

Table 5
Partial List of Water Reactive Chemicals

Alkali metals, such as Na, Li, K
Alkali metal hydrides, such as LiH, CaH₂, LiAlH₄, NaBH₂
Alkali metal amides, such as NaNH₂
Metal alkyls, such as lithium and aluminum alkyls
Grignard reagents, RMgX
Halides of nonmetals, such as BCl₃, BF₃, PCl₃, PCl₅, SiCl₄, S₂Cl₂
Inorganic acid halides, such as POCl₃, SOCl₂, SO₂Cl₂
Anhydrous metal halides, such as AlCl₃, TiCl₄, ZrCl₄, SnCl₄
Phosphorus pentoxide
Calcium carbide
Organic acid halides and anhydrides of low molecular weight, such as, acetylchloride
acetic acid anhydride

Table 6
Partial List of Pyrophoric Chemicals

Grignard reagents, RMgX
Metal alkyls and aryls, such as RLi, RNa, R₃Al, R₂Zn
Metal carbonyls, such as Ni(CO)₄, Fe(CO)₅, Co₂(CO)₈
Alkali metals such as Na, K
Metal powders, such as Al, Co, Fe, Mg, Mn, Pd, Pt, Ti, Sn, Zn, Zr
Metal hydrides, such as NaH, LiAlH₄
Nonmetal hydrides, such as B₂H₆ and other boranes, PH₃, AsH₃
Nonmetal alkyls, such as R₃B, R₃P, R₃As
Phosphorus (white)