

Concentration

- 0.240 mol of washing soda, Na_2CO_3 , is dissolved in water to make 0.500 L of a solution for softening water.
 - What is the ppm concentration of the solution?
 - What is the molar concentration of a solution in which
 - What is the %W/V concentration of the solution?
- What is the amount concentration of 500 mL of a solution that contains 12.7 g of swimming pool chlorinator, calcium hypochlorite?
- How many moles of solid sodium hydrogen carbonate would be needed to make 0.100 L of a 0.600 mol/L solution suitable for use as an antacid?
- What mass of sodium hydroxide (lye) must be added to 1.50 L of water in order to prepare a solution with a concentration of 0.0750 mol/L?
- Calculate the volume of 0.100 mol/L solution that can be prepared from 3.60 mmol of caustic soda.

6. What volume of 0.700 mol/L brush cleaning solution can be prepared from 126 g of sodium phosphate, $\text{Na}_3\text{PO}_4(\text{s})$?
7. Calculate the % W/V of an ink solution that contains 0.210 g of iron(II) sulphate dissolved in 0.048 L of water.
8. Sodium phosphate can be used to remove scale deposits from a car radiator.
- What volume of a 0.075 mol/L solution would contain 1.10 mol of sodium phosphate?
 - What would be the %W/V concentration of the solution?
9. A solution of windshield washer fluid is 46.5% V/V of propanol. What volume of propanol is present in a 3.5 L jug of windshield washer fluid?