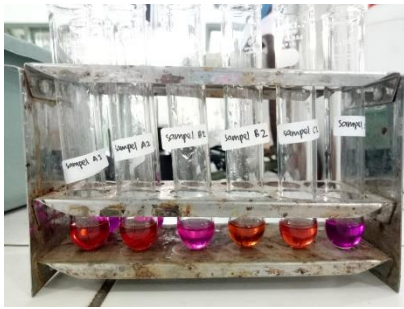
destilasi sampel C



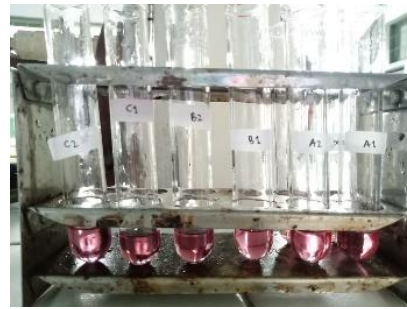
Proses destilasi sampel C



Hasil destilasi sampel A



Uji Kualitatif dengan $KMnO_4$



Uji Kualitatif dengan
Pereaksi Schiff



Hasil uji sampel
dengan pereaksi
Schiff dengan HCl



Larutan
baku
standart



Larutan standart



Pengujian kuantitatif
sampel



Uji kuantitatif dengan
spektrofotometri uv-vis