

Solutions

How many moles of solute particles are in each of the following solutions?

0.50 M CH_3Cl

0.50 M K_2SO_4

0.50 M FeCl_3

0.50 M $\text{CH}_3\text{CH}_2\text{OH}$

Label the following as strong, weak, or nonelectrolytes

HF

HBr

Na_2CO_3

CH_3COOH

CH_3COCH_3

KOH

What is the difference between solvation and hydration?

Indicate if the following pairs will or will not form a solution.

C_3H_8 and H_2O

CH_3OH and C_7H_8 (toluene)

$\text{C}_{20}\text{H}_{30}\text{O}$ and water

Gasoline (large hydrocarbons) and NaCl

C_7H_8 and C_6H_{14}

KNO_3 and H_2O

How does temperature affect the solubility of a solid? A gas?