

CHEMICAL RESISTANCE

Thermoplastics, thermosets and elastomers have outstanding resistance to a wide range of chemical reagents. Such resistance, however, is a function both of temperatures and concentration, and there are many reagents which can be handled for limited temperature ranges and concentrations. In borderline cases, it will be found that there is limited attack, generally resulting in some swelling due to absorption. There are also many cases where some attack will occur under specific conditions, but for many such applications, the use of plastic will be justified on economic grounds when considered against alternative materials. Resistance is often affected (and frequently reduced) when handling a number of chemicals or compounds containing impurities. For this reason, when specific applications are being considered, it may be worthwhile to carry out tests using the actual product that will be encountered in service.

The data in the following tables were obtained from numerous sources in the industry. The information is based primarily on the immersion of unstressed strips in the chemicals at ambient temperatures, and to a lesser degree on field experience. The end user should be aware of the fact that actual service conditions will affect the chemical resistance.

All data provided is based on testing at temperatures between 20°C (68°F) and 23°C (73°F).

RATINGS

A*	Excellent — No Effect
B	Good — Minor Effect
C	Fair — Data Not Conclusive, Testing Recommended
D	Not Recommended

*An "A" rating does NOT guarantee that pipe can be used at its pressure rating and yield the identical life expectancy with this chemical as compared to water alone.

CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS							GASKETS					ALLOYS						
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	VITON	EPDM	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Acetaldehyde*, CH ₃ CHO		D	D	B	C	D	D	A	D	D	D	B	C	D	C	A	A	A	A
Acetaldehyde Aqueous 40%, CH ₃ CONH ₂		D	D	A	D			A	D		D	B	A						
Acetamide				A				A		D	C	A	C	A	B	A	B		
Acetate Solvents, Crude		D	D	D	A			A						D	D	A	B		
Acetate Solvents, Pure		D	D	D	A	B		A			D	C	D	D	D	A	B		
Acetic Acid* 05%		A	A	A	A	A	A	A	A	A	A	A	A	B	A	A	A	B	A
Acetic Acid* 10%		A	B	A	A	A	A	A	B	B	D	B	B	B	B	A	A	B	A
Acetic Acid* 20%		A	A	A	A	A	A	A	B	B	C	B	B	B	B	A	A	A	A
Acetic Acid* 30%		A	A	A	A	A	A	A	B	B	C	A	B	B	B	A	A	A	A
Acetic Acid* 50%		A	A	A	A	A	A	A			C	B	C	A	C	A	A		A
Acetic Acid* 60%		A		B	A		A	A			C	C	C			A			
Acetic Acid* 80%		B	B	C	A		A	A			C	B	C	C	A	A			A
Acetic Acid Glacial* 100%, CH ₃ COOH	1.05	D	D	B	B		A	A	D		D	B	C	D	A	A	B	B	A
Acetic Aldehyde (Acetaldehyde)	1.08						A	A			D	A	C	D	C				
Acetic Anhydride, (CH ₃ CO) ₂ O		D	C	B	B	A	A	A		C	D	C	B	C	A	A	A	B	A
Acetic Ester (See Ethyl Acetate)							A				D	B	D	D					
Acetic Ether (See Ethyl Acetate)							A				D	B	D	D					
Acetol							A												
Acetone*, CH ₃ CO·CH ₃	0.8	D	D	B	D	B	C	A	D	B	D	A	C	C	C	A	A	A	A
Acetonitrile (Methyl Cyanide)		D		B	A			A		D	C	A	A	C	B	A	A		B
Acetophenone, C ₆ H ₅ COCH ₃	1.03	D	D	A	A			A		D	D	A	D	C	D	A	A		
Acetyl Acetone				A	D			A			D	A	D	D	D				
Acetyl Benzene				A				A			D	A	D	D	D				
Acetyl Bromide				A				A											
Acetyl Chloride, CH ₃ COCl	1.1	D	D	A	A			A			C	D	D	C	D	A	B		
Acetyl Oxide								A			D	B	B	C	D				
Acetyl Propane								A			D	B	D	D	D				
Acetylene, HC·CH		C	C	A	A			A	B		A	A	B	A	A	A	A		
Acetylene Dichloride								A			A	A	D	D	D				
Acetylene Tetrachloride								A			A	D	D	D	D				
Acid Mine Water		A	A	B	A			A			A								
Acrylic Acid		D	D		A			A											

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	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (KLPE)	TEFLON	ABS	SBR	VITON	EPDM	NEOPRENE	BUKALON (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM
Acrylic Emulsions*		D	D	D	A	D	A	A	D	D	D	D	C	C	C	A		B
Acrylonitrile, CH ₂ =CHCN		D	D	B	A	D	A	A	D	D	D	D	C	C	C	A		B
Adipic Acid Aqueous		A	A	A	A	A	A	A	D	D	D	D	A	A	A	A		
Air		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
Alcohol (See Ethyl Alcohol)																		
Alcohol, Allyl		D	D	A	A	A	A	D	B	B	A	A	A	A	A		A	A
Alcohol, Amyl, C ₄ H ₉ CH ₂ OH		C	B	A	A	A	A			A	A	A	A	A	A		A	A
Alcohol, Benzyl, C ₆ H ₅ CH ₂ OH		D	D	A	A	D	A			A	C	C	D	A	A		A	A
Alcohol, Butyl, C ₃ H ₇ CH ₂ OH	.806	C	A	A	A	A	A			A	A	A	A	A	A	A	A	A
Alcohol, Diacetone, (CH ₃) ₂ COHCH ₂ COCH ₃		D		C	B		A			D	A	C	C	A	A		A	A
Alcohol, Ether							A			B	A	C	C	B	A		A	A
Alcohol, Ethyl, CH ₃ CH ₂ OH		A	A	A	A	A	A			B	A	A	A	A	A		A	A
Alcohol, Hexyl, C ₅ H ₁₁ CH ₂ OH		A		A	A	A	A			A	A	B	A		A		A	A
Alcohol, Isobutyl, C ₃ H ₇ CH					A	A	A			A	A	A	B		A		A	A
Alcohol, Isopropyl, C ₂ H ₅ CH ₂ OH		A	A	A	B	A	A			A	A	A	B		A		A	A
Alcohol, Methyl, CH ₃ OH		A	D	A	A	A	A			D	A	A	A	A	A	A	A	A
Alcohol, Octyl, CH ₇ H ₁₅ CH ₂ OH										A	A		B		A		A	A
Alcohol, Polyvinyl		A	A	A			A			A	A							
Alcohol, Propargyl		A																
Alcohol, Propyl, C ₂ H ₅ CH ₂ OH		A	A	A	A	A	A			A	A	A	A	A	A	A	A	A
Aldehyde							A			D	A	C	D	C				
Alkanes							A			A	D	D	A	D				
Alkazene							A			B	D	D	D	D				
Allyl Aldehyde							A			A			B	B				
Allyl Bromide							A			B		D	D	D				
Allyl Chloride		D			A	A	B			B	D	D	D	D	A		A	A
Allyl Trichloride							A			A			D	D				
Alum		A	A	A	A	A	A			A	A	A	A	A	A		A	A
Alum, Ammonium		D	D	A	A					A	A	A	A	A				
Alum, Chrome		A	A	A						A		A	A	A				
Alum, Potassium		A	A	A	A	A	A			A	A	A	A	A				
Aluminum, Acetate							A		B	C	A	B	B	B				
Aluminum, Ammonium Sulfate				A	A		A			A	A	B	B					
Aluminum, Bromide							A			A	A	A	A	A				
Aluminum, Chloride, AlCl ₃	2.44	A	A	A	A	A	A	A	D	A	A	A	A	A	C	C	C	A
Aluminum, Chlorohydroxide							A											
Aluminum, Citrate	2.88									D	A	A	A	A	C	C	C	B
Aluminum, Fluoride		A	A		A	A					A	A	A	A				
Aluminum, Formate														D				
Aluminum, Hydroxide, Al(OH) ₃		A	A	A	A	A	A			D	C	A	A	A	A	A	A	
Aluminum, Nitrate		A	A	A	A		A		A	B	A	A	A					
Aluminum, Oxychloride		A	A	A	A					D								

