

1. Indicate any correct statements, or write "NONE" if none are correct. A Some organic compounds don't have any melting points. B Some impurities can increase the melting point of a compound. C The melting point of a compound is independent of the heating rate. D The melting point of a compound is independent of the quantity being melted. (4 pts)

A, C, D

2. You mix your sample with broken glass. It is impure now, but its melting point won't change. Why not? (2 pts).

Glass is immiscible

3. Which compound will you recrystallize today? (2 pts).

benzil

4. Let's assume that during your melting point experiment, you determined that your unknown is sulfanilic acid. What chemical do you have to mix it with to determine the mixed melting point? (2 pts).

sulfanilic acid

5. Sketch a melting point-composition diagram for a binary mixture. Don't forget to label both x and y axes and show the eutectic point for full credit! (5 pts).

