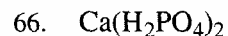


Hw. week 4 Chem. 6A CSUS S05

Ch. 3



$$(10 \text{ formula units}) \left(\frac{4 \text{ atoms H}}{\text{formula unit}} \right) = 40 \text{ atoms H}$$

69. Add water to the mixture to dissolve the sugar. Filter the mixture to separate the sugar solution from the insoluble sand. Add another small amount of water to remove last traces of sugar. Filter. Allow the water to evaporate from the sugar solution to obtain crystals of sugar. Sand is the insoluble residue.

70. (a) NaCl (d) Fe_2S_3 (g) $\text{C}_6\text{H}_{12}\text{O}_6$
 (b) H_2SO_4 (e) K_3PO_4 (h) $\text{C}_2\text{H}_5\text{OH}$
 (c) K_2O (f) $\text{Ca}(\text{CN})_2$ (i) $\text{Cr}(\text{NO}_3)_3$

CH. 6

9. Formulas of compounds.

- (a) Na and I NaI (d) K and S K_2S
 (b) Ba and F BaF_2 (e) Cs and Cl CsCl
 (c) Al and O Al_2O_3 (f) Sr and Br SrBr_2

14. (a) calcium hydroxide (d) sodium hydrogen carbonate
 (b) sodium nitrate (e) iron (II) sulfide
 (c) sulfur (f) potassium carbonate

16.

Ion	SO_4^{2-}	Cl^-	AsO_4^{3-}	$\text{C}_2\text{H}_3\text{O}_2^-$	CrO_4^{2-}
NH_4^+	$(\text{NH}_4)_2\text{SO}_4$	NH_4Cl	$(\text{NH}_4)_3\text{AsO}_4$	$\text{NH}_4\text{C}_2\text{H}_3\text{O}_2$	$(\text{NH}_4)_2\text{CrO}_4$
Ca^{2+}	CaSO_4	CaCl_2	$\text{Ca}_3(\text{AsO}_4)_2$	$\text{Ca}(\text{C}_2\text{H}_3\text{O}_2)_2$	CaCrO_4
Fe^{3+}	$\text{Fe}_2(\text{SO}_4)_3$	FeCl_3	FeAsO_4	$\text{Fe}(\text{C}_2\text{H}_3\text{O}_2)_3$	$\text{Fe}_2(\text{CrO}_4)_3$
Ag^+	Ag_2SO_4	AgCl	Ag_3AsO_4	$\text{AgC}_2\text{H}_3\text{O}_2$	Ag_2CrO_4
Cu^{2+}	CuSO_4	CuCl_2	$\text{Cu}_3(\text{AsO}_4)_2$	$\text{Cu}(\text{C}_2\text{H}_3\text{O}_2)_2$	CuCrO_4

18. Naming binary nonmetal compounds:

- (a) CO_2 carbon dioxide (f) N_2O_4 dinitrogen tetroxide
 (b) N_2O dinitrogen oxide (g) P_2O_5 diphosphorus pentoxide
 (c) PCl_5 phosphorus pentachloride (h) OF_2 oxygen difluoride
 (d) CCl_4 carbon tetrachloride (i) NF_3 nitrogen trifluoride
 (e) SO_2 sulfur dioxide (j) CS_2 carbon disulfide

21. (a) CuCl_2 copper(II) chloride (d) FeCl_3 iron(III) chloride
 (b) CuBr copper(I) bromide (e) SnF_2 tin(II) fluoride
 (c) $\text{Fe}(\text{NO}_3)_2$ iron(II) nitrate (f) HgCO_3 mercury(II) carbonate

24. Formulas of acids:

- (a) acetic acid, $\text{HC}_2\text{H}_3\text{O}_2$ (d) boric acid, H_3BO_3
 (b) hydrofluoric acid, HF (e) nitrous acid, HNO_2
 (c) hypochlorous acid, HClO (f) hydrosulfuric acid, H_2S

27. Formulas for:

- (a) silver sulfite Ag_2SO_3
 (b) cobalt(II) bromide CoBr_2

- (c) tin(II) hydroxide $\text{Sn}(\text{OH})_2$
 (d) aluminum sulfate $\text{Al}_2(\text{SO}_4)_3$
 (e) manganese(II) fluoride MnF_2
 (f) ammonium carbonate $(\text{NH}_4)_2\text{CO}_3$
 (g) chromium(III) oxide Cr_2O_3
 (h) cupric chloride CuCl_2
 (i) potassium permanganate KMnO_4
 (j) barium nitrite $\text{Ba}(\text{NO}_2)_2$
 (k) sodium peroxide Na_2O_2
 (l) iron(II) sulfate FeSO_4
 (m) potassium dichromate $\text{K}_2\text{Cr}_2\text{O}_7$
 (n) bismuth(III) chromate $\text{Bi}_2(\text{CrO}_4)_3$