Answer on Question #41666, Chemistry, Organic Chemistry

Question:

How much KClO₃ must be heated to obtain 2.50 gram of oxygen?

Answer:

The equation of this reaction:

$$2KCIO_3 \rightarrow 2KCI + 3O_2$$

For solving this question we can use proportion:

Molecular mass of $KCIO_3 = 122.5*2 = 245$

Molecular mass of $O_2 = 32*3 = 96$.

Suppose that x is mass of KCIO₃.

So, we get the proportion: x/245 = 2.50g/96

x = 6.38g of KCIO₃