

EPA's Chemical Compatibility Chart

EPA-600/2-80-076 April 1980
 A METHOD FOR DETERMINING THE COMPATIBILITY OF CHEMICAL MIXTURES

Please Note: This chart is intended as an indication of some of the hazards that can be expected on mixing chemical wastes. Because of the differing activities of the thousands of compounds that may be encountered, it is not possible to make any chart definitive and all inclusive. It cannot be assumed to ensure compatibility of wastes because wastes are not classified as hazardous on the chart, nor do any blanks necessarily mean that the mixture cannot result in a hazard occurring. Detailed instructions as to hazards involved in handling and disposing of any given waste should be obtained from the originator of the waste.

#	REACTIVITY GROUP NAME	CONSEQUENCE																																																																																																			
1	Acids, Mineral, Non-oxidizing	1	U																																																																																																		
2	Acids, Mineral, Oxidizing	2	U																																																																																																		
3	Acids, Organic	3	U																																																																																																		
4	Alcohols and Glycols	4	U																																																																																																		
5	Aldehydes	5	U																																																																																																		
6	Amides	6	U																																																																																																		
7	Amines, Aliphatic and Aromatic	7	U																																																																																																		
8	Azo Compounds, Diazo Compounds and Hydrazines	8	U																																																																																																		
9	Carbamates	9	U																																																																																																		
10	Caustics	10	U																																																																																																		
11	Cyanides	11	U																																																																																																		
12	Dithiocarbamates	12	U																																																																																																		
13	Esters	13	U																																																																																																		
14	Ethers	14	U																																																																																																		
15	Fluorides, Inorganic	15	U																																																																																																		
16	Hydrocarbons, Aromatic	16	U																																																																																																		
17	Halogenated Organics	17	U																																																																																																		
18	Isocyanates	18	U																																																																																																		
19	Ketones	19	U																																																																																																		
20	Mercaptans and Other Organic Sulfides	20	U																																																																																																		
21	Metals, Alkali and Alkaline Earth, Elemental	21	U																																																																																																		
22	Metals, Other Elemental & Alloys as Powders, Vapors, or Sponges	22	U																																																																																																		
23	Metals, Other Elemental & Alloys as Sheets, Rods, Drops, etc.	23	U																																																																																																		
24	Metals and Metal Compounds, Toxic	24	U																																																																																																		
25	Nitrides	25	U																																																																																																		
26	Nitriles	26	U																																																																																																		
27	Nitro Compounds, Organic	27	U																																																																																																		
28	Hydrocarbons, Aliphatic, Unsaturated	28	U																																																																																																		
29	Hydrocarbons, Aliphatic, Saturated	29	U																																																																																																		
30	Peroxides and Hydroperoxides, Organic	30	U																																																																																																		
31	Phenols and Cresols	31	U																																																																																																		
32	Organophosphates, Phosphothioates, Phosphodithioates	32	U																																																																																																		
33	Sulfides, Inorganic	33	U																																																																																																		
34	Epoxides	34	U																																																																																																		
101	Combustible and Flammable Materials, Miscellaneous	101	U																																																																																																		
102	Explosives	102	U																																																																																																		
103	Polymerizable Compounds	103	U																																																																																																		
104	Oxidizing Agents, Strong	104	U																																																																																																		
105	Reducing Agents, Strong	105	U																																																																																																		
106	Water and Mixtures Containing Water	106	U																																																																																																		
107	Water Reactive Substances	<---EXTREMELY REACTIVE! DO NOT MIX WITH ANY CHEMICAL OR WASTE MATERIAL! EXTREMELY REACTIVE!-->																																																																																																			

CODE	CONSEQUENCE
H	Heat Generation
F	Fire
G	Innocuous and non-flammable gas generation
GT	Toxic Gas formation
GF	Flammable Gas formation
E	Explosion
P	Violent Polymerization
S	Solubilization of toxic substance
U	May be hazardous, but Unknown