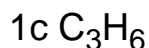
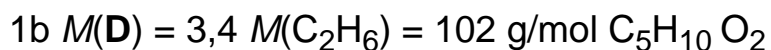
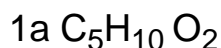


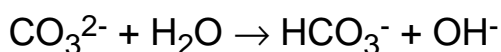
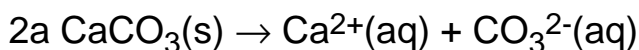
FACITLISTE 1.runde Kemi-OL 2000/2001

Opgave 1



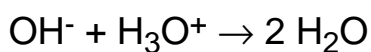
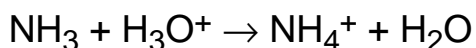
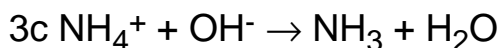
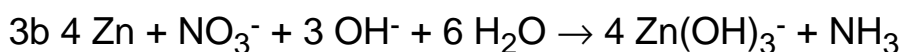
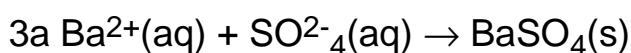
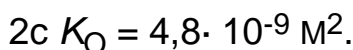
1d 2-propanol propanon ethansyre

Opgave 2



2b Opløseligheden 0,000127 M

Opgave 3



3d $m((NH_4)_2SO_4) = 0,330$ g (0,00250 mol)

$m(NH_4NO_3) = 0,080$ g (0,00100 mol)

$$m(\text{NH}_4\text{Cl}) = 0,439 \text{ g (0,00820 mol)}$$

Opgave 4

$$4a \quad p(\text{SbCl}_3) \cdot p(\text{Cl}_2) \cdot p(\text{SbCl}_5)^{-1}$$

$$4b \quad n_{\text{LIGEVÆGT}} = n_0 (1-\alpha) + 2 \alpha n_0 = n_0 (1+\alpha) \text{ og } n_0 M_0 = n_{\text{LIGEVÆGT}} M$$

$$\Rightarrow M_0 = M + \alpha M \text{ eller } \alpha = (M_0 - M) / M \quad \alpha = 0,917$$

$$4c \quad p_{\text{LIGEVÆGT}} = 1,917 p_0 \Rightarrow p_0 = 0,03365 \text{ bar}$$

$$4d \quad p(\text{SbCl}_3) = (R T / V) n_0 (M_0 - M) / M = p_0 (M_0 - M) / M$$

$$p(\text{Cl}_2) = (R T / V) n_0 (M_0 - M) / M = p_0 (M_0 - M) / M$$

$$p(\text{SbCl}_5) = (R T / V) n_0 (1 - (M_0 - M) / M) = p_0 (2M_0 - M) / M$$

$$K_p = 0,34 \text{ bar}$$