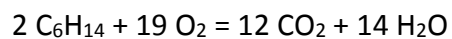


Question #74310 - Chemistry - General Chemistry

How many grams of CO<sub>2</sub> will be produced from the combustion of 25 liters of C<sub>6</sub>H<sub>14</sub> at STP assuming that Oxygen is in excess?

**Answer**

Firstly write chemical equation:



$$M(\text{CO}_2) = 44 \text{ g/mol}; V_m = 22.4 \text{ l/mol}$$

If Oxygen is excess reagent, then:

$$m(\text{CO}_2) = V(\text{C}_6\text{H}_{14}) \times M(\text{CO}_2) / V_m = 25 \times (12 \times 44) / (2 \times 22.4) = 294.64 \text{ g}$$

Answer provided by AssignmentExpert.com