

Mixtures & solutions

Exercises

1.- A commercial disinfectant is a solution prepared solving 3 g of hydrogen peroxide in 99 g of water. Find its concentration expressed in grams per litre. The density of the solution is 1010 g.cm^{-3}

2.- A standard hydrochloric solution is 35 % and its density is 1,19 g/ ml. Calculate its concentration expressed in grams per litre. How many millilitres of solution do you need to get 15 grams of hydrochloric acid?

3.- A standard solution of nitric acid is 69 % and its density is 1,41 grams per millilitre. Calculate its concentration expressed in grams per liter. How many millilitres do you need to get 60 grams of nitric acid. Calculate the mass of nitric acid in 100 millilitres of solution.

4.- We solve 15 g of sugar in 60 g water, getting a solution volume equal to 65 ml. Calculate the concentration of the solution expressed in mass percentage and grams per litre. Find the solution density. Calculate the mass of sugar found in 15 ml of solution. What is the volume of solution which contains 2 g of sugar?

5.- A solution of salt in water has 30 grams of salt per litre. Calculate the amount of salt contained in a 200 cubic centimetre glass of solution. How many millilitres of solution do we need to get half a kilogram of salt?