

Molality = $\frac{\text{moles Solute}}{\text{kg Solvent}}$

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Mar 15-9:26 AM

p22 (4) --- g I_2
Solute

750g ^{CCl₄} Solvent ~~0.02M~~

$m = \frac{0.02 \text{ mole I}_2}{0.75 \text{ kg CCl}_4}$

0.02 mole I₂	254 g I ₂
Mole I₂	

= 5.08 g I₂

Mar 15-9:38 AM

922 ③

SOLVENT H₂O 5g KCl SOLUTE

0.5 M (circled in red)

1 molal (circled in red)

$\frac{0.5 \text{ mole}}{1 \text{ kg}}$ (circled in red)

0.5 mole KCl
? kg H₂O

1 kg H ₂ O	1 mole KCl	5g KCl
0.5 mole KCl	74 g KCl	

= 0.135 kg H₂O

Mar 15-9:43 AM

<p><u>Solution</u></p> <ul style="list-style-type: none"> - homogeneous mixture - evenly mixed - NEVER settles out (solids) - <i>Permanently mixed</i> - light goes through <u>un</u> deflected - very very small particles - <i>Permanently suspended</i> - <u>never</u> settles out 	<p><u>SNOW GLOBE</u> <u>SUSPENSION</u></p> <p><i>heterogeneous</i></p> <p>Short time in "soln"</p> <p><i>deflect some light.</i></p> <p>Large particles</p>	<p><u>FOG</u> <u>colloid</u></p> <p><i>suspended longer time</i></p> <p>- deflects lots</p> <p><i>small but too big to stay permanently suspended</i></p>
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Mar 15-9:47 AM