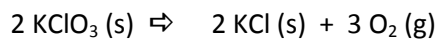


Chemistry
Unit #17—Gases

Gas Stoichiometry

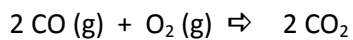
1. Calculate the grams of oxygen gas produced at 3.546 atm and 96°C by the complete decomposition of 63.4 L of potassium chlorate.



2. If 14.4 L of ethane is combusted at 100°C and 256.46 kPa, how many grams of water will be produced?



3. If 4.66 grams of oxygen gas is reacted with carbon monoxide, what volume of carbon dioxide is produced at 36°C at 56 kPa?



4. Consider the combustion reaction between 50 mL of liquid methyl alcohol, CH_3OH , and 22.8 L of O_2 gas at 27°C and a pressure of 2.0 atm. Calculate the number of moles of water vapor formed when this reaction goes to completion. The density of liquid methyl alcohol is 0.850 g/mL. (Limiting Reactant)