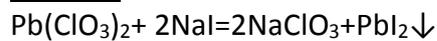


Answer on Question #48639, Chemistry, Other

Task:

What mass of precipitate will form if 1.50 l of concentrated $\text{Pb}(\text{ClO}_3)_2$ is mixed with 0.650 L of 0.130 M NaI.

Answer:



$$C_M = \frac{v}{V} \quad v = C_M V$$

$$v(\text{Pb}(\text{ClO}_3)_2) = 0,13 \cdot 0,65 = 0,0845 \text{ mol}$$

$$v(\text{NaI}) = v(\text{Pb}(\text{ClO}_3)_2) = 0,0845 \text{ mol}$$

$$v = \frac{m}{M} \quad M(\text{NaI}) = 150 \text{ g/mol}$$

$$m(\text{NaI}) = v(\text{NaI}) \cdot M(\text{NaI}) = 0,0845 \cdot 150 = 12,68 \text{ g}$$