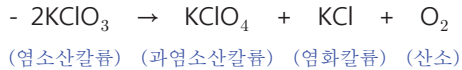


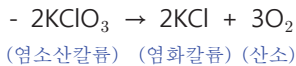
# 반드시 암기해야 할 화학 반응식

## ※ 제 1류 위험물

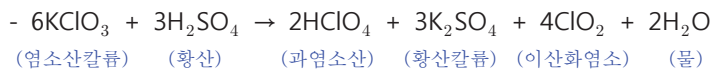
### 1. 염소산칼륨 분해반응식 (400°C)



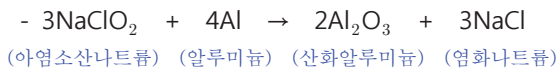
### 2. 염소산칼륨 분해반응식 (540°C~560°C)



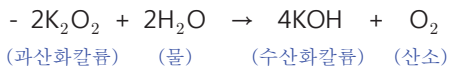
### 3. 염소산칼륨 + 황산



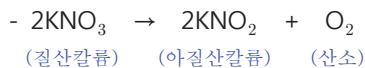
### 4. 아염소산나트륨 + 알루미늄



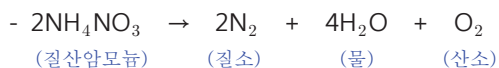
### 5. 과산화칼륨 + 물



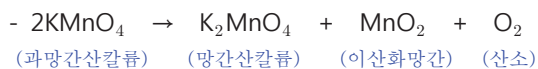
### 6. 질산칼륨 열분해 반응식 400°C



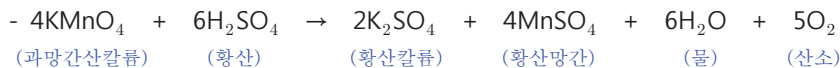
### 7. 질산암모늄 분해반응식 (폭발, 분해반응)



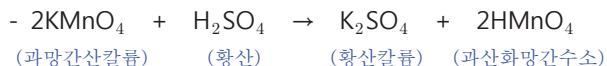
### 8. 과망간산칼륨 분해반응식 240°C



### 9. 과망간산칼륨 + 묽은 황산



### 10. 과망간산칼륨 + 진한 황산



### 11. 과망간산칼륨 + 염산

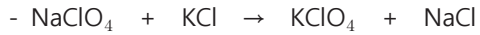


12. 과염소산칼륨 분해반응식 (610°C )



(과염소산칼륨) (염화칼륨) (산소)

13. 과염소산나트륨 + 염화칼륨



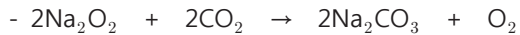
(과염소산나트륨) (염화칼륨) (과염소산칼륨) (염화나트륨)

14. 과산화나트륨 + 물



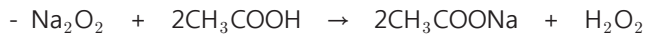
(과산화나트륨) (물) (수산화나트륨) (산소)

15. 과산화나트륨 + 이산화탄소



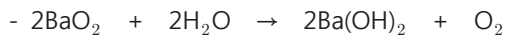
(과산화나트륨) (이산화탄소) (탄산나트륨) (산소)

16. 과산화나트륨 + 초산



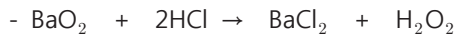
(과산화나트륨) (아세트산, 초산) (아세트산(초산)나트륨) (과산화수소)

17. 과산화바륨 + 물



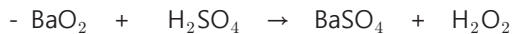
(과산화바륨) (물) (수산화바륨) (산소)

18. 과산화바륨 + 염산



(과산화바륨) (염산) (염화바륨) (과산화수소)

19. 과산화바륨 + 황산



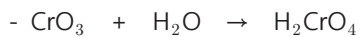
(과산화바륨) (황산) (황산바륨) (과산화수소)

20. 삼산화크롬 분해반응식



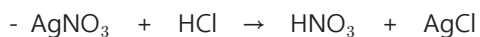
(삼산화크롬) (산화크롬) (산소)

21. 삼산화크롬 + 물



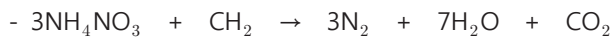
(삼산화크롬) (물) (크롬산)

22. 질산은 + 염산



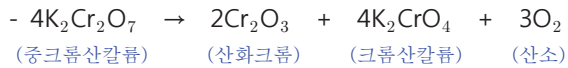
(질산은) (염산) (질산) (염화은)

23. 질산암모늄 + 경유 [안포폭약]