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Aluminum, Phosphate		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Aluminum, Potassium Sulfate		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Aluminum, Salts		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Aluminum, Sulfate, Al ₂ (SO ₄) ₃	2.7	A	A	A	A	A	A	A	A	B	A	A	A	A	A	D	B	B	A	A
Amber Acid		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Amines, R-NH ₂		C			B			A					C		D	D		A	B	A
Ammonia 10%		A		A				A	D				A		D	A		A	A	A
Ammonia, Anhydrous 99.5%, NH ₃		D	D	A	B	B		A					D		A		B	B	B	A
Ammonia, Aqueous 25%		A	A	A	A			A					A		A					A
Ammonia, Dry Gas		A	A	A	A	A		A	A	D	A	A	A	A	A					A
Ammonia, Liquid, NH ₄ OH		D		A	A	D		A					B		A	A				B
Ammonia, Nitrate, NH ₄ NO ₃		B	B	A	A				A				B		A	A				
Ammonium Phosphate, Monobas.		A		A		B		A	A				A		A	A		A	A	A
Ammonium Phosphate, Tribasic		A		A		B		A					A		A	A		A	A	A
Ammonium, Acetate		A	A	A				A					A		A	A		A	A	A
Ammonium, Alum								A					B							
Ammonium, Bichromate								A					B							
Ammonium, Bifluoride		A	A	A	A			A					A							B
Ammonium, Bisulfide		A	A	A	A			A					B							
Ammonium, Carbonate, (NH ₄) ₂ CO ₃		A	A	A	A	A	A	A	A	A	A	B	C	B	B	A	A	A	A	B
Ammonium, Casenite																				
Ammonium, Chloride, NH ₄ Cl	1.5	A	A	A	A	A	A	A	A	A	A	A	B	A	A	B			A	A
Ammonium, Dichromate		A						A					A							
Ammonium, Fluoride, NH ₄ F	1.3							A					A							
Ammonium, Fluoride 10%		A	A	A	A	A		A					B						B	A
Ammonium, Fluoride 20%		A		A	A			A												
Ammonium, Fluoride 25%		D	D	A	A			A												
Ammonium, Hydroxide, NH ₄ OH		A	D	A	A	B	A	A	B	D	B	A	B	A	A	A		A	A	A
Ammonium, Metaphosphate		A	A	A	A	A	A	A					B							
Ammonium, Nitrate, NH ₄ NO ₃	1.7	B	B	A	A	A	A		A				A		A	A				A
Ammonium, Oxalate, NH ₄ C ₂ O ₄													A							A
Ammonium, Persulfate, (NH ₄) ₂ S ₂ O ₈	2.0	A	A	C	A			A	D		C	B	A	C				A	A	A
Ammonium, Phosphate		A	A	A	A	A		A					A							A
Ammonium, Phosphate Di Basic, (NH ₄) ₂ HPO ₄		A	A	A		B		A					A							A
Ammonium, Phosphate Monobasic, (NH ₄)H ₂ PO ₄			A	A		A							A				C			A
Ammonium, Phosphate Tribasic, (NH ₄) ₃ H ₂ PO ₄			A	A		A							C							A
Ammonium, Salts		A		A	A	A	A	A					A							A

