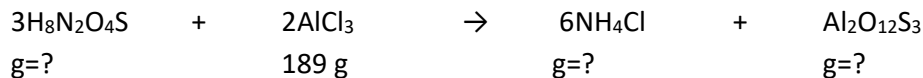


By Mole Method:



$$\begin{aligned} \text{No. of Mole (2AlCl}_3) &= \frac{\text{Weight}}{\text{Molecular Weight}} \\ &= \frac{189 \text{ g}}{264 \text{ g/mole}} \\ &= 0.716 \text{ mol} \end{aligned}$$

$$\text{Weight (3H}_8\text{N}_2\text{O}_4\text{S)} = \text{No. of mole} \times \text{Molecular weight}$$

$$= 0.716 \text{ mol} \times 396 \text{ g/mol}$$

$$= 283.5 \text{ g}$$

$$\text{Weight (6NH}_4\text{Cl)} = \text{No. of mole} \times \text{Molecular weight}$$

$$= 0.716 \text{ mol} \times 318 \text{ g/mol}$$

$$= 227.66 \text{ g}$$

$$\text{Weight (Al}_2\text{O}_{12}\text{S}_3) = \text{No. of mole} \times \text{Molecular weight}$$

$$= 0.716 \text{ mol} \times 342 \text{ g/mol}$$

$$= 244.84 \text{ g}$$

Check:

