Chemical properties

Substance \ Plastic material	Concentration (%)	PC	PVC	PA 6	POM C	POM H	PTFE	PETP	PMMA	PE	PP	PVDF	PUR	PSU	PEEK
Acetaldehyde	40	2	2	3	4	3	4	4	2	4	4	4	2	2	4
Acetone	100	2	2	4	3	4	4	3	2	4	4	4	1	2	4
Allyl alcohol	100	2	3	3	3	3	4	4	1	4	4			3	
Aluminum chloride	10	4	4	3	3	4	4	4	4	4	4	4		4	
Ammonia, aqueous	10	2	4	4	4	2	4	4	4	4	4	4	2	4	4
Ammonium chloride		4	4	4	4	3	4	4	4	4	4	4		4	
Aniline	100	2	2	3	3	3	4	4	1	4	4	4	1	2	4
Gasoline, unleaded		1	4	4	4	4	4	4	1	4	3	4	4	3	4
Gasoline, premium		3	2	4	4	4	4	4	4	4	3	4	4	3	4
Benzene	100	2	3	4	4	3	4	4	1	3	2	4	3	2	
Benzyl alcohol	100	2	4	3	4	4	4	4	2	3	3	4	3	3	
Bleach solution 0.1% free chlorine		2	4	2	2	2	4	4		3	4	3		2	
Lead acetate			4	3	4	4	4			4	4	4	4		
Boric acid	10	4	4	3	4	3	4	4	4	4	4	4	4	4	4
Hydrogen peroxide	0,5	3	4	4	4	4	4	4	3	4	4	4		4	4
Hydrogen peroxide	1	3	4	4	4	4	4	4	3	4	4	4		4	4
Hydrogen peroxide	3	3	4	3	4	2	4	4	3	4	4	4		4	4
Hydrogen peroxide	10	2	4	2	4	2	4	4	2	4	4	4		4	4
Hydrogen peroxide	30	2	4	2	3	2	4	4	2	4	4	4		4	4
Bromic acid	50		4	2	2		4			4	4	4	2		
Butane, liquid		4	4	4	4	4	4	4		4	4	4			4
Butanol	100	4	4	4	4	4	4	3	2	4	3		3	3	
Butyl acetate	100		4	4	4	4	4	4	1	4	2	4	2	2	
Calcium carbonate		4	4	4	4	4	4	4	4	4	4	4	4		4
Calcium hydroxide		4	4	4	4	4	4	3		4	4	4	3		4
Calcium chloride, aqueous	10	4	4	4	4	4	4	4	4	4	4	4	3	4	4
Calcium chloride, alcoholic	20	4	4	1	4	4	4	4		4	4	4		3	
Cellulose acetate		4	4	4	4	4	4	4	4	4	4		4		
Citric acid	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Diesel oil	100	4	4	4	4	4	4	4		4	3	4		4	
Dichloroethane	100	1	2	4	4	4	3	2	1	2	4	4	2	2	
Dioxane	100	1	2	4	3	3	4	4	2	4	3	2	2	2	
Acetic acid	10	2	4	2	4	3	4	4	1	4	4	4	2	4	4
Acetic acid	80	2	3	2	2	2	4	2	1	4	4	4	2	4	4
Ethanol	96	4	4	4	4	4	4	4	2	4	4	4	4	4	4
Ethyl lactate	100	2	2	4	3	3	3	4	2	4	4	4	2	2	4
Ethyl ether	100	2	2	4	4	4	3	4	2	3	3		4	2	
Phenol, molten	100	1	3	1	2	2	4	2	1	4	4	4	3	2	2
Phenol, aqueous	10	2	3	2	2	2	4	2	1	4	4	4	3	2	4
Hydrofluoric acid	40	2	4	1	2	2	4	2	2	4	4	4	2	2	
Fluorine, dry			3	2	2	2	4			2	2	4			
Formaldehyde, aqueous	20	3	4	3	4	4	4	4	4	4	4	4	3	2	4
Phosphorous acid	10	4	4	2	3	2	4	4	2	4	4	4		4	4
Phosphoric acid, concentrated	80	2	4	2	2	2	4		2	4	4	4		4	4
Freon 11®		3	4	4	4	3	4	4		3	2	4			
Freon 12®		3	2	4			4	4	4	3	2	4			
Freon 22®		3	4	4				4	4		3	2			
Freon 113®		3	4	4				4	3		3	2			

