Wayne State University
Office of Environmental Health and Safety

Chemical Compatibility Chart

EPA-600/2-80-076 April 1980

X = **Mixing may result in genration of :**
Toxic gas,
Flammable gas
Heat,
Fire,
Explosion,
Violent polymerization,
Solubilization of toxic substances,
Or other hazardous materials.

#	Chemical Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1	Acids, Mineral, Non-oxidizing	1																																								
2	Acids, Mineral, Oxidizing		2																																							
3	Acids, Organic		X	3																																						
4	Alcohols and Glycols	X	X	X	4																																					
5	Aldehydes	X	X	X		5																																				
6	Amides	X	X				6																																			
7	Amines, Aliphatic and Aromatic	X	X	X		X		7																																		
8	Azo Compounds, Diazo Compounds and Hydrazines	X	X	X	X	X			8																																	
9	Carbamates	X	X						X	9																																
10	Caustics	X	X	X		X				X	10																															
11	Cyanides	X	X	X					X			11																														
12	Dithiocarbamates	X	X	X		X		X	X				12																													
13	Esters	X	X						X		X			13																												
14	Ethers	X	X												14																											
15	Fluorides, Inorganic	X	X	X												15																										
16	Hydrocarbons, Aromatic		X														16																									
17	Halogenated Organics	X	X					X	X		X	X						17																								
18	Isocyanates	X	X	X	X			X	X		X	X	X						18																								
19	Ketones	X	X						X		X	X								19																						
20	Mercaptans and Other Organic Sulfides	X	X						X									X	X	X	20																					
21	Metals, Alkali and Alkaline Earth, Elementa	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	21																				
22	Metals, Other Elemental & Alloys as Powders, Vapors, or Sponges	X	X	X					X	X	X							X	X		X		22																			
23	Metals, Other Elemental & Alloys as Sheets, Rods, Drops, etc.	X	X						X									X						23																		
24	Metals and Metal Compounds, Toxic	X	X	X			X	X			X														24																	
25	Nitrides	X	X	X	X	X			X	X	X	X	X	X				X	X	X	X	X				25																
26	Nitriles	X	X	X							X											X			X	X	26														
27	Nitro Compounds, Organic		X			X					X											X				X		27														
28	Hydrocarbons, Aliphatic, Unsaturated	X	X			X																	X						28													
29	Hydrocarbons, Aliphatic, Organic Saturated		X																											29												
30	Peroxides and Hydroperoxides,	X	X		X	X		X	X	X		X	X					X	X	X	X	X	X		X	X	X		X		30											
31	Phenols and Cresols	X	X						X										X			X				X					X	31										
32	Organophosphates, Phosphothioates, Phosphodithioates	X	X						X		X											X									X		32									
33	Sulfides, Inorganic	X	X	X		X			X										X												X			33								
34	Epoxides	X	X	X	X	X		X	X		X	X	X								X	X	X		X	X					X	X	X	X	34							
35	Combustible and Flammable Materials, Miscellaneous	X	X																			X				X					X					35						
36	Explosives	X	X	X					X		X			X								X	X	X	X	X					X	X		X	X	X	36					
37	Polymerizable Compounds	X	X	X					X		X	X	X									X	X	X	X	X					X	X		X				37				
38	Oxidizing Agents, Strong	X		X	X	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	38			
39	Reducing Agents, Strong	X	X	X	X	X	X	X				X	X				X	X	X	X	X						X	X			X	X	X		X	X	X	X	X	39		
40	Water and Mixtures Containing Water	X	X						X										X			X	X		X	X								X						X	40	
41	Water Reactive Substances	<---Extremely Reactive! Do Not Mix With Any Chemical Or Waste Material! Extremely Reactive!--->																																								41
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41