

Quiz 9.2 – Electrolyte Solutions

Name: _____

Question 1Classify each of the following compounds as a *strong* electrolyte, *weak* electrolyte, or *non*-electrolyte

- | | |
|--|---|
| <input type="radio"/> $\text{Ca}(\text{NO}_3)_2$ | <input type="radio"/> H_2CO_3 |
| <input type="radio"/> N_2 | <input type="radio"/> NH_3 |
| <input type="radio"/> HNO_3 | <input type="radio"/> $\text{C}_6\text{H}_{12}\text{O}_6$ |

Question 2

Give the molal concentration of solute particles in the following solutions:

- ☐ 0.75M MgCl_2
- ☐ $0.25\text{M CH}_3\text{CH}_2\text{OH}$
- ☐ A solution with 0.2M NaCl and 0.3M CHCl_3

Question 3Find the freezing point of an aqueous solution with 1.5M MgSO_4 . Water has a freezing point depression constant of $-1.86^\circ\text{C}/m$ **Question 4**Saline solution commonly used in medical practice is made by dissolving 9g of NaCl in 1L of solution. Find the osmotic pressure of saline solution (in atm) at 298K

Good Bones

By Maggie Smith

Life is short, though I keep this from my children.
Life is short, and I've shortened mine
in a thousand delicious, ill-advised ways,
a thousand deliciously ill-advised ways
I'll keep from my children. The world is at least
fifty percent terrible, and that's a conservative
estimate, though I keep this from my children.
For every bird there is a stone thrown at a bird.
For every loved child, a child broken, bagged,
sunk in a lake. Life is short and the world
is at least half terrible, and for every kind
stranger, there is one who would break you,
though I keep this from my children. I am trying
to sell them the world. Any decent realtor,
walking you through a real shithole, chirps on
about good bones: This place could be beautiful,
right? You could make this place beautiful.