

Download Freezing Point Depression Lab Answers

Molecular Mass by Freezing Point Depression Lab by av s on ...

Transcript of Molecular Mass by Freezing Point Depression Lab. Mass 8.00 g of BHT, an empty test tube, and the test tube with the BHT. Heat the water until 90 degrees Celsius after the test tube is submerged. Once the water is at 90 degrees Celsius remove the test tube. Stir the BHT continuously and record the temperature every 20 seconds.

Lab 19: Colligative Properties: Freezing

CONCLUSIONS. Explain your answer. The molar mass would be lower because if the freezing point was 0.3° lower, then there would be a greater change in temperature, which would result in a larger molality and more moles. There would also be a smaller molar mass.

Molar Mass by Freezing Point Depression

Post-lab Analysis. First, we can see that the freezing points are already established. Therefore, we can find ΔT_{fp} for BHT + cetyl alcohol and BHT + unknown. This is because ΔT_{fp} is the change of the freezing point between BHT and BHT + whichever substance. We use some simple subtraction for this part.

Determination of Molecular Mass by Freezing Point Depression

Determination of Molecular Mass by Freezing Point Depression Page 3 of 10 The cooling behavior of a solution is somewhat different from that of a pure liquid (see Figure 2). The temperature at which a solution freezes is lower than that for the pure solvent. In addition, there is a slow gradual fall in temperature as freezing proceeds.

Solved: Determination Of Molar Mass By Freezing Point Depr ...

Determination of molar mass by freezing point depression lab. From the graph I determined the freezing point of t butanol as 23°C . Please check if ΔT_{fp} or molality of t butanol solution is correct.

Colligative Properties: Freezing

Antifreeze is a solution with a depressed freezing point. The freezing point is lowered by the solutes in the solution as detailed above. Instead of freezing at 0°C , most automotive antifreezes do not freeze until -40°C . In industry, colligative properties can be used to alter the freezing points and boiling points of substances to fit special applications.

Experiment 12 Freezing Point of Solutions

Experiment 12 – Freezing Point of Solutions A solution freezes at a lower temperature than does the pure solvent. This phenomenon is called freezing point depression. The freezing point depression of a solution is a colligative property of the solution which is dependent upon the number of dissolved particles in the solution. The higher the

FREEZING POINT DEPRESSION LAB REPORT

Freezing point depression occurs when the freezing point of a liquid is lowered by adding another compound on it. The freezing point of water is 0° , but it can be depressed by adding a solvent such as salt in our experiment. It's a colligative property of matter.

Lab 3

where ΔT_f is T_f (pure solvent) - T_f (solution), k_f is the freezing point depression constant for the solvent and m_c is the colligative molality. In this experiment, the colligative molality of a stearic acid solution containing lauric acid will be used to predict the freezing point depression.