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Ammonium, Sulfate, (NH ₄)SO ₄	1.8	A	A	A	A	A	A		B	C	A	A	B	A	B	A	A	
Ammonium, Sulfide		A	A	A	A	A	A			C	A	A	A	A				
Ammonium, Thiocyanate, NH ₄ SCN	1.3	A	A	A	A	A	A			A	A	A	A	A				
Ammonium, Thiosulfate, (NH ₄) ₂ S ₂ O ₃							A			A	A	A	A	A			A	
Amyl Acetate, CH ₃ CO ₂ C ₅ H ₁₁	.86	D	D	D	C	C	C	A	D	D	A	A	C	D	A	A	D	A
Amyl Alcohol* (See Alcohol Amyl)	0.8	C	B	A		A	A	A	D	B	A	A	A	A			C	C
Amyl Borate					A				D	A	D	A	A	A				
Amyl Bromide							A			B	D	D	D	D				
Amyl Chloride, CH ₃ (CH ₂) ₃ CH ₂ Cl	0.8	D	D	D	A	D	D	A		A	D	D	D	D			C	C
Aniline*, C ₆ H ₅ NH ₂	1.02	D	D	A	C	C	A	A	D	D	B	B	D	D			A	B
Aniline Chlorohydrate		D							D	D	B	B	D	C				B
Aniline Hydrochloride		D	D	A	A	A	A		D	D	B	A						
Anthraquinone Sulfonic Acid		A	A	A	A						A	A						
Anti-Freeze		A		A		B		A	C		A	A	A	A			A	A
Antichlor								A		A	A	A	A	A				
Antimony Chloride, SbCl ₃	3.1			A	A	A	A	A			A		D	D				
Antimony Pentachloride								A					D	D				
Antimony Trichloride		A		A	A			A		A	A		A	A				
Aqua Regia 80% HCL, 20% Nitric		D	D	D	A	B	D	A	D	D	C	C	C	C			D	D
Argon								A			A	A	D	C			D	
Arochlor 1248						B			D	A		D	D					
Aromatic Hydrocarbons		D	D			B		D	A	A	D	D	D				A	B
Arsenic Acid, H ₃ ASO ₄		A	A	A	A	A		A	A	A	A	B	B				A	A
Arsenous Acid																		
Aryl Supfonic Acid		D	D	D	D													
Asphalt		D	D	A	A	D		A			A	D	B	B	C		A	A
Aviation Fuel (115-145 OCT)								A										
Aviation Turbine Fuel								A										
Baking Soda (See Sodium Bicarbonate)								A										
Barium Acetate																		
Barium Carbonate, BaCO ₃	4.3	A	A	A	A	A	A	A		A	A	A	A	A	A		B	A
Barium Chloride, BaCl ₂	3.1	A	A	A	A	A	A	A		A	A	A	A	A	A		B	A
Barium Cyanide						B				A	A	A	C					
Barium Hydrate								A		A	A	A	A	A				
Barium Hydroxide, Ba(OH) ₂	2.2	A	A	A	A	A	A	A	A	A	A	A	A	A			A	C
Barium Nitrate, BaNO ₃		A	A	A				A			A	A	A	A			A	
Barium Salts		A	A	A	A	A	A	A		A	A	A	A	A			A	
Barium Sulfate, BaSO ₄	4.4	A	A	A	A	A	A	A		A	A	A	A	A			A	A
Barium Sulfide, BaS	4.3	A	A	A	A	A	A	A		A	A	A	A	A			A	A
Beer		A	A	A	A	A	A	A	A	A	A	A	C	A			A	A
Beet Sugar Liquid		A	A	A				A		A	A	A	A	A			A	A
Beet Sugar Liquors		A	A	A	A			A		A	A	A	A	A			A	A
Benzaldehyde*, C ₆ H ₅ CHO	1.05	D	D	C	C	D			D	D	C	C	D	D			A	A

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Benzalkonium Chloride		A																	
Benzene, C ₆ H ₆	0.9	D	D	C	B	D	D	A	D	B	D	C	C	D	B	A	A	B	
Benzene Sulfonic Acid*, C ₆ H ₅ SO ₃ H		D	D	D	B	A	A	A		A	D	B	C	B		A			
Benzene Sulfonic Acid 10%		D	D	D	B	D	A	A		A									
Benzil Chloride, C ₆ H ₅ CH ₂ Cl	1.1						A	A		A	D	D	D	D					
Benzoic Acid, C ₆ H ₅ COOH	1.3	A	A	A	A	A	A	A	A	A	B	C	D	B	B	A	A	A	
Benzol (See Benzene)								A	D										
Benzyl Alcohol, C ₆ H ₅ CH ₂ OH (See Alcohol, Benzyl)	1.05			A				A		A	B	D	C						
Benzyl Benzoate								A		A	C	D	D	D					
Benzyl Chloride, C ₆ H ₅ CH ₂ Cl	1.1			A	D			A		A	D	D	D	D					
Bismuth Carbonate, (BiO) ₂ CO ₃	6.8	A	A	A	A	A	A	A		A	A		A	A					
Black Liquor		A	A	A	A	A	A	A		A	B	A	A	A					
Bleach (See Sodium Hypochlorite)		A	A	A	A	A	A	A	B	A	A	D	D	A					
Borax, Na ₂ B ₄ O ₇		A	A	A	A	A	A	A	B	B	A	A	C	A	A	A	A	A	
Boric Acid, H ₃ BO ₃	1.4	A	A	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	
Brake Fluid								A			D	A	B	C	B				
Brewery Slop											A	A	A	A	A				
Brine		A	A	A	A			A	A	A	A	A	A	A					
Brine Acid		A	A	A	A	A		A	A	A	A	A	A	A				A	
Bromic Acid		A	A	D	A			A	A	A	B								
Bromine Dry								A			A	D	D	D	D				
Bromine Gas		C		D	A	D	D	A		A	D	D	D	D	C				
Bromine Liquid, Br	3.1	D	D	D	A	D	D	A	D	A	D	D	D	D	D				
Bromine Water		D	C	C	A	D		A		A	D	D	C	D	D	D	A	A	
Bromobenzene		D						A		D			C	D					
Bromotoluene		D		D				A											
Butadiene Gas		B	A	A	A			A	D	D	A	D	B	D	B	A	A	B	
Butane, CH ₃ (CH ₂) ₂ CH ₃	0.8	A	A	A	A	C		A	A	D	A	D	A	A	B	A	A		
Butanediol* (Butylene Glycol)		A	B		A	A		A	D		A	D							
Butanol (See Alcohol, Butyl)								A	D						A	A		A	
Butter								A		D	A		B	A	B	A			
Buttermilk								A			A		A	A	A	B			
Butyl Acetate, CH ₃ COO(CH ₂) ₃ CH ₃	0.9	D	D	C	B	D		A	D		D	B	D	C	C	A		B	
Butyl Acrylate Pure		D	D	D	A			A		D	D	A							
Butyl Acrylate Saturated								A		D	D	A							
Butyl Amine		D	D	D	B			A		D	D	D	D	C	C		A		
Butylbenzene (Phenylbutane)								A			D			C	D				
Butyl Benzoate								A			A		D	D	D				
Butyl Bromide					A			A			B		D	D	D				
Butyl Butyrate (Butyl Butanoate)								A			C		D	D					
Butyl Carbitol								A			A	A	B	C	A				

