Mass Molar Conversion Additional Examples

Ca_3N_2 (Calcium Nitride)

① Find Molar Mass

Ca: $3 \cdot 40.08g$

N: $2 \cdot 14.01g$

Ca_3N_2: $148.26g/mol$

(1mol = 148.26g)

② Convert $1.45 mol\ Ca_3N_2$ to mass Ca_3N_2

$$\frac{1.45\ \cancel{mol} \mid 148.2g}{\mid 1\ \cancel{mol}} = 214.89g\ Ca_3N_2$$

$Sr(NO_3)_2$ (Strontium Nitrate)

① Find Molar Mass

Sr: $1 \cdot 87.62g$

N: $2 \cdot 14.01g$

O: $6 \cdot 16.00g$

$Sr(NO_3)_2 = 211.64g/mol$

(1mol = 211.64g)

② Convert $315.9g\ Sr(NO_3)_2$ to mol $Sr(NO_3)_2$

$$\frac{315.9\cancel{g} \mid 1\ mol}{\mid 211.64\cancel{g}} = 1.49\ mol\ Sr(NO_3)_2$$