## Answer on Question\#39838, Chemistry, Other

## Question:

How many milliliters of 0.121 M H 2 SO 4 are needed to neutralize 0.150 g of NaOH ?

## Answer:

An equation of the reaction is:
$2 \mathrm{NaOH}+\mathrm{H}_{2} \mathrm{SO} 4=\mathrm{Na} 2 \mathrm{SO} 4+2 \mathrm{H} 2 \mathrm{O}$
Moles of $\mathrm{NaOH}=0.150 / 40=0.00375$ moles.
The mole ratio of this equation is:
$n(\mathrm{NaOH}) / n(\mathrm{H} 2 \mathrm{SO} 4)=2 / 1$
The moles of $\mathrm{H} 2 \mathrm{SO} 4=0.00375 / 2=0.001875$ moles
The volume of H 2 SO 4 we can be found from formula:
$C=n / V$
$\mathrm{V}=0.0011875 / 0,121=0.0155 \mathrm{~L}=15.5 \mathrm{ml}$

