**Mass Volume Percent (% m/v)**

Mass-volume percentage is expressed not in % units, but in % g/mL.

Due to the way this concentration type is defined it is possible to have solutions of concentration above 100% m/v.

Mass Volume Percent = mass of solute (g) \_ x 100

volume of solution (mL)

**As with all concentration in percentage problems--turn the percentage into a ratio over 100.**

**1)** What is the concentration in % m/v of a potassium chloride solution \_\_\_\_\_\_\_\_\_\_\_\_ made with 2.50 g of potassium chloride in 50.0 mL of solution? **(5 % m/v)**

**2)** What is the concentration in % m/v of 120 mL of low fat milk that contains 7.50 g of casein (protein)?

**3)** Many people use a solution of trisodium phosphate, Na3PO4 (commonly called TSP), to clean walls before putting up wallpaper.

The recommended concentration is 1.7% (m/v).

What mass of TSP is needed to make 2.0 L of solution?

**4)** What is the concentration in percent mass/volume of 150 mL of solution containing 30 g of solute? **(20 % m/v)**

**5)** What is the concentration by % m/v if 67 g are dissolved to make 1.2 L of solution? **(5.6 % m/v)**

**6)** What volume of a 40 % m/v solution contains 70 g of solute? **(175 mL soln)**

**7)** What amount of solute is dissolved to make 0.50 L of a 20. % m/v solution?

**(100g solute)**

**8)** What amount of a 75 % m/v solution will be made if 50.0 g of solute are dissolved?

**(66.7 mL solution)**

**9)** What is the concentration in % m/v if 0.55 kg of solute is dissolved to make 1.5 L of solution? **(36.7 % m/v)**