

Molality Worksheet

1. Write the equation for molality:
2. Write the equation for molarity:
3. Explain how molality and molarity differ.
4. What is the molality of a solution in which 0.32 moles aluminum chloride has been dissolved in 2,200 g water?
5. What mass of water is needed to prepare a 1.20 molal solution using 0.60 mol propyleneglycol?
6. What is the molality of a solution in which 0.145 mol carbon dioxide is dissolved in 591 mL water?
7. What is the molality of a solution in which 13.7 g sodium chloride has been dissolved in 500.0 g water?
8. How many grams of ethanol, $\text{C}_2\text{H}_6\text{O}$, are need to prepare a 0.10 *m* solution using 1.000 kg water?
9. What is the molality of the solution is which 3.0 moles of sodium chloride is dissolved into 1.5 kg of water?
10. What is the molality of a solution in which 25.0 grams of sodium chloride is dissolved in 2000 mL of water?
11. What is the molality of a solution in which 15.0 grams of iodine gas is dissolved in 500 g of alcohol?
12. How much water should be added 5.00 grams of potassium chloride to prepare to a 0.500 *m* solution?