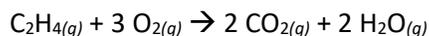


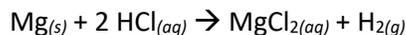
Chemistry – Chapter 12 book problems #3: Limiting reagents

1. The equation for the complete combustion of ethene (C₂H₄) is



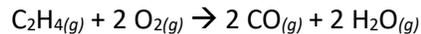
If 2.70 mol C₂H₄ reacts with 6.30 mol O₂, identify the limiting reagent.

2. Hydrogen gas can be produced by the reaction of magnesium metal with hydrochloric acid.



Identify the limiting reagent when 6.00 g HCl reacts with 5.00 g Mg.

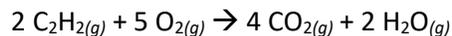
3. The equation below shows the incomplete combustion of ethene.



If 2.70 mol C₂H₄ is reacted with 6.30 mol O₂,

- Identify the limiting reagent.
- Calculate the moles of water produced.

4. The heat from an acetylene torch is produced by burning acetylene (C₂H₂) in oxygen.



How many grams of water can be produced by the reaction of 2.40 mol C₂H₂ with 7.40 mol H₂O?