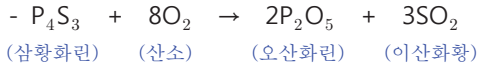
(질산암모늄) (경유) (질소) (물) (이산화탄소)

24. 중크롬산칼륨 열 분해식

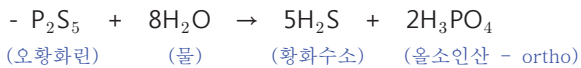


※ 제2류 위험물

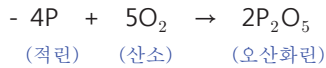
25. 삼황화린 연소반응식



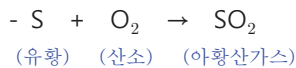
26. 오황화린 + 물



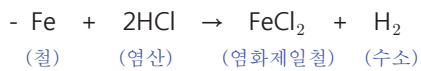
27. 적린 연소반응식



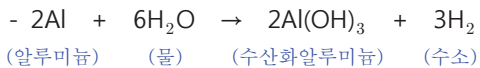
28. 황 연소반응식



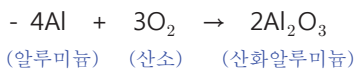
29. 철 + 염산



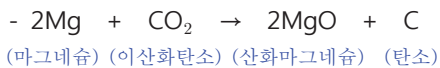
30. 알루미늄 + 물



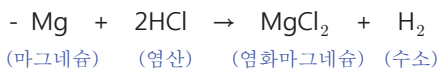
31. 알루미늄 + 산소



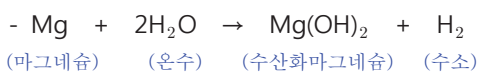
32. 마그네슘 + 이산화탄소



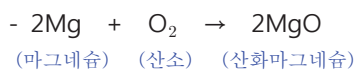
33. 마그네슘 + 염산



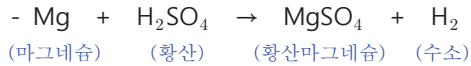
34. 마그네슘 + 물



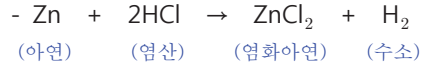
35. 마그네슘 연소반응식



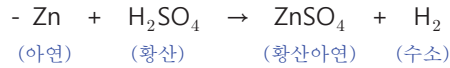
36. 마그네슘 + 황산



37. 아연 + 염산

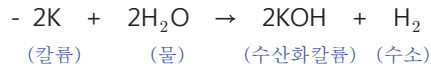


38. 아연 + 황산

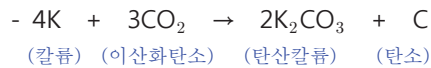


※ 제3류 위험물

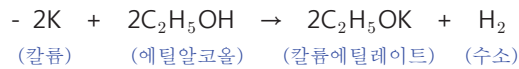
39. 칼륨 + 물



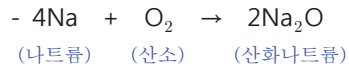
40. 칼륨 + 이산화탄소



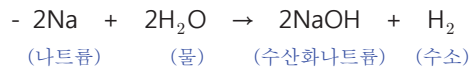
41. 칼륨 + 에틸알코올



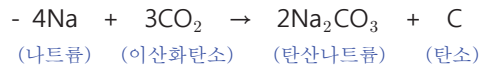
42. 나트륨 연소반응식



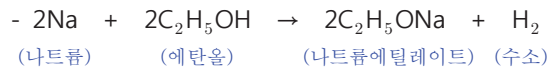
43. 나트륨 + 물



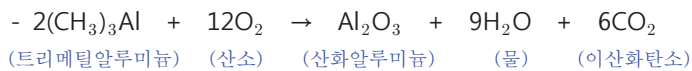
44. 나트륨 + 이산화탄소



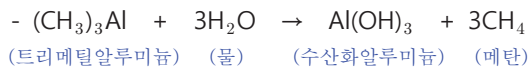
45. 나트륨 + 에틸알코올



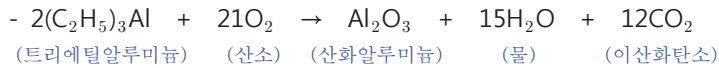
46. 트리메틸알루미늄 (TMA) 연소반응식