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CHEMICAL	THERMOPLASTICS						GASKETS						ALLOYS						
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	EPDM	VITON	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Butyl Cellosolve (Ethylene Glycol Monobutyl Ether)		A	D		A		A				D	B	C	C	B		A		
Butyl Chloride (Chlorobutane)					A		A				A			D	D				
Butyl Diol		B	A	A	A		A				A	A							
Butyl Ether		D	D	D	A		A				D	D	C	B	C		A		
Butyl Formate							A						D	D					
Butyl Hydrate							A				A	B	A	A	A				
Butyl Hydride (See Butane)							A				A	D	A	A	A				
Butyl Hydroxide							A				A	B	A	A	A				
Butyl Mercaptan		D			A		A				A		A	A					
Butyl Phenol		C	A	A	A		A	D											
Butyl Phthalate		D	D	A	A		A				C	B	D	D	D				
Butyl Stearate							A		D	D	A	B	D	B	D				
Butylene (Liquified Petroleum Gas)		A	A	D	A	B	A	D			A	D	C	B	C	A	A		
Butyraldehyde, CH ₃ (CH ₂) ₂ CHO							A				D	B	C	D	C				
Butyric Acid, CH ₃ (CH ₂) ₂ COOH		D	B	A	A	B	A	D			B	B	C	D	C	B	B	A	A
Cadmium Cyanide		A	A								A		A						
Cadmium Salts				A	A	A	A				A								
Caffeine Citrate		A			A		A				A								
Calamine	3.5						A				A		B	B	A				
Calcium Acetate		A	A	A	A		A				D	A	B	B	A				
Calcium Bisulfide		A	A	A	A	B	A		D		A	D	A	A		B		A	A
Calcium Bisulfite		A	A	A	A		A	D			A	D	A	A	A				
Calcium Carbonate, CaCO ₃	2.7	A	A	A	A	A	A				A	A	A	A	A	A	A	A	A
Calcium Chlorate, Ca(ClO ₃) ₂	2.7	A	A	A	A	A	A				A	A	A	A	A	A	C		B
Calcium Chloride, CaCl ₂	2.1	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	A	A
Calcium Cyanide							A				A	A	A	A	A				
Calcium Hydroxide, Ca(OH) ₂	2.3	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Calcium Hypochloride							A				A	A	D	D	A				
Calcium Hypochlorite, Ca(ClO) ₂	2.3	A	A	B	A	A	A	A	D		A	A	D	B	A	D	A	B	A
Calcium Nitrate	1.820	A	A	A	A	A	A	A	A	A	A	A	A	B	A				
Calcium Oxide					A		A				A	A	A	A	A				
Calcium Phosphate, CaHPO ₄	2.3						A				A	A	B	A	A				
Calcium Sulfate, CaSO ₄	2.9	A	A	A	A	A	A				A	A	B	A	A	A	A	A	B
Calcium Sulfide		A	A	A	A		A		B		A	A	B	A	A				
Calcium Thiosulfate	1.872						A				A	A	A	B	A				
Caigon (Sodium Hexametaphosphate), (NaPO ₃) ₆				C	A	D	A	A			A		A	A		A	A		
Cane Sugar Liquors		A	A	A	A		A		A		A	A	A	A	A	A	A		
Caprylic Acid (Octanic Acid)					A		A							C	B				
Carbinol (See Alcohol, Methyl)							A				D	A	A	A	A				

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS							GASKETS					ALLOYS							
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	POLY-PROPYLENE (PP)	POLY-ETHYLENE (PE)	TEFLON	SBR	EPDM	BUNA N (NITRILE)	316 STAINLESS STEEL	TITANIUM	CPVC	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE-CROSS LINKED (XLPE)	ABS	VITON	NEOPRENE	HYPALON	304 STAINLESS STEEL	HASTELLOY C	
Carbolic Acid (See Phenol), C ₆ H ₅ OH		A	A			D									C	C	D	A	B	A
Carbon Bisulfide*		D	D	A	D	A	A			D	D	A	A	A	C	D	D	C	A	A
Carbon Dioxide (Wet or Dry), CO ₂		A	A	A	A	A	A	A	B	A	A	A	A	A	B	A	A	A	A	A
Carbon Disulfide, CS ₂		D	D	D	A	C	D	A	D	A	D	C	D	A	C	C	D	A	A	
Carbon Monoxide, CO		A	A	A	A	A	A	A		A	A	A	A	A	B	A	A	A		
Carbon Tetrachloride, CCl ₄	1.6	D	D	D	A	D	D	A	D	D	D	D	A	D	B	D	D	A	C	A
Carbonic Acid, H ₂ CO ₃		A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	B	A	A	A
Casein				A																
Castor Oil*	0.95	A	C	A	A	C	A	A	A	A	A	A	A	A	A	A	A	A		
Catsup		A	A	A					A	A	A	A	A	A	B	C	A	A		
Caustic Lime (Calcium Hydroxide)							A							B	A	A	A			
Caustic Potash (Potassium Hydroxide)		A	A	A	A		A							D	A	B	A			
Caustic Soda (Sodium Hydroxide)		A	A	A	A		A	A					A	B	A	B	C	A		
Cellosolve (See Butyl Cellosolve)		B		A	A		A		D					C	B		C		A	
Chloral Hydrate (Knockout Drops)	1.901	A	A	A	A				D				D	A			C			
Chloroacetic Acid*		A		D		D	A							D	B	D	D	D	D	A
Chloric Acid		A		A			A	D						D	D	D	D	D	D	A
Chloric Acid 20%		A	A	D	A													A	A	
Chlorinated Glue		A	A	C	A									A	B	D	C			
Chlorine Dioxide		A	A	C	A		A	D						D				A	A	
Chlorine Dry							A	D	D					C	B	C	D	A	A	D
Chlorine Gas Dry		D	D	D	A		A	D	D					B	D	C	C			
Chlorine Gas Wet		D	D	D	A		A	D	D					C	D	D	C			
Chlorine Liquid, Cl ₂		D	D	D	A	C	C	C	D					C	D	D	C			
Chlorine Water		A	A	C	A	A	A	B						A	B	C	C	B	D	A
Chlorosulfonic Acid, ClSO ₂ Ho	1.770	D	D	D	C	D	D	A	D	D	D	D	D	D	D	D	D	D	D	A
Chlorox Bleach 5.5%, CL ₂		A	A	C	A		A							A	B	B	C	B	A	A
Chocolate Syrup				A										A	A	A	A	A	A	
Chresylic Acid 50%		A		A	B	D								A	A	D	A	A		B
Chrome Alum (Chr. Potass. Sulf.)		A	A	A	A	A	A							A			A	A		
Chromic Acid 05%		A		D		B								D	A	A	D	D	A	A
Chromic Acid 10%		A	A	B	A		A		D					D	A	B	D	D	A	B
Chromic Acid 20%		B	B	D	A	A	A		D					D	B	B	C	C	A	C
Chromic Acid 30%		B	B	D	A	A	A		D					D	A		D	D		C
Chromic Acid 50%, H ₂ CrO ₄		D	D	D	A	D	A		D					D	A	B	D	D	D	C
Chromium Alum		A	A	A	A		A	A						A	A	A				
Citric Acid*, C ₆ H ₈ O ₇ ·H ₂ O	1.543	A	A	A	A	C	A	A	A					A	A	A	B	A	A	A
Citric Oils				A			A	A						A	B	D	A	D	A	A
Cobalt Chloride	3.348						A	A						A	A	A	A	A		
Coconut Oil		A	A	A	A	A	A		D					A	B	B	A			
Cod Liver Oil							A		D					A	A	B	B	B		
Coffee			A	A										A	A	A	A	A	A	

