

Question 26 (4 marks)

A gas is produced when 10.0 g of zinc is placed in 0.50 L of 0.20 mol L⁻¹ nitric acid. 4

Calculate the volume of gas produced at 25°C and 100 kPa. Include a balanced chemical equation in your answer.

Nitric acid: $n = cv$ $Zn + H_2NO_2 \rightarrow$

$$n = 0.2 \times 0.5$$

$$= 0.1 \text{ mol}$$