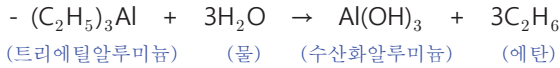
47. 트리메틸알루미늄 (TMA) + 물



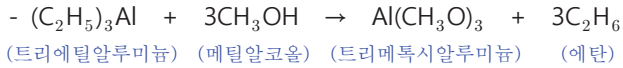
48. 트리에틸알루미늄 (TEA) 연소반응식



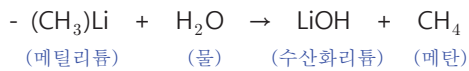
49. 트리에틸알루미늄 (TEA) + 물



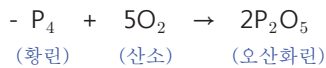
50. 트리에틸알루미늄 (TEA) + 메틸알코올



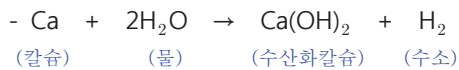
51. 메틸리튬 + 물



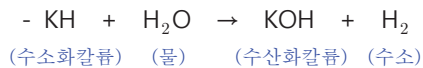
52. 황린 연소반응식



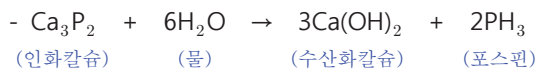
53. 칼슘 + 물



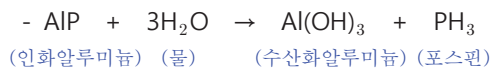
54. 수소화칼륨 + 물



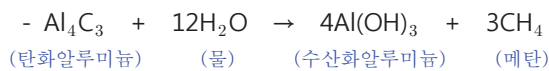
55. 인화칼슘 + 물



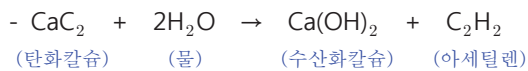
56. 인화알루미늄 + 물



57. 탄화알루미늄 + 물

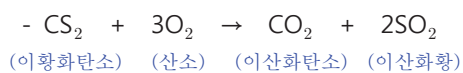


58. 탄화칼슘 + 물

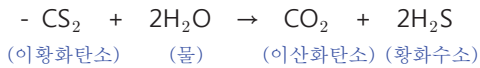


※ 제4류 위험물

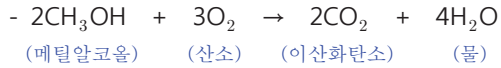
59. 이황화탄소 연소반응식



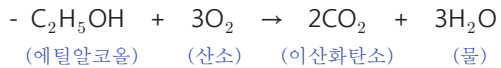
60. 이황화탄소 + 물



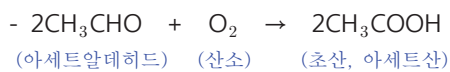
61. 메틸알코올 연소반응식



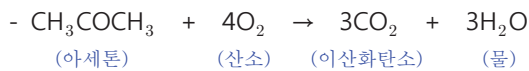
62. 에틸알코올 연소반응식



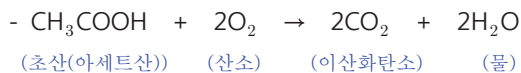
63. 아세트알데히드 산화반응식



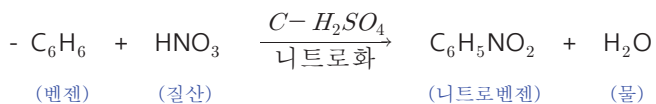
64. 아세톤 연소반응식



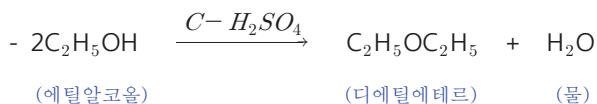
65. 초산(아세트산) 연소반응식



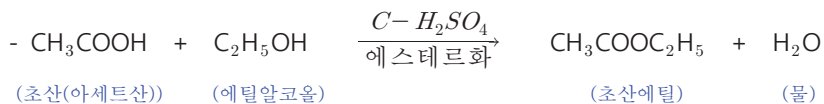
66. 니트로벤젠 제조



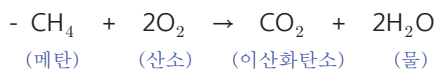
67. 디에틸에테르 제조



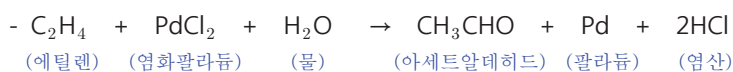
68. 초산에틸 제조



69. 메탄 연소식

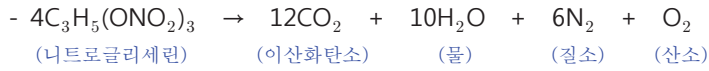


70. 에틸렌 산화식

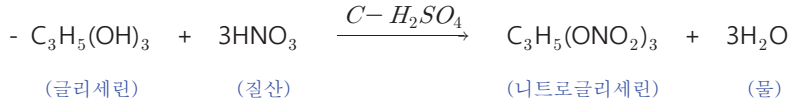


