## Answer on Question \#41666, Chemistry, Organic Chemistry

## Question:

How much $\mathrm{KClO}_{3}$ must be heated to obtain 2.50 gram of oxygen?

## Answer:

The equation of this reaction:
$2 \mathrm{KClO}_{3} \rightarrow 2 \mathrm{KCl}+3 \mathrm{O}_{2}$

For solving this question we can use proportion:

Molecular mass of $\mathrm{KClO}_{3}=122.5^{*} 2=245$

Molecular mass of $\mathrm{O}_{2}=32 * 3=96$.

Suppose that $x$ is mass of $\mathrm{KClO}_{3}$.

So, we get the proportion: $\mathrm{x} / 245=2.50 \mathrm{~g} / 96$
$x=6.38 \mathrm{~g}$ of $\mathrm{KClO}_{3}$

