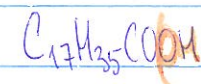
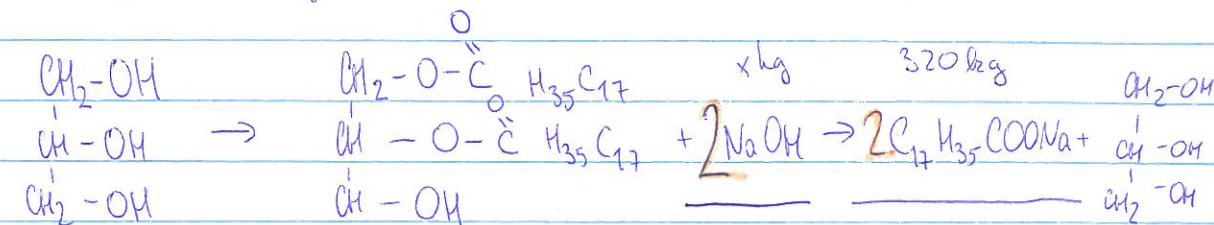


43) Kolik kg 8% NaOH je třeba na výrobu 320 kg sodného mýdla z distearidu?



$$\begin{aligned} M(\text{NaOH}) &= 40 \text{ g mol}^{-1} = 40 \text{ kg} \\ M(\text{C}_{17}\text{H}_{35}\text{COONa}) &= 306 \text{ g mol}^{-1} \end{aligned}$$

$$\begin{array}{l} \uparrow 2 \text{ 80 kg NaOH} \dots\dots 612 \text{ kg C}_{17}\text{H}_{35}\text{COONa} \uparrow \\ \times \text{ kg NaOH} \dots\dots 320 \text{ kg C}_{17}\text{H}_{35}\text{COONa} \\ \hline 80 : x = 612 : 320 \\ \hline x = 41,83 \text{ kg NaOH (100\%)} \end{array}$$

$$\begin{array}{l} \uparrow 41,83 \text{ kg} \dots\dots 100\% \downarrow \\ \times \text{ kg} \dots\dots 8\% \downarrow \\ \hline 41,83 : x = 8 : 100 \\ \hline x = 523 \text{ kg} \end{array}$$

51) Kolik g KOH je třeba na přípravu 1 dm³ O, který bude mít pH=12

$$\text{pOH} = 2 + \text{pH} = 12 = 14$$

KOH - silný hydroxid

$$c = 0,01 \text{ M}$$

$$c = \frac{m}{M \cdot V} \Rightarrow m = c \cdot M \cdot V$$

$$m = 0,01 \cdot 56 \cdot 1 = \underline{0,56 \text{ g KOH}}$$