CHEM1405 (Vet. Science) - 2003

2003-J-2

- $Ca(CH_3CO_2)_2(s) \rightarrow Ca^{2+}(aq) + 2CH_3CO_2^-(aq)$

- cobalt(II) chloride-6-water

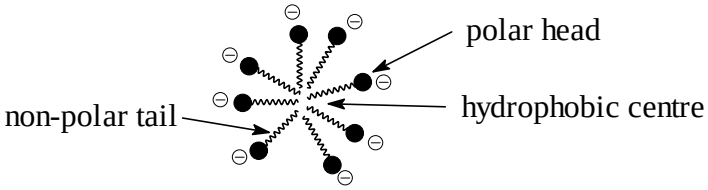
  NH_4Cl

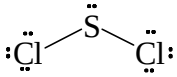
  lithium sulfate

  $Ca(HCO_3)_2$

- 766 kJ released

- Long chain fatty acids consist of a polar head and a non-polar tail. When dispersed in water they arrange themselves spherically so that the polar (hydrophilic) heads are interacting with the polar water molecules and the non-polar (hydrophobic) tails are interacting with each other. This arrangement is called a micelle.



- 

2003-J-3

- $k = 0.0123\ \text{minr}^{-1}$ $t_{½} = 56.4$ min

  113 min

- 6.4 atm

2003-J-4

- $2.00 \times 10^{-9}\ M^2$

- 2.54

- $C_6H_5CH_2CO_2^-(aq) + H_3O^+(aq) \rightarrow C_6H_5CH_2COOH(aq) + H_2O(l)$

  $C_6H_5CH_2COOH(aq) + OH^-(aq) \rightarrow C_6H_5CH_2CO_2^-(aq) + H_2O(l)$

2003-J-5

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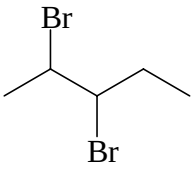
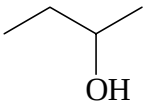
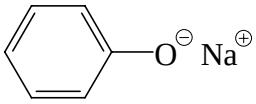
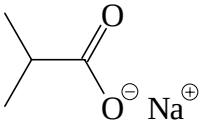
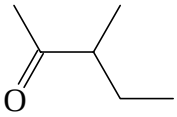
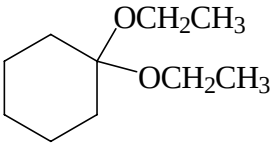
(*E*)-2-pentene		
butanone		
phenol		
		
		
cyclohexanone		

2003-J-6

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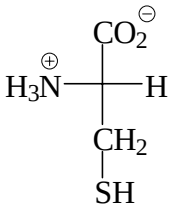
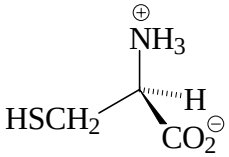
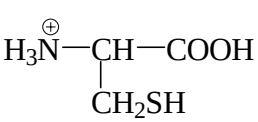
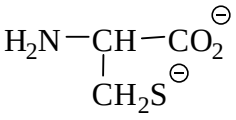
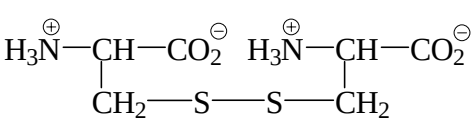


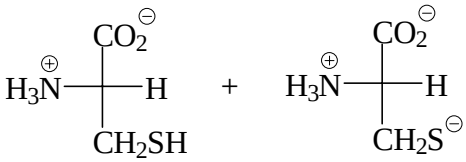




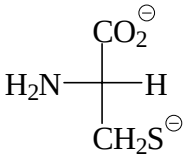




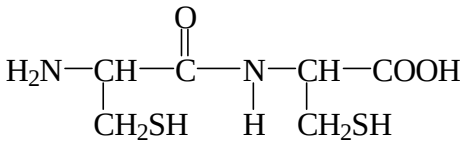
pH 8.2



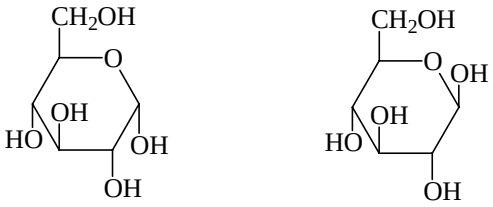
pH 13.0

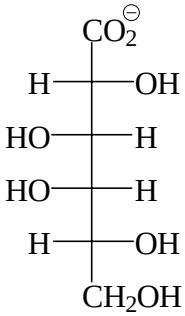


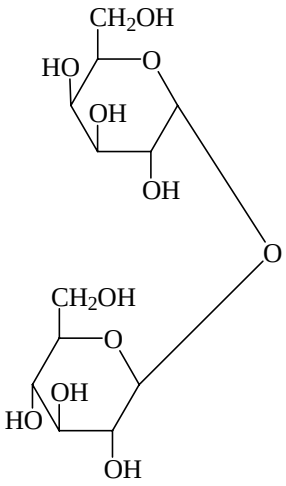
2003-J-6 (cont.)

- 

2003-J-7

- 





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