

CHEQ 1094 CHEMICAL REACTIONS

Complete and balance the following equations, using the activity series of the metals and the solubility table when needed. If no reaction occurs, write "NR". Indicate the states of all substances.

1. $\text{Mg}(s) + \text{O}_2(g) \xrightarrow{\Delta}$
2. $\text{Ca}(s) + \text{N}_2(g) \xrightarrow{\Delta}$
3. $\text{Ba}(s) + \text{Cl}_2(g) \longrightarrow$
4. $\text{Na}(s) + \text{Br}_2(l) \longrightarrow$
5. $\text{Al}(s) + \text{S}_8(s) \xrightarrow{\Delta}$
6. $\text{CaO}(s) + \text{H}_2\text{O}(l) \longrightarrow$
7. $\text{K}(s) + \text{P}_4(s) \xrightarrow{\Delta}$
8. $\text{Li}_2\text{O}(s) + \text{H}_2\text{O}(l) \longrightarrow$
9. $\text{SO}_3(g) + \text{H}_2\text{O}(l) \longrightarrow$
10. $\text{K}(s) + \text{H}_2\text{O}(l) \longrightarrow$
11. $\text{Sn}(s) + \text{FeCl}_3(aq) \longrightarrow$
12. $\text{Zn}(s) + \text{NiCl}_2(aq) \longrightarrow$
13. $\text{Al}(s) + \text{HBr}(aq) \longrightarrow$
14. $\text{Ag}(s) + \text{HCl}(aq) \longrightarrow$
15. $\text{Cl}_2(aq) + \text{AlI}_3(aq) \longrightarrow$
16. $\text{Br}_2(l) + \text{NaF}(aq) \longrightarrow$
17. $\text{Cu}(s) + \text{H}_2\text{O}(l) \longrightarrow$
18. $\text{CaCl}_2(aq) + \text{Na}_2\text{CO}_3(aq) \longrightarrow$
19. $\text{MgBr}_2(aq) + \text{KNO}_3(aq) \longrightarrow$
20. $\text{HNO}_3(aq) + \text{Sr}(\text{OH})_2(aq) \longrightarrow$
21. $\text{AgNO}_3(aq) + \text{AlCl}_3(aq) \longrightarrow$
22. $\text{K}_2\text{CO}_3(aq) + \text{HC}_2\text{H}_3\text{O}_2(aq) \longrightarrow$
23. $\text{NH}_4\text{Br}(aq) + \text{K}_2\text{SO}_4(aq) \longrightarrow$
24. $\text{HCl}(aq) + \text{NaHCO}_3(aq) \longrightarrow$

