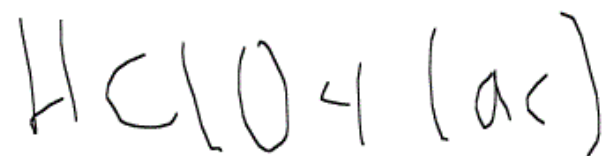
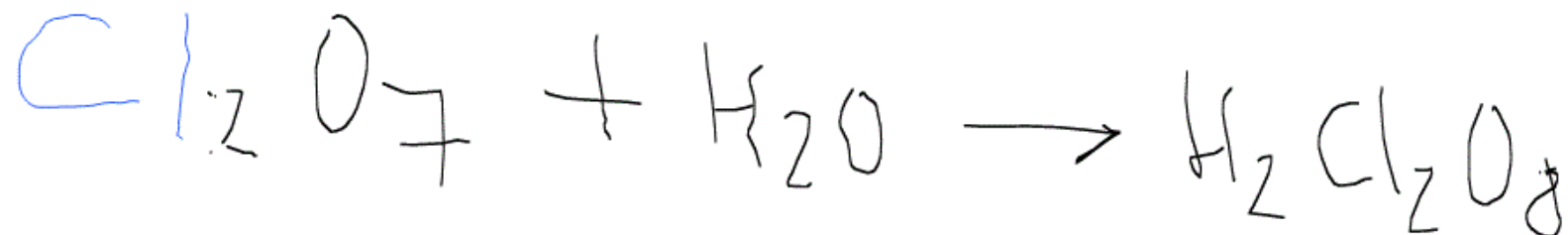


Clase 21 Junio 2021

Título de la nota

21/06/2021



D-glucosa

$$\frac{M = 180.16 \text{ g}}{\text{mol}}$$

1m

$$\left(180.16 \text{ g} \right) \left(\frac{100}{90} \right)$$
$$= 200 \text{ g}$$

$$f_{dis} = \frac{m_{glucosa} + m_{agua}}{V_{glucosa} + V_{agua}}$$

$$f_{glucosa} = 1.5 \text{ g/mL}$$

$$f_{agua} = 0.9968$$

$$\rho_{dis} = \frac{200g + 1000g}{}$$

$$\frac{200g}{1.05g/mL} + \frac{1000g}{0.9968g/mL}$$

$$= \frac{1200g}{1136.5mL} = 1.05g/mL$$

$$\left(\frac{1.05 \text{ g}}{\text{mL}} \right) (1500 \text{ mL})$$

$$= 1575 \text{ g}$$

==

$$\begin{aligned}M &= \frac{1000 \rho m}{1000 + mM_2} \\ &= \frac{(1000)(1.05)(1)}{1000 + 1(180.16)} \\ &= 0.8897 M\end{aligned}$$

$$\left(\frac{0.889 + 1.10}{L} \right) \left(1.5 L \right)$$

$$= \left(1.33 \text{ mol} \right) \left(180.16 \frac{\text{g}}{\text{mol}} \right)$$

$$= \left(240.4 \text{ g} \right) \left(\frac{100}{90} \right) = 267.1 \text{ g}$$

$$m = \frac{M_1}{1000}$$

$$1000\rho - MM_2$$

Obtención de unidades de concentración a partir de Molaridad y densidad de dispersión homogénea

Disperso (2)	Sacarosa		Dispersante (1)	Agua
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Instrucción: Llenar las celdas de color amarillo, los resultados aparecen en color azul.

ρ dis (g/mL)	m dis (g)	V dis (mL)	V dis (L)	m_2 (g)	m_1 (g)	peq ₂ (g/eq)
1.2500	1250.00	1000.00	1.00	718.2000	531.8000	342.00

Molaridad	M_2 (g/mol)	M_1 (g/mol)	n_2 (mol)	n_1 (mol)	eq ₂	# eq ₂	Osmoles ₂
2.1000	342.00	18.00	2.1000	29.5444	2.1000	1	1

