## Question #70034, Chemistry / General chemistry

If you start with 14.8 g of C3H8 and 3.44 g of O2 what is the limiting reagent?

## Solution

$$C_3H_8 + 5O_2 = 3CO_2 + 4H_2O$$
  
 $n(C_3H_8) = m/M = 14.8 / (12*3+1*8) = 0.337 \text{ (mol)}$   
 $n(O_2) = m/M = 3.44 / (16*2) = 0.107 \text{ (mol)}$ 

## Answer

O<sub>2</sub> is the limiting reagent