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS							GASKETS					ALLOYS					
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	VITON	EPDM	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM
Coke Oven Gas		D	A	A	A				D	A	A	B	D					
Cola Concentrates		A	A	A	A	A												
Copper Acetate		A	A	A	A					D	A	B	B	C				
Copper Borofluoride		A	A	A	A					A	A							
Copper Carbonate		A	A	A	A					A	A			D				
Copper Chloride, CuCl ₂ ·2H ₂ O	3.4	A	A	A	A	B	A	A	A	A	A	C	A	A	B	D	A	A
Copper Cyanide, Cu(CN) ₂		A	A	A	A	B	A	A	A	A	A	A	B	A	A	A	A	A
Copper Fluoborate, CuBF ₆ ·4H ₂ O		A	A			A	A			A		A	B		D	D		B
Copper Fluoride, CuF ₂	2.9	A	A	A	A		A	A		A	A							
Copper Nitrate, Cu(NO ₃) ₂	2.3	A	A	A	A	B	A	A		A	A	A	A		A	A	A	A
Copper Salts		A	A	A	A		A			A	A	A	A	A	A			
Copper Sulfate, CuSO ₄ ·5H ₂ O	2.3	A	A	A	A		A		B	B	A	A	B	A	A	C	A	A
Copper Sulfate 5%		A	A	A	A	B	A			A		A	A	A	A	A	A	A
Corn Oil		A	A	A	A		A	B	D	A	B	A	A	B				
Corn Syrup		A	A	A	A		A			A	B	A	A					
Cottonseed Oil*		A	A	A	A	C	A	A	D	A	B	A	B					
Cream			A	A						A	A	C	A	A	A	A		
Creosol, CH ₃ C ₆ H ₄ OH	1.05	D	D	C	C	C	D	A	D	A	D	D	D		A	A		
Creosote		D	D				A	A	D	A	D	D	B	C				
Cresols*, C ₆ H ₄ OH·CH ₃		D	D	C	A	D	A		D	A	D	D	D	C	A	A		
Cresylic Acid		C	C	A	A	C		A	D	A	D	D	D		A	A	A	B
Croton Aldehyde		D	D	A	C		A	D		A	B				A			
Crude Oil		A	A	A	A		A			A	D	B	D					
Cryolite		B	B	A	A		A			A	A	A	B					
Cupric Cyanide (See Copper Cyanide)						A												
Cupric Fluoride		A	A	A	A	A	A			A	A							
Cupric Nitrate						A	A			A	A	A	A	A				
Cupric Salts		A	A	A	A	A	A			A	A	D			D			
Cupric Sulfate (See Copper Sulfate)		A	A	A	A	A	A			A	A							
Cutting Oil							A			A	D	B	A	B				
Cyanic Acid (Isocyanic Acid), HOCN							A				A	A	A	A			A	
Cyclohexane		D	D	D	A	C	A	D	D	A	D	D	C			A	A	
Cyclohexanol, C ₆ H ₁₁ OH	0.94	D	D	A	C	D	A	D	D	A	B		B			A	A	
Cyclohexanone*, C ₆ H ₁₀ O	0.95	D	D	B	C	D	A	D	D	A	C		C			A	A	
Decalin		D	D	A	A		A		D	A	D	D	D	D				
Decanal							A			D	A		D	D				
Decane							A		D	A	D	C	B	C				
Detergents*		A	A	B	A	C	A	A	B	A	A	A	A		A	A		
Detergents, Heavy Duty		A	A	A	A	A	A		B	A	A	A	A					
Developers							A		B								A	A
Dextrin		A	A	A	A	A	A	A		A	A	A	A					
Dextrose		A	A	A	A	A	A			A	A	A	A					
Diacetone Alcohol		D	D	A	B		A		D	D	A	C	D	B				
Diallyl Phthalate																		

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS					GASKETS					ALLOYS					
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	TEFLON	POLY-ETHYLENE-CROSS LINKED (XLPE)	ABS	SBR	EPDM	BUNA N (NITRILE)	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Diazo Salts		A	A	A	A	A	A									
Dibenzyl Ether, (C ₆ H ₅ CH ₂) ₂ O																
Dibutyl Amine																
Dibutyl Ether, CH ₃ (CH ₂) ₃ O(CH ₂) ₃ CH ₃																
Dibutyl Phthalate		D	D	B	A		C	A	D	D	B	A	D	D	D	
Dibutyl Sebacate		B			A			A	D	D	C	B			D	
Dicalcium Phosphate																
Dichlorethane		D				D		A			C		D		A	A
Dichloro Benzene		D						A			B		D		D	
Dichlorobenzene		D	D		A			A	D	D	A	D	D	D	D	
Dichloroethylene, ClHC	1.25	D		D	A			A	D		A	D	D	D	D	
Dichloroisopropyl Ether					A					D						
Dichloromethane								A			B	D	D	D	D	
Diethyl Phthalate																
Diesel Fuel		A	A	B	A	D	A	A	B	D	A	D	D	A	D	A
Diethanolamine, (HOCH ₂ CH ₂) ₂ NH	1.1									B						
Diethyl Cellosolve					A						D					
Diethyl Ether		D	D	B	A			A		D	C	C	C	D	C	D
Diethyl Ketone								A			D	B	D	D	D	
Diethyl Oxide								A			D	D	C	B	C	
Diethylamine		D	D	A	C			A	D		D	B	B	C	A	A
Diethylbenzene								A			D	D	D	C		
Diethylene Glycol*, O(CH ₂ CH ₂ OH) ₂			A	A		B	A	A		A	A	A	A		A	A
Diethylenetriamine					A			A				B	C			
Diglycolic Acid		A	A	A	A		A	A			A	A		C	A	
Diisobutyl Ketone					A				D		D	D				
Diisobutylene					A			A			A	D			A	
Diisooctyl Phthalate								A			B	B		A		
Diisopropyl Ketone, (CH ₃) ₂ CHCOCH(CH ₃) ₂					B			A			D	B				
Dimethyl Amine		D	D	A	B			A			D	C		B	D	
Dimethyl Benzene								A			A	D	D	D	D	
Dimethyl Ether								A			B	B	C	B	C	
Dimethyl Formamide		D	D	A	A			A	D		C	B	B	D		A
Dimethyl Ketone								A			D	A	C	D	C	
Dimethyl Phthalate					B			A		D	B	B	D	D	D	A
Dimethylamine		D	D	A	D		C		D		D	D				
Diocetyl Phthalate		D	D	D	A	D	D	A			A	B	D	D	D	A
Dioxane		D	D	B	D			A			D	B	D	D	D	C
Dioxolane	1.065				D					D	D	D				
Diphenyl	1.0							A			A	D	D	D	D	
Diphenyl Ether (See Diphenyl Oxide)																
Diphenyl Oxide											A	D	D	D	A	A
Dipropylene Glycol	1.252							A			A			A		
Disodium Methylarsonate																
Disodium Phosphate		A	A	A	A	A	A	A			A		A	A		

