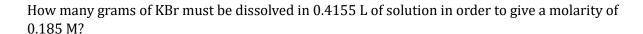
Molarity & Stoichiometry



Example Two

What is the molarity of a solution of lithium nitrate is 10.0 grams of LiNO $_3$ were dissolved in 500.0 mL of solution? The molar mass of LiNO $_3$ is 68.95 g/mol.

Example Three

What total volume of solution is needed to generate a 1.00~M solution of NaCl using 10.0~g rams of NaCl? The molar mass of NaCl is 58.44~g/mol

Example Four

What is the maximum mass of magnesium that could completely react with 50.0~mL of 6.00~M HCl according to the reaction below?

$$Mg(s) + 2 HCl(aq) \rightarrow MgCl_2(aq) + H_2(g)$$

Example Five

What is the molarity of nitric acid HNO_3 if 15.0 mL of the solution is completely neutralized by 38.5 mL of 0.150 M NaOH?

Example Six

A 25.0 mL solution of sulfuric acid is completely neutralized by 18 mL of 1.0 M LiOH. What is the concentration of the $\rm H_2SO_4$ solution?

Example Seven

What is the maximum mass of silver that can be obtained from a reaction between $5.00~\rm g$ of Copper and $100.0~\rm mL$ of $2.00~\rm M$ silver nitrate solution.

$$Cu(s) + 2 AgNO_3(aq) \rightarrow 2 Ag(s) + Cu(NO_3)_2(aq)$$