Unidades de concentración

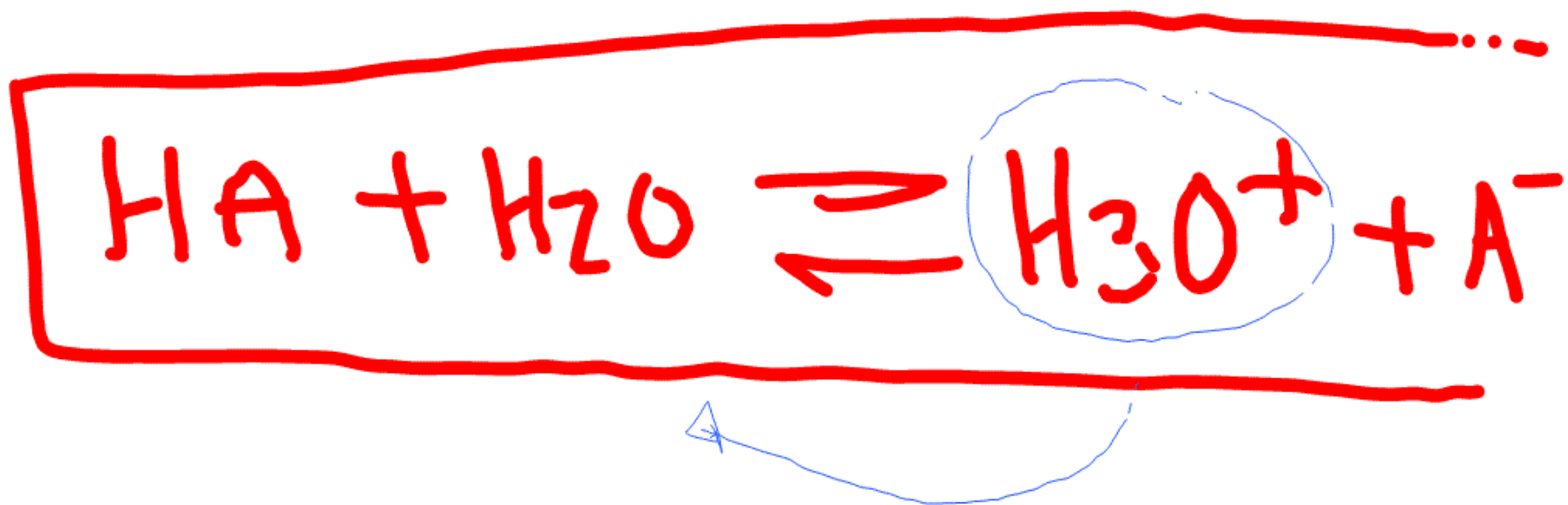
%m/m	%m/v	Formalidad	Normalidad	Molalidad	x_2	x_1	Osmolalidad
57.4560	71.8200	2.1000	2.1000	3.9489	0.0664	0.9336	3.9489
ppm	ppb	ppt	Osmolaridad				
7.182e+5	7.182e+8	7.182e+11	2.1000				

Dr. Juan Carlos Vázquez Lira 2021 V2

Con apoyo del programa DGAPA-UNAM-PAPIME PE-202021







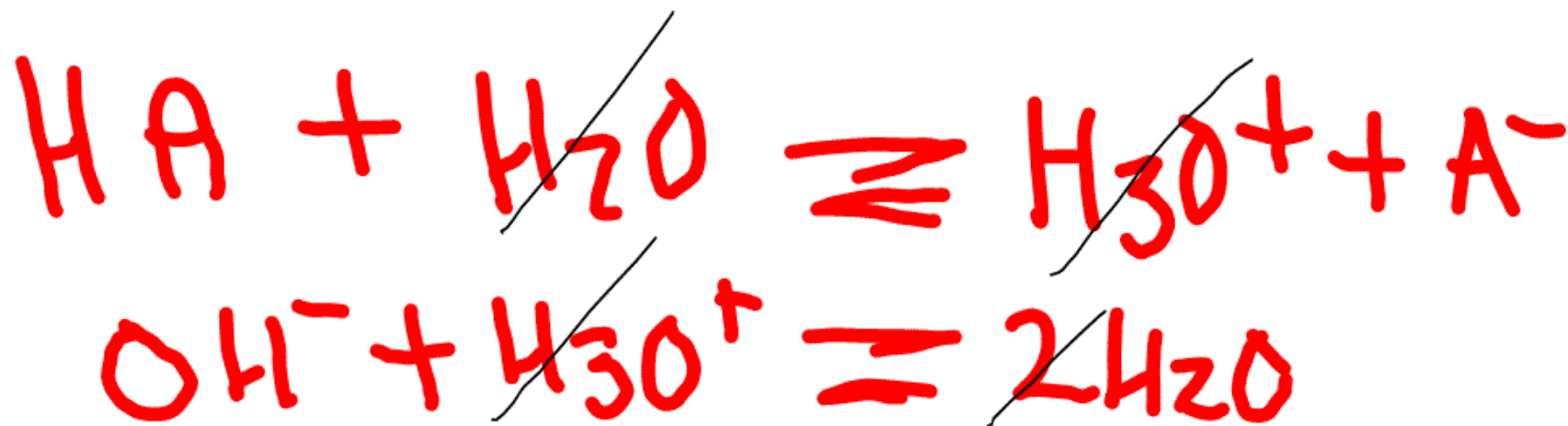


$$K_a = \frac{[\text{H}_3\text{O}^+][\text{A}^-]}{[\text{HA}][\text{H}_2\text{O}]}$$

cte

Ibuprofeno

$$K_a = 10^{-5.2}$$





$$K_{eq} = \frac{[\text{A}^-] [\text{H}_3\text{O}^+]}{[\text{HA}] [\text{OH}^-] [\text{H}_3\text{O}^+]}$$

$$K_{eq} = \frac{K_a}{K_w} = \frac{10^{-5.2}}{10^{-14}}$$

$$K_{eq} = 10^{14-5.2} = 10^{8.8}$$

K_r