



$$v(\text{Mg}) = \frac{8}{24} = 0.33\text{mol}$$

$$v(\text{O}_2) = \frac{0.33}{2} = 0.167\text{mol}$$

$$V(\text{O}_2) = 0.167 * 22.4 = 3.73\text{L}$$

$$\underline{V(\text{O}_2)=3.73\text{L}}$$