

# 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																																																																																																			
2	Acids, Mineral, Oxidizing	2																																																																																																			
3	Acids, Organic	3																																																																																																			
4	Alcohols and Glycols	4																																																																																																			
5	Aldehydes	5																																																																																																			
6	Amides	6																																																																																																			
7	Amines, Aliphatic and Aromatic	7																																																																																																			
8	Azo Compounds, Diazo Compounds and Hydrazines	8																																																																																																			
9	Carbamates	9																																																																																																			
10	Caustics	10																																																																																																			
11	Cyanides	11																																																																																																			
12	Dithiocarbamates	12																																																																																																			
13	Esters	13																																																																																																			
14	Ethers	14																																																																																																			
15	Fluorides, Inorganic	15																																																																																																			
16	Hydrocarbons, Aromatic	16																																																																																																			
17	Halogenated Organics	17																																																																																																			
18	Isocyanates	18																																																																																																			
19	Ketones	19																																																																																																			
20	Mercaptans and Other Organic Sulfides	20																																																																																																			
21	Metals, Alkali and Alkaline Earth, Elemental	21																																																																																																			
22	Metals, Other Elemental & Alloys as Powders, Vapors, or Sponges	22																																																																																																			
23	Metals, Other Elemental & Alloys as Sheets, Rods, Drops, etc.	23																																																																																																			
24	Metals and Metal Compounds, Toxic	24																																																																																																			
25	Nitrides	25																																																																																																			
26	Nitriles	26																																																																																																			
27	Nitro Compounds, Organic	27																																																																																																			
28	Hydrocarbons, Aliphatic, Unsaturated	28																																																																																																			
29	Hydrocarbons, Aliphatic, Saturated	29																																																																																																			
30	Peroxides and Hydroperoxides, Organic	30																																																																																																			
31	Phenols and Cresols	31																																																																																																			
32	Organophosphates, Phosphothioates, Phosphodithioates	32																																																																																																			
33	Sulfides, Inorganic	33																																																																																																			
34	Epoxides	34																																																																																																			
101	Combustible and Flammable Materials, Miscellaneous	101																																																																																																			
102	Explosives	102																																																																																																			
103	Polymerizable Compounds	103																																																																																																			
104	Oxidizing Agents, Strong	104																																																																																																			
105	Reducing Agents, Strong	105																																																																																																			
106	Water and Mixtures Containing Water	106																																																																																																			
107	Water Reactive Substances	107																																																																																																			

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

**<---EXTREMELY REACTIVE! DO NOT MIX WITH ANY CHEMICAL OR WASTE MATERIAL! EXTREMELY REACTIVE!-->**