Common Water Reactive Chemicals

Chemical Name	Chem. Formula	Reaction With Water
Acetic Anhydride	$C_4H_6O_3$	May boil explosively
Acetyl Chloride	CH_3COCl	Violently decomposes to HCl and acetic acid
Aluminum Bromide	$AlBr_3$	Violent hydrolysis
Aluminum Chloride	$AlCl_3$	Violent decomposition forming HCL gas
Boron Tribromide	BBr_3	Violent or explosive reaction when water added
Butyl Lithium	C_4H_9Li	Ignites on contact with water
Calcium Carbide	Ca_3C_2	Gives off explosive acetylene gas
Calcium Hydride	CaH_2	Hydrogen gas liberated
Chlorosulfonic Acid	$ClSO_3H$	Highly exothermic violent reaction
Chlorotrimethyl Silane	$(CH_3)_3SiCl$	Violent reaction
Dichlorodimethyl Silane	$(CH_3)_2SiCl_2$	Violent reaction
Lithium Aluminum Hydride	LiAlH	Releases and ignites hydrogen gas
Lithium Hydride	LiH	Violent decomposition
Lithium Metal	Li	Powder reacts explosively with water
Methyltrichlosilane	CH_3SiCl_3	Violent reaction forming HCl acid
Oxalyl Chloride	$C_2Cl_2O_2$	Violent reaction forming HCl acid
Phosphorus Pentachloride	PCl_5	Violent reaction with water
Phosphorus Pentachloride	PCl_5	Violent reaction
Phosphorus Pentoxide	P_2O_5	Violent exothermic reaction
Phosphorus Tribromide	PBr_3	Reacts violently with limited amounts of warm water
Phosphorus Trichloride	PCl_3	Violent reaction releasing flamm. diphosphane
Phosphoryl Chloride	$POCl_3$	Slow reaction which may become violent
Potassium Amide	KNH_2	Violent reaction which may cause ignition
Potassium Hydride	KH	Releases hydrogen gas
Potassium Metal	K	Forms KOH and hydrogen gas
Pottasium Hydroxide	KOH	Highly exothermic reaction
Silicon Tetrachloride	$SiCl_4$	Violent reaction producing silicic acid
Sodium Amide	$NaNH_2$	Generates NaOH and NH_3 (flammable)
Sodium Azide	NaN_3	Violent reaction with strongly heated azide
Sodium Hydride	NaH	Reacts explosively with water
Sodium Hydrosulfite	$Na_2S_2O_4$	Heating and spontaneous ignition with 10% H_2O
Sodium Hydroxide	NaOH	Highly exothermic reaction
Sodium Metal	Na	Generates flammable hydrogen gas
Sodium Peroxide	NaO	Reacts violently or explosively
Strontium Metal	Sr	Violent reaction
Sulfuric Acid	H_2SO_4	May boil and spatter
Tetrachloro Silane	$SiCl_4$	Violent reaction
Thionyl Chloride	$SOCl_2$	Violent reaction which forms HCl acid and SO_2 gas
Titanium Tetrachloride	$TiCl_4$	Violent reaction that produces HCl gas
Trichloro Silane	$SiHCl_3$	Releases toxic and corrosive fumes
Triethyl Aluminum	$Al(C_2H_5)_3$	Explodes violently in water
Triisobutly Aluminum	$Al(iC_4H_9)_3$	Violent reaction with water
Zirconium Tetrachloride	$ZrCl_4$	Violent reaction with water