1 = Poor 2 = Moderate 3 = Good 4 = Optimal

Continued on next page

Chemical properties

Substance \ Plastic material	Concentration (%)	PC	PVC	PA 6	POM C	POM H	PTFE	PETP	PMMA	PE	PP	PVDF	PUR	PSU	PEEK
Glycerin	90	3	4	4	4	4	4	4	4	4	4	3	4	4	
Heptane	100	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Hexane	100	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Isopropanol	90	3	4	4	4	4	4	4	3	4	4	4	3	3	
Iron(III) chloride		3	4	2	3	3	4		3	4	4	4	3	4	
Iodine/potassium iodide solution	3	4	2	2			4	4		3	4	4		2	
Potassium hydroxide, aqueous	10	2	4	4	4	3	4	2	4	4	4	4	2	4	4
Potassium hydroxide, aqueous	50	2	4	4	4	2	4	2	4	4	4	2	2	4	4
Potassium nitrate	10	4	4	4	3	3	4	4	4	4	4	4		4	
Potassium dichromate	5	4	4	3			4	4	3	4	4	4	3	4	
Potassium permanganate	1	4	4	2	4	3	4	4	4	4	4	4		4	
Chlorobenzene	100	1	2	4	4	3	4	4	2	3	4	4	1	1	
Chlorine gas	100	3	4	2	2	2	4	2	2	3	2	4	1	2	4
Chloroform	100	1	2	2	2	2	4	2	1	2	3	4	1	1	4
Chlorine water		3	3	2	2	2		2		3	3	4		4	
Copper chloride		4	4		4	3	4			4	4	4	4		
Copper sulfate		4		3	4	4	4			4	4	4		4	
Chromic acid	10	4	4	2	2	2	4	3		4	4	4		2	4
Carbon dioxide		4	4	4	4	4	4	4	4	4	4	4	4		4
Mercury	100	4	4	4	4	4	4	4	4	4	4	4	4	4	
Mercury chloride, aqueous	5	4	4	2	4	4	4			4	4	4		4	
Magnesium chloride, aqueous	10	4	4	4	4	4	4	4	4	4	4	4	3	4	3
Manganese sulfate	10	4		4	4	4	4	4		4	4	4		4	
Methanol	98	2	4	4	4	4	3	3	2	4	4	4	3	3	4
Methyl acetate	100	2	2	4	4	3	4	4	2	4	4	4		2	
Methyl ethyl ketone	100	2	2	4	3	3	4	4	1	4	4	3	2	2	4
Methylene chloride	100	12	3	3	2	2	4	2	1	3	3	4	1	1	4
Mineral oil	100	4	4	4	4	4	4	4	4	4	4	4	4	4	
Lactic acid	10	4	4	4	4	4	4	4	4	4	4	4		4	4
Sodium bisulfite	10	4	4	4	2	2	4	4		4	4	4		4	
Sodium carbonate	10	4	4	4	4	4	4	4	4	4	4	4	2	4	4
Sodium chloride	10	4	4	4	4	4	4	4	4	4	4	4	3	4	4
Sodium sulfate	10	4	4	4	4	4	4	4		4	4	4		4	
Sodium hydroxide, aqueous	50	2	4	3	4	2	4	2	3	4	4	3	2	4	4
Sodium hydroxide, aqueous	10	2	4	4	4	3	4	2	4	4	4	4	3	4	4
Nitrobenzene	100	1	2	3	3	3	4	2	1	4	4	4	1	2	4
Oleic acid, concentrated	40	4	4	4	4	4	4	4	4	4	3	4	4	4	
Oxalic acid	10	4	4	3	2	2	4	4	4	4	3	4		4	4
Ozone		4	4	2	2	2	4	2	4	3	3	4	4	4	4
Petroleum	100	2	4	4	4	4	4	4	4	4	4	4	4	4	
Nitric acid, concentrated	65	2	2	2	2	2	4	2	2	3	2	4	2	2	
Nitric acid	10	3	4	2	2	2	4	3	3	4	4	4	2	4	4
Hydrochloric acid	10	4	4	2	2	2	4	3	4	4	4	4	2	4	4
Hydrochloric acid	2	4	4	2	2	2	4	4	4	4	4	4	2	4	4

1 = Poor 2 = Moderate 3 = Good 4 = Optimal

Continued on next page

Chemical properties

Substance \ Plastic material	Concentration (%)	PC	PVC	PA 6	POM C	POM H	PTFE	PETP	PMMA	PE	PP	PVDF	PUR	PSU	PEEK
Silicone oil		4	4	4	4	4	4	4	4	4	4	4			
Cooking oil		4	4	4	4	4	4	4	4	3	4	4	4		
Alcohol		4	4	4	4	4	4	4	2	4	4	4	4	2	4
Styrene	100	2		4	4	4	4	2		3	3		2	4	4
Hydrogen sulfide, aqueous	2	4	4	4	3	2	4	4	4	4	4	4	2	4	
Sulfur dioxide		3	4	2	3	2	4	3	4	4	4	4	2		4
Carbon disulfide	100	2	3	4	4	4	4	4	2	3	4	4		2	
Sulfuric acid	98	2	4	1	2	2	4	2	2	2	2	4	1	2	2
Sulfuric acid	10	4	4	2	3	2	4	4	4	4	4	4	2	4	4
Sulfuric acid, fuming		2	3	2	2	2	4	2	3	2	2	2	2		2
Soap solution	1	4	4	4	4	4	4	4	4	4	4	4	4	4	
Seawater	100	4	4	4	4	4	4	4	4	4	4	4	4	4	
Carbon tetrachloride	100	2	2	4	3	3	3	4	1	2	2	4	1	2	
Tetralin	100	2	2	4	4	3	4	4	1	4	3	4		4	
Thionyl chloride	100	2	2	1	3	3	3	4		2	2	4			
Toluene	100	2	2	4	3	3	4	4	1	3	3	4	2	2	4
Trichloroethylene	100	2	2	3	3	3	4	2	1	2	3	4	1	1	4
Water, cold		4	4	4	4	4	4	4	4	4	4	4	4	4	4
Wine		4	4	4	4	4	4	4		4	4	4		4	
Wax, molten		4		4	4	4	4	4		4	4	4		4	

1 = Poor 2 = Moderate 3 = Good 4 = Optimal