

UNSat } SAT } SUPA sat.
 (Dilute } Full. } Super →
 vs } } only under
 Concentrated } } Special
 } } conditions!

Molar.ity = $\frac{\text{Moles solute}}{\text{l of solution}}$

Big (M) → Solute + Solvent

Dec 21-7:26 AM

Mass % = $\frac{\text{Part}}{\text{Whole}} \times 100$

pph (parts per hundred) → solute + solvent.

PPM = $\frac{\text{Part}}{\text{Whole}} \times 1,000,000$

10^6

Dec 21-8:23 AM

Mole fraction

$$X = \frac{\text{part moles}}{\text{Whole moles (TOTAL)}}$$

Dec 21-8:24 AM

Molality (m) = $\frac{\text{moles of solute}}{\text{Kg of solvent}}$

$(1.H.12)$ →

Dec 21-8:25 AM

Dissolve Quicker Better

- ① Heat
- ② $\uparrow P$ on gas (Flat subs \bar{n})
- ③ Stir
- ④ \uparrow Surface area
- ⑤ Bond type
- ⑥ How much already dissolved

Dec 21-8:27 AM

Henry's Law

$$C_g \approx P_g$$

$$C_g = K \cdot P_g$$

Solubility of gas in solution \rightarrow C_g
 K \leftarrow constant
 P_g \leftarrow Pressure on gas

Dec 21-8:35 AM

4.35g $C_6H_{12}O_6$ $25\text{ml H}_2\text{O}$ @ 25°C
 Find molarity of glucose. $\text{MW} = 180\text{g/mole}$

$d = \frac{g}{\text{ml}}$

$\frac{4.35\text{g } C_6H_{12}O_6}{180\text{g } C_6} = 0.0241\text{ mole glucose}$ 25g

$m = \frac{\text{moles gluc}}{\text{kg H}_2\text{O}} = \frac{0.0241\text{ mole gluc.}}{0.025\text{ kg H}_2\text{O}} = 0.97\text{m}$

$M = \frac{\text{moles}}{\text{L soln}} = \frac{0.0241\text{ mole}}{0.02935\text{ L}} = 0.821\text{M}$

29.35g total
 29.35ml

Dec 21-8:37 AM

HW

13/24, 28, 32, 34, 50a

Dec 21-8:44 AM