Answer on Question #53799 - Chemistry - General Chemistry

Question:

2 litres of 9.8% w/w H_2SO_4 (d=1.5gm/ml) solution is mixed with 3 litre of 1M KOH solution. the number of moles of H2So4 added are?

Answer:

First we need to count the mass of acid added.

m= d×V×0,098, m=1.5gm/ml×2000ml×0,098=294gm

Number of moles is found from equation $n=\frac{m}{M}$, where m- mass of acid, M- molar mass of sulphuric acid

$$n=\frac{294gm}{98gm/mol}= 3mol$$

Answer: 3 mol