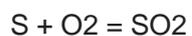


Question # 85514, answer

How many grams of sulfur must be burned (with sufficient oxygen) to produce 5.282 L of sulfur dioxide? ?

Answer:

1)chemical reaction equation



2) number of moles of sulfur dioxide $\text{SO}_2 = 5.282 \text{ L} / 22.4 \text{ moles/L} = 0.236 \text{ moles}$

3) according to reaction stoichiometry number of moles of sulfur $\text{S} = 0.236 \text{ moles}$ (oxygen is in excess)

4) mass of sulfur = $0.236 \text{ moles} \times 32 \text{ g/mole} = 7.55 \text{ g}$

Answer provided by www.AssignmentExpert.com