## ※ 제5류 위험물

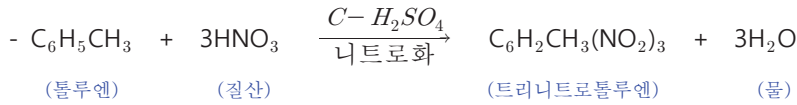
71. 니트로글리세린 분해반응식



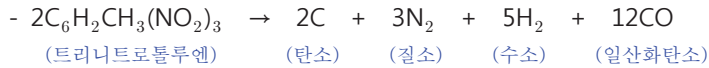
72. 니트로글리세린 제조



73. 트리니트로톨루엔 (TNT) 제조

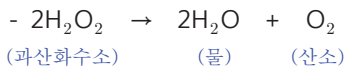


74. 트리니트로톨루엔 분해반응식

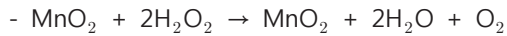


## ※ 제6류 위험물

75. 과산화수소 분해반응식

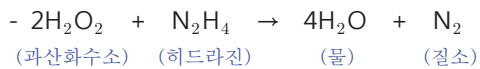


76. 이산화망간+과산화수소

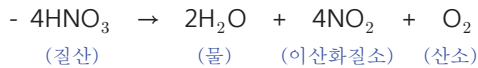


(※ 이산화망간은 촉매 역할만하고 반응 후 바닥에 그대로 남아 있다.)

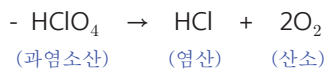
77. 과산화수소 + 히드라진



78. 질산 분해반응식

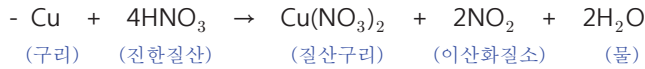


79. 과염소산 분해식

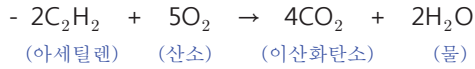


## ※ 기타

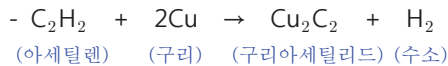
### 80. 구리 + 진한질산



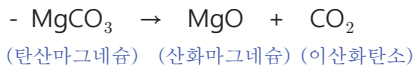
### 81. 아세틸렌 연소반응식



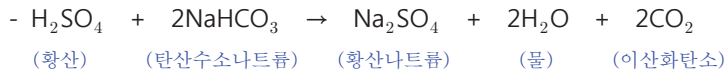
### 82. 아세틸렌 + 구리



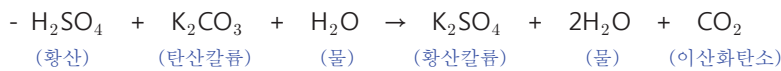
### 83. 탄산마그네슘 분해식



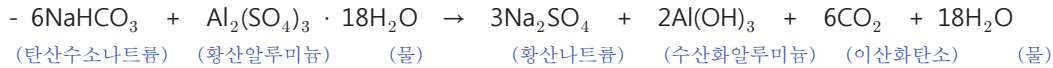
### 84. 산, 알칼리 소화기



### 85. 강화액 소화기



### 86. 포소화약제

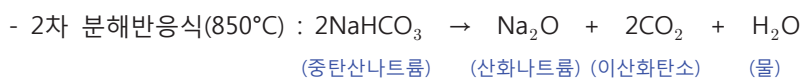
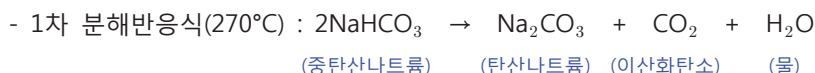


### 87. 분말소화약제

종 류	주 성분	착 색	적응화재
제1종 분말	탄산수소나트륨 ( $\text{NaHCO}_3$ )	백색	B, C
제2종 분말	탄산수소칼륨 ( $\text{KHCO}_3$ )	담회색	B, C
제3종 분말	제일인산암모늄 ( $\text{NH}_4\text{H}_2\text{PO}_4$ )	담홍색	A, B, C
제4종 분말	탄산수소칼륨+요소 ( $\text{KHCO}_3 + (\text{NH}_2)_2\text{CO}$ )	회·백색	B, C

#### ㉠ 열분해 반응식

##### ㉡ 제 1종 분말

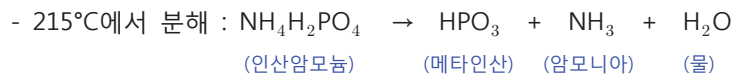
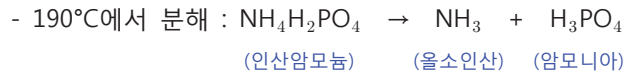


##### ㉢ 제 2종 분말





㊤ 제 3종 분말



㊤ 제 4종 분말

