

LAMPIRAN

Lampiran 1. Perhitungan Pembuatan Larutan

- Pembuatan Larutan $\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$ 0,1 M

$$M = \frac{g}{Mr} \times \frac{1000}{V}$$

$$0,1 \text{ M} = \frac{g}{203,31} \times \frac{1000}{500}$$

$$g = 10,1655 \text{ gram}$$

- Pembuatan Larutan NaOH 0,1 M

$$M = \frac{\text{mol}}{V}$$

$$\text{mol} = M \cdot V$$

$$= 0,1 \text{ M} \times 0,5 \text{ L}$$

$$= 0,05$$

$$g = \text{mol} \times Mr$$

$$= 0,05 \times 40$$

$$= 2 \text{ gram}$$

Lampiran 2. Perhitungan Ukuran Kristal Magnesium Oksida

Ukuran kristal MgO dihitung dengan persamaan *Scherrer* sebagai berikut:

$$D = \frac{K \lambda}{\beta \cos \theta}$$

Dimana;

D = ukuran partikel (nm)

λ = Panjang gelombang (0,15406 Å)

K = *shape factor* (0,9)

β = FWHM (rad)

θ = sudut bragg (°)

$$D1 = \frac{0,9 \times 1,5406}{0,13 \times \cos 27,073/2}$$

$$D1 = 62.85599158$$

$$D2 = \frac{0,9 \times 1,5406}{0,189 \times \cos 27,597/2}$$

$$D2 = 43.28238205$$

$$D3 = \frac{0,9 \times 1,5406}{0,157 \times \cos 31,887/2}$$

$$D3 = 52.62488649$$

$$D4 = \frac{0,9 \times 1,5406}{0,16 \times \cos 37,124/2}$$

$$D4 = 52.3764423$$