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CHEMICAL	THERMOPLASTICS					GASKETS					ALLOYS						
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	EPDM	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Distilled Water		A	A	A	A												
Divinylbenzene		D	D	D	D												
Dolomite							A										
Dowtherm (Ethylene Glycol)							A		D								
Dry Cleaning Solvents							A		D								
Epichlorohydrin, $\text{OCH}_2\text{CHCH}_2\text{Cl}$		D	D	A	A		A		D	D					A		
Epsom Salts		A	D	A	A		A			A	A	B	A	A	A	A	B
Esters		D	D	C	A		A			A	A	B	A	A	A	A	
Ethane						D	A			D		B	A	B	A	A	
Ethanol (See Alcohol, Ethyl)							A	C									
Ethanolamine, $\text{HOCH}_2\text{CH}_2\text{NH}_2$	1.02	D	D	D	D		A		B	D	A	D	B		A	A	
Ethers		D	D	C		C	A			C	C	D	D	D	A	A	B
Ethyl Acetate, $\text{CH}_3\text{COO}\cdot\text{C}_2\text{H}_5$		D	D	C	A	C	A	D	D	D	B	D	D	D	A	A	B
Ethyl Acetoacetate		D	D	D	A		A		D	D	A	D	D	D	A	A	
Ethyl Acrylate, $\text{CH}_2\text{CHCOOC}_2\text{H}_5$		D	D	D	A		A			D	B	D	D	D			
Ethyl Alcohol*	0.8	A	A	A	A	D	A		A	B	A	A	A	A			
Ethyl Benzene					A		A		D	D	A	D	D	D			
Ethyl Bromide				D		D	D										
Ethyl Butyrate						D	D										
Ethyl Cellosolve						D	D										
Ethyl Chloride (Chloroethane), $\text{CH}_3\text{CH}_2\text{Cl}$	0.92	D	D	D	A	D	D	A	D	B	A	A	C	B	C	A	A
Ethyl Ether, $\text{C}_2\text{H}_5\text{OC}_2\text{H}_5$		D	D	B	A	D	D	A	D		C	D	D	D	D		
Ethyl Formate							A			D	B	B	D	D	C		
Ethyl Hexanol					A		A				A	A	B	B	A		
Ethyl Sulfate							A				D		C	D	D		
Ethylcellulose									B			A	D	D	A		
Ethylene Bromide		D	D	C	A		A			B	C	D	D	D	A	A	B
Ethylene Chloride		D	D	C	A	D	D	A	D		A	C	D	D	A	A	B
Ethylene Chlorohydrin		D	D	A	A		D	A		B	A	A	B	D	B		
Ethylene Diamine		D	D	A	C		A	D	B	D	A	A	A	A	B	A	
Ethylene Dichloride* (Dichloroethane), $\text{CH}_2\text{Cl}\cdot\text{CH}_2\cdot\text{Cl}$	1.25	D	D	C	A	D	D	A		D	A	D	D	D	A	B	A
Ethylene Glycol*, $\text{HOCH}_2\cdot\text{CH}_2\text{OH}$	1.1155	A	C	A	A	B	A	A	A	A	A	A	A		A	A	A
Ethylene Oxide, $(\text{CH}_2)_2\text{O}$	0.9	D	D	D	A	A	A	A	D		D	D	D	D	A		
Extrin		A	A	A	A		A				A	A					
Fatty Acids*		A	B	A	A	C	A	A	D	D	A	D	B	B	D	A	A
Ferric Acetate (Iron Acetate, Basic)		B					A						D	A			
Ferric Chloride, Anhydrous, FeCl_3	2.9	A	A	A	A	B	A	A		A	A	B	B	B	D	D	A
Ferric Hydroxide		A	A	A	A		A				C	A					
Ferric Nitrate, FeNO_3	1.7	A	A	A	A	B	A	A	A	A	A	A	A	A	B	A	A
Ferric Sulfate, $\text{Fe}(\text{SO}_4)_3$	3.1	A	A	A	A	A	A	A	A	A	A	A	B	A	B	A	A
Ferrous Chloride, FeCl_2	3.2	A	A	A	A	B	A	A	D		A	A	B	B	D	D	A

