

NAME _____

Calculate the boiling point elevation for a solution consisting of 5.48 grams of Na_2CO_3 and 497 grams of water. The K_b for water is $0.516^\circ\text{C kg/mol}$.

ANS _____

NAME _____

Calculate the molar mass of a compound if when 9.00 g of it is dissolved in 119 g of benzene, the melting point of benzene is lowered 2.02 °C. The K_f for benzene is 8.0 K mol/kg.

ANS _____

NAME _____

Calculate the mass of NaCl needed to lower the freezing point of 11.9 kilograms of water by 2.99 °C. The K_f for water is 1.86 °C kg/mol.

ANS _____

NAME _____

Calculate the boiling point elevation for a solution consisting of 15.9 grams of CaCl_2 (molar mass = 111.0 g/mol) and 396 grams of water. The K_b for water is $0.516^\circ\text{C kg/mol}$.

ANS _____

NAME _____

Calculate the molar mass of a compound if when 7.41 g of it is dissolved in 159 g of benzene, the melting point of benzene is lowered 3.68 °C. The K_f for benzene is 8.0 K mol/kg.

ANS _____

NAME _____

Calculate what mass of Na_2SO_4 needed to lower the freezing point of 15.9 kilograms of water by $2.61\text{ }^\circ\text{C}$. The molar mass of $\text{Na}_2\text{SO}_4 = 142\text{ g/mol}$. The K_f for water is $1.86\text{ }^\circ\text{C kg/mol}$.

ANS _____

NAME _____

Calculate the boiling point elevation for a solution consisting of 13.9 grams of LiF (molar mass = 25.94 g/mol) and 697 grams of water. The K_b for water is $0.516^\circ\text{C kg/mol}$.

ANS _____

NAME _____ H

Calculate the molar mass of a compound if when 16.0 g of it is dissolved in 130 g of benzene, the melting point of benzene is lowered 2.02 °C. The K_f for benzene is 8.00 K mol/kg.

ANS _____

NAME _____ I

Calculate what weight of LiF needed to lower the freezing point of 24.9 kilograms of water by 2.99 °C. The molar mass of LiF = 25.94 g/mol. The K_f for water is 1.86 °C kg/mol.

ANS _____

NAME _____ J

Calculate the boiling point elevation for a solution consisting of 25.9 grams of CaCl_2 (molar mass = 111 g/mol) and 396 grams of water. The K_b for water is $0.516^\circ\text{C kg/mol}$.

ANS _____

NAME _____ K

Calculate the molar mass of a compound if when 18.4 g of it is dissolved in 159 g of benzene, the melting point of benzene is lowered 3.68 °C. The K_f for benzene is 8.00 K mol/kg.

ANS _____

NAME _____ L

Calculate what mass of CaCl_2 needed to lower the freezing point of 35.9 kilograms of water by 2.61°C . The molar mass of $\text{CaCl}_2 = 111\text{ g/mol}$. The K_f for water is $1.86^\circ\text{C kg/mol}$.

ANS _____