
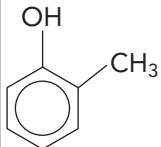
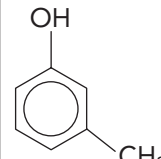
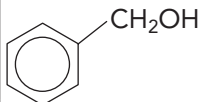
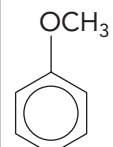
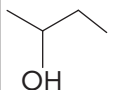
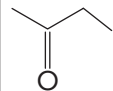


PADRÃO DE RESPOSTAS
(VALOR POR QUESTÃO: 2,00 PONTOS)

Questão	Resposta
1	<p>carbono</p> <p>6</p> <p>H₂O</p> 
2	<p>Magnésio</p> <p>MgCl₂</p> <p>Vermelha</p> <p>+1</p>
3	<p>Cresóis em menor proporção:</p>   <p>Isômeros de função:</p>  
4	<p>$\text{CH}_3\text{COOH} + \text{NH}_3 \longrightarrow \text{CH}_3\text{CONH}_2 + \text{H}_2\text{O}$</p> <p>Função orgânica: éster.</p> <p>Hibridação: sp²</p>
5	<p>Composto X</p>  <p>Composto Y</p>  <p>Mecanismo: substituição nucleofílica</p> <p>Isômeros ativos: 2¹ = 2</p>

6	<p>Solução de fluoreto de potássio</p> <p>Apresenta maior número de partículas dissolvidas.</p> $\begin{array}{c} \text{O} \\ \\ \text{H}-\text{C}-\text{H} \end{array}$ <p>Geometria trigonal plana</p>
7	$\text{Fe}^0_{(s)} + \text{Cu}^{2+}_{(aq)} \rightarrow \text{Fe}^{2+}_{(aq)} + \text{Cu}^0_{(s)}$ $\Delta E^\circ = + 0,34 - (- 0,44) = + 0,78 \text{ V}$
8	<p>Tempo de meia-vida do ^{214}Bi: 20 min</p> <p>Velocidade média de consumo do ^{212}Bi: $\left(\frac{100 - 25}{2 - 0}\right) = 37,5 \text{ mg} \times \text{h}^{-1}$</p> <p>1 mol $^{212}\text{Bi} \rightarrow 1 \text{ mol } \beta$</p> <p>212 g $\rightarrow 6 \times 10^{23}$ partículas</p> <p>0,0375 g $\rightarrow X$</p> <p>$X = 1,06 \times 10^{20} \text{ partícula} \times \text{h}^{-1}$</p>
9	$\begin{array}{l} \frac{1}{2}\text{H}_2(\text{g}) + \frac{1}{2}\text{Cl}_2(\text{g}) \rightarrow \text{HCl}(\text{g}) \quad \Delta H^\circ = - 92,5 \text{ kJ} \times \text{mol}^{-1} \\ + \text{HCl}(\text{l}) \rightarrow \frac{1}{2}\text{H}_2(\text{g}) + \frac{1}{2}\text{Cl}_2(\text{g}) \quad \Delta H^\circ = + 108,7 \text{ kJ} \times \text{mol}^{-1} \\ \hline \text{HCl}(\text{l}) \rightarrow \text{HCl}(\text{g}) \quad \Delta H^\circ = + 16,2 \text{ kJ} \times \text{mol}^{-1} \end{array}$ <p>Solidificação</p> <p>Condensação ou liquefação</p>
10	<p>NaOH consumido: $0,34 - 0,20 = 0,14 \text{ mol} \times \text{L}^{-1}$</p> <p>HClO formado: $0,20 \text{ mol} \times \text{L}^{-1}$</p> <p>Consumo de 20% do HClO = consumo de NaOH: $0,20 \times \frac{20}{100} = 0,04 \text{ mol} \times \text{L}^{-1}$</p> <p>[NaOH] no produto final = $0,14 - 0,04 = 0,10 \text{ mol} \times \text{L}^{-1}$</p> <p>$\text{ClO}^- + \text{HOH} \rightleftharpoons \text{HClO} + \text{OH}^-$</p>