

LAMPIRAN

1. Perhitungan perbandingan mol Vanilin dan Aseton

Diketahui : Densitas / Berat Jenis / ρ Vanilin = 0,791 gram/ml

Mr Aseton = 58 gram/mol

Mr Vanilin = 152,15 gram/mol

Perbandingan Teoritis Vanilin dan Aseton = 2 : 1

2 mol Vanilin + 1 mol Aseton \rightarrow 1 mol GVT-0

- Menghitung mol Aseton

$$\text{mol Aseton} = \frac{\tilde{n} \text{ Aseton}}{\text{Mr Aseton}}$$

$$\text{mol Aseton} = \frac{0,791 \text{ gram/ml}}{58 \text{ gram}}$$

$$\text{mol Aseton} = 0,01363 \text{ mol}$$

$$\text{jadi, } \begin{matrix} 2 \text{ mol Vanilin} & + & 1 \text{ mol Aseton} & \rightarrow & 1 \text{ mol GVT-0} \\ (0,02726 \text{ mol}) & & (0,01363 \text{ mol}) & & (0,01363 \text{ mol}) \end{matrix}$$

- Menghitung massa Vanilin yang ditimbang :

$$\text{Massa} = \text{mol} \times \text{Mr Vanilin}$$

$$\text{Massa} = 0,01363 \text{ mol} \times 152,15 \text{ gram/mol} = 2,0707$$

$$\text{➤ } 3 : 1 = 3 \times 2,0707 \text{ gram} = 6,2121 \text{ gram}$$

$$\text{➤ } 3,5 : 1 = 3,5 \times 2,0707 \text{ gram} = 7,24745 \text{ gram}$$

$$\text{➤ } 4 : 1 = 4 \times 2,0707 \text{ gram} = 8,2828 \text{ gram}$$