

tugas 7.

1. dik: gml larutan = 200 ml / 0,2 kg $M_r = 98$

berat = 20%

kepadatan: 1,2 g/ml

dit: m?

Jwb: massa asam Sulfat = $\frac{20}{100} \times 200 = 40$ gr H_2SO_4

mol zat terlarut = $\frac{40}{98} = 0,4082$ mol

~~molalitas = 0,4082~~ gr

molalitas = $\frac{0,4082}{0,2} = 2,041$ mol/kg

2. dik: zat terlarut = 33 gr C_2H_5OH Kepadatan = 0,785 g/ml

gml larutan = 100 ml / 0,1 kg

dit = % volume ?

Jwb: volume $C_2H_5OH = \frac{33}{0,785} = 42,04$ ml

% volume $C_2H_5OH = \frac{42,04}{100} \times 100\% = 42,04\%$

No.

Date: / /

3. Dik: etanol di larutkan = 33 g kerapatan etanol murni = 0,785 g/ml

Volume total larutan = 1000 ml

dit: Konsentrasi C_2H_5OH

Jwb: Volume etanol = $33 \cdot \left(\frac{1}{0,785}\right) = 41,9 \text{ ml}$

Konsentrasi = $\frac{41,9}{100} \cdot 100\% = 41,9\%$