

# EPA's Chemical Compatibility Chart

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