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CHEMICAL	APPROX. SP. GR. AT 100% CONCENTRATION	THERMOPLASTICS				GASKETS						ALLOYS							
		PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	EPDM	VITON	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Ferrous Nitrate		A	A	A	A		A			A	B	B	A	B					
Ferrous Sulfate, FeSO ₃	1.9	A	A	A	A	B	A	A		A	A	A	A	A	C	A	A	A	B
Fish Solubles*		A	A	B		B	A												
Fluoboric Acid (Fluoro Boric Acid), HBF ₄	1.8	A	A	A	A	A	A		A	A	A	A	B	A	B	D	D	D	A
Fluorine Gas (Wet)		A	A	B	A			A		A	A	D	D	D					
Fluorine, Liquid	1.108	C		D	A	C	C	B		B	C	C	D	D	D	D	D	D	A
Fluosilicic Acid 25%, H ₂ SiF ₆		A	A	A	A	B	A	A		A	A	A	A	A	B				B
Formaldehyde*, HCHO	1.01	D	A	A	A	B	A	A	A		B	B	B	B	B	A	B	A	B
Formaldehyde* 35%		A	A	A	A			A			A	A							
Formaldehyde* 50%		A	A	A	A			A			B	D							
Formic Acid*, HCOOH	1.2201	A	A	A	A	A	A	A	D	A	D	A	A	C	B	B	A	C	A
Freon 11 (MF), CCl ₃ F		D	A	A	A	C		A		D	B	D	D	B	A	A	A	A	
Freon 113 (TF), C ₂ Cl ₃ F ₃		A			A		A	A		B	B	D	A	A	A	A	A	A	
Freon 114		A			A		A	A		A	A	C	A	A	A	A	A	A	
Freon 12		C	A	A	A	A		A		A	B	A	A	B	A	A	A	A	
Freon 12 (Wet)		B		A		C		A		A	B	B	A		D				
Freon 22, CClF ₂		D	D	A	A	A		A		A	D	B	B	D	A	A	A		
Freon TF		B	B	D		D		A		B	B	D	A		A	A	A		
Fructose		A	A	A	A	A	A	A		A	A	A	A	A	A	A	A	A	
Fruit Juice		A	A	A	A	B	A	D	A		A		A	A	A	A	A		
Fruit Pulp*		A	A	A	A	A	A			A	A	D	D	A	A	A	A	A	A
Fuel Oil*		B		B	A	D	A	A	B	D	A	D	D	A	A	A	A	A	A
Fumaric Acid (Boletic Acid)								A		A	A		B	A	B				
Furan	0.938							A		D	D	D	D	D	C	A	A		B
Furfural (Ant Oil) (Bran Oil), C ₄ H ₃ OCHO	1.2	D	D	C	B	D	C	A		D	D	D	D	D	C	A	A		B
Furfuryl Alcohol					B	D	C	A	D		D	C							A
Gallic Acid		A	A	A	A	D	A	A		B	A	A	A	A	A	A	A		A
Gas, Natural		A	A	A	A			A			A	D	D	B	A	D	A	D	A
Gasoline*, Leaded		A	D	D	A	D	A	A	D	D	B	D	B	A	D	A	A	D	A
Gasoline*, Sour		A	B	D	A	D	A	A	D		A	D	B	A	D	A	A	D	A
Gasoline*, Unleaded		C	D	D	A	D	A	A	D	D	B	D	B	A	D	A	A	D	A
Gelatin		A	A	A	A			A		A	A	A	A	A	A	A	B		A
Gin*		A	A	A	A	D	A	A			A	A							
Gluconic Acid 50%																			
Glucose, C ₆ H ₁₂ O ₆		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
Glue		A	A	A	A			A		A	A	B	A	A	A	A	B	A	A
Glycerin (See Glycerol)		A	A	A	A			A		A	A	A	A	A	A	A	A	A	A
Glycerol (Glycyl Alcohol), C ₃ H ₅ (OH) ₃	1.3	A	A	A	A	B	A	A	A		A	A	A	A	A	A	A	A	A
Glycolic Acid* (See Hydroxyacetic Acid)		A	A	A	A	B	A	A	A		A	A	A	A					
Glycols*		A	A	A	A	A	A	A			A	A	A	A					
Glyoxal											A								
Gold Monocyanide											A					A			
Grape Juice		A	A			B					A				A	A			
Grape Sugar		A	A	A	A	A					A	A	A		A	A			
Grease		A		A	A	A					A	D	B	B	C	A	A		

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS						GASKETS						ALLOYS						
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE CROSS LINKED (XLPE)	TEFLON	ABS	SBR	VITON	EPDM	NEOPRENE	BUNA N (NITRILE)	HYALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Green Liquor		A	A	A	A		A		D	A	A	B	B	B					
Helium		A	A	B	A	D	A	A	A	A	A	B	B	B	A	A		A	
Heptane*, CH ₃ (CH ₂) ₅ CH ₃	0.6594	D	A	B	A	D	A	A	A	A	D	B	B	B	A	A		A	
Hexane*, CH ₃ (CH ₂) ₄ CH ₃	0.6734																		
Hexene																			
Hexyl Alcohol (Hexanol)		A	A	A	A		A		A	A	B								
Honey		A		A	A	A	A			A		A	A		A	A			
Hydraulic Oil						D	A		D	A	D	B	A	B					
Hydraulic Oil (Synthetic)				D						A		C	A	C	A	A			
Hydrazine	1.004	D	D	D	D	A		A		D	A	C	C	C	A	A			
Hydrobromic Acid, HBr	48% = 1.5	A	A	B	A	B		A		D	A	A	D	D		D	D	A	A
Hydrobromic Acid 20%		A	A	A	A			A			A	A	C	D		D		A	A
Hydrobromic Acid 50%		A	A	B	A	A		A			A	A	A	D		C		D	B
Hydrochloric Acid (Dry Gas), HCl		A						A		B		A						C	A
Hydrochloric Acid 10%		A	A	A	A			A		B	A	A	A	B				C	A
Hydrochloric Acid 20%		A	A	A	A	A		A		B	A	A	B	B	A	D	D	C	A
Hydrochloric Acid 25%		A	A	A	A	A		A		B	A	A	B	C	A				
Hydrochloric Acid 37% (Muriatic Acid)	1.19	A		A	A	A		A		B	A	C	C	C	D	D	C	B	
Hydrocyanic Acid, HCN		A	A	A	A	A		A		D	B	A	A	B	A	A	A	A	
Hydrocyanic Acid 10%		A	A	A	A	A		A		A	A	B	B	A	D	D			
Hydrofluoric Acid 10%		A	A	A	A			A			A	A	B	A					
Hydrofluoric Acid 20%, HF+H ₂ O		A		A		C	A	A			A	A	C	D	C	D	D	D	B
Hydrofluoric Acid 30%		A	A	A	A			A			A	A							
Hydrofluoric Acid 40%		B	D	A	A			A		D	A	A							
Hydrofluoric Acid 50%		D	D	A	B	C	A	A		D	A	A	B	C	A	D	D	D	B
Hydrofluoric Acid 65%																			
Hydrofluoric Acid 75%, HF	0.987	D	C	A	A	D	A	A		D		B	C	D	A	D	D	A	C
Hydrofluosilicic Acid, H ₂ SiF ₆		D	D	A	A	A	A	A			A	A	C	A	A				
Hydrofluosilicic Acid 20%		D		A				A			A	A	B	B	D	D	D	B	
Hydrogen, H		A	A	A	A	A	A	A	B	A	A	A	A	A	A	A			
Hydrogen Chloride Gas Dry				A	A	A	A												
Hydrogen Cyanide		A	A	A	A			A			A	A	B	B	A				
Hydrogen Fluoride		D	D	A	A			A											
Hydrogen Peroxide 05%		A	D	A	A			A			A	A							
Hydrogen Peroxide 10%		A	A	A	A	A		A					D	A	C	C	C	A	
Hydrogen Peroxide 30%		A	D	C		A	A	A			A	B	D	D	C	B	C	B	A
Hydrogen Peroxide 50%		B	B	A	A		A	B			A	C	D	D	A				
Hydrogen Peroxide 90%		D	D	D	A		A	C			B	C	D	D	C				
Hydrogen Peroxide, H ₂ O ₂		A		A	A	B	A	A		B	A	B	C	C	B	B	A	B	A
Hydrogen Phosphide (See Phosphine)		D	A	A	A	A	A						C	C					
Hydrogen Sulfide, H ₂ S		A		A	A	A	A	A	D	A	A	A	A	A	A				
Hydrogen Sulfide (Aq. Sol.)	1.1895	A	A	A		A	A	A		D	C	A	C	C	A	A		A	
Hydrogen Sulfide (Dry)		A	A	A	A	A	A	A		A	A	A	A	A	A	C		A	
Hydroquinone		A	A	A	A	A	A	A	B	A	A	A	A	D	A				

