Chemical Compatibility Chart

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A METHOD FOR DETERMINING THE COMPATIBILITY OF CHEMICAL MIXTURES

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***Caution*: 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 compatibiltiy of wastes because wastes are not sclassified as hazardous on the chart, nor do any blanks necessarily mean that the mixture cannot result in a hazard occuring. Detailed instructions as to hazards involved in handling and disposing of any given waste should be obtained from the originator of the waste.**

Legend

Code	Consequences
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

No.	Reactivity Group Name	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	101
1	Acids, Mineral, Non-oxidizing	1																																		
2	Acids, Mineral, Oxidizing		2																																	
3	Acids, Organic		GH	3																																
4	Alcohols and Glycols	H	HF	HP	4																															
5	Aldehydes	HP	HF	HP		5																														
6	Amides	H	HGT				6																													
7	Amines, Aliphatic and Aromatic	H	HGT	H		H		7																												
8	Azo Compounds, Diazo Compounds and Hydrazines	HG	HGT	HG	HG	H			8																											
9	Carbamates	HG	HGT						GH	9																										
10	Caustics	H	H	H		H				HG	10																									
11	Cyanides	GT GF	GT GF	GT GF					G			11																								
12	Dithiocarbamates	H,F GF	H,F GF	H,GT GF		GF GT		U	HG				12																							
13	Esters	H	HF						HG		H			13																						
14	Ethers	H	HF												14																					
15	Fluorides, Inorganic	GT	GT	GT												15																				
16	Hydrocarbons, Aromatic		HF														16																			
17	Halogenated Organics	HGT	H,F GT					HGT	HG		HGF	H						17																			
18	Isocyanates	HG	H,F GT	HG	HP			HP	HG		H,P G	HG	U						18																		
19	Ketones	H	HF						HG		H	H								19																
20	Mercaptans and Other Organic Sulfides	GT GF	H,F GT						HG									H	H	H	20															
21	Metals, Alkali and Alkaline Earth, Elemental	H,F GF	H,F GF	H,F GF	H,F GF	H,F GF	GF H	GF H	GF H	GF H	GF H	GF H	GF,H GT	GF H				HE	GF H	GF H	GF H	21														
22	Metals, Other Elemental & Alloys as Powders, Vapors, or Sponges	H,F GF	H,F GF	G F					H,F GT	U	GF H							HE	GF H		H,F GF		22													
23	Metals, Other Elemental & Alloys as Sheets, Rods, Drops, etc.	H,F GF	H,F GF						H,F G									H F						23												
24	Metals and Metal Compounds, Toxic	S	S	S			S	S			S														24											
25	Nitrides	GF HF	H,F E	H GF	H,E GF	GF H			U	HG	U	GF H	GF H	GF H				GF H	U	GF H	GF H	E				25										
26	Nitriles	H,GT GF	H,F GT	H							U											H P			S	GF H	26									
27	Nitro Compounds, Organic		H,F GT			H					H E											H,E GF				H,E GF		27							
28	Hydrocarbons, Aliphatic, Unsaturated	H	HF			H																	H E						28						
29	Hydrocarbons, Aliphatic, Saturated		HF																											29						
30	Peroxides and Hydroperoxides, Organic	HG	HE		HF	HG		HGT	H,F E	H,F GT	H,E GT	H,F GT						HE	H	E	H,F GT	HE	HG		HG	H,E GF	H,P GT		HP	,	30					
31	Phenols and Cresols	H	HF						HG										HP			GF H				GF H				H	31				
32	Organophosphates, Phosphothioates, Phosphodithioates	HGT	HGT						U		HE											H									U	32			
33	Sulfides, Inorganic	GT GF	HF GF	GT		H			E										H												HGT		33		
34	Epoxides	HP	HP	HP	HP	U		HP	HP		HP	HP	U								HP	HP	HP		HP	HP				HP	HP	U	HP	34	
101	Combustible and Flammable Materials, Miscellaneous	HG	H,F GT																			H,F G				H,F GF				H,F GT					101
102	Explosives	HE	HE	HE					HE		HE		HE									HE	HE	HE	E	E				HE	HE		HE	HE	HE
103	Polymerizable Compounds	PH	PH	PH					PH		PH	PH	U									PH	PH	PH	PH	PH				PH	PH		PH		
104	Oxidizing Agents, Strong	HGT		HGT	HF	HF	H,F GT	H,F GT	HE	H,F GT		H,E GT	H,F GT	HF	HF		HF	HGT	H,F GT	HF	H,F GT	H,F E	H,F E	HF		H,F E	H,F GT	HE	HF		HG	HF	H,F GT	H,F GT	H,F G	H,F G
105	Reducing Agents, Strong	HGF	H,F GT	HGF	H,F GF	H,F GF	HGF	HG				HGT	HF				H,F E	HE	HGF	HGF	HGF						HGF	HE			HE	HGF	H,GT GF		H	HGF
106	Water and Mixtures Containing Water	H	H						G										HG			HGF	HG GF		S	HGF							GT GF		
107	Water Reactive Substances	<--------EXTREMELY REACTIVE!!!! DO NOT MIX WITH ANY CHEMICAL OR WASTE MATERIAL!!!! EXTREMELY REACTIVE!!!!->																																		
		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	101