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS						GASKETS						ALLOYS						
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	VITON	EPDM	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Hydroxyacetic Acid (Glycolic Acid)		A		A		A					A		A	A				A	
Hydroxyacetic Acid 70%, HOCH ₂ COOH		A	A			A					A	A	A	A				B	
Hydroxylamine Sulfate		A	A	A	A						A		A				A		
Hypochlorous Acid		A	A	A	A	A	A		B	B	B	D	D	D	D	A			
Ink*				A	A	D	A					A	A	D	A	A			
Iodine Solution, I ₂		D	A	C	A	D	D	A	D	A	A	C	C	A	D	D	A	B	
Isobutyl Alcohol (See Alcohol, Isobutyl), (CH ₃) ₂ CHOH	0.806				A			A	B	A	A								
Isooctane, (CH ₃) ₃ CCH ₂ CH(CH ₃) ₂	0.7	A	A	A	A			A	D	A	D	A	A	A					
Isophorone		D	D								D	D							
Isopropyl Acetate	0.9226					B		A			D	B				B			
Isopropyl Alcohol (See Alcohol, Isopropyl)								D	B										
Isopropyl Ether	0.723	D	D	C	A	D		A	D	D	D	D	B	D	A				
Jet Fuel JP-3				A	D			A		A	D	C	A	D	A		A		
Jet Fuel JP-4		A	A	C	A	D		A		A	D	D	B		A		A		
Jet Fuel JP-5		A	A	C	A	D		A		A	D	C	A	D	A		A		
Kerosene*	0.81	A	A	A	A	D	D	A	C	D	A	D	D	A	D	A	A	A	A
Ketones		D	D	A	A	D		A		D	C	D	D	D	A	A	A	A	A
Kraft Liquor		A	A	A	A														
Lacquer				A				A	D	D	D	D	D	D	A	A		A	A
Lacquer Thinner		C		B				A	D		A	D	D	D	A		A	A	A
Lactic Acid* (Milk Acid), CH ₃ CHOHCOOH	1.2	A	A	A	A	B	A	A	A	A	B	B	B	B	A	A	A	B	A
Lard		A	A	A	A	B		A		D	A	C	C	A	C	A			
Lard Oil		A	A	A	A			A			A	A	A						
Latex*				A		A	A	A		A	A	B	C	B	C	A	A		
Lauric Acid	0.833	A	A	A	A			A								A	A		
Lauryl Chloride, C ₁₂ H ₂₅ Cl		A	A	A	A			A			C	A	B	B	C	B	A	A	A
Lead Acetate (Sugar of Lead), Pb(C ₂ H ₃ O ₂) ₂ ·3H ₂ O	2.5	A	A	A	A	B	A	A	A										
Lead Chloride, PbCl ₂		A	A	A	A			A			A	A	B		A				
Lead Nitrate, Pb(NO ₃) ₂		A	A	A				A	A	A	A	A	A	A	B				
Lead Sulfate		A	A	A	A			A			A	A	B	A	A				
Lemon Oil		A	A	D	A			D											
Levulinic Acid																			
Ligroin (Benzine)		D	D	C	A	D				A	C	B	A		A		A		
Lime (Calcium Oxide), CaO		A		A		A			A	A	C	A	A	A	A		A		
Lime-Sulfur Solution		A	A	A	A				D				D						
Linoleic Acid (Linolic Acid)	0.905	B	A	A	A			A		B	D	D	B	D					
Linseed Oil (Flaxseed Oil)		A	A	A	A	D	A	A	A	D	B	B	B	A	B				
Lithium Bromide, LiBr		A			A			A					A						
Lithium Chloride, LiCl								A					A						
LPG								A	D								A		
Lubricants		A		A				A	D	A			D	A		A	A	A	A
Lubricating Oil		A	A	A	A			A	B	D	A								

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS						GASKETS						ALLOYS						
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	VITON	EPDM	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Lye Solution (See Sodium Hydroxide & Potassium Hydroxide)									B										
Machine Oil		A	A	A	A		A			A		D							
Magnesium Acetate							A			D					A				
Magnesium Carbonate, MgCO ₃	3.0	A	A	A	A	B	A	A		A	B	A	D	A	A	A			B
Magnesium Chloride, MgCl ₂	2.3	A	A	A	A	B	A	A	A	A	A	A	A	A	A	B	B	A	A
Magnesium Citrate		A	A	A	A			A		A	A								B
Magnesium Hydroxide (Milk of Magnesia), Mg(OH) ₂	2.36	A	A	A	A			A	B	A	A								
Magnesium Nitrate, Mg(NO ₃) ₂ ·6H ₂ O	2.03	A	A	A	A	A	A	A		A	B	B	A	A	A	A	A	A	A
Magnesium Oxide								A		A	A	A	A	A	A	A	A		
Magnesium Sulfate (Epsom Salts), MgSO ₄	2.6	A	A	A	A	A	A	A	B	A	C	A	A	A	A	A	B	A	B
Maleic Acid		A	A	A	A	A	A	B	B	A	C	B	D	C	A	A	A	A	A
Maleic Anhydride						D			B	A	D	D	D						A
Malic Acid (Apple Acid)		A	A	A	A	D		A	B	A	D	C	A	B	A	A	A	A	A
Manganese Sulfate Mash		A	A	A	A		A		B	A	A	A	A	A	A	A			
Mayonnaise				A			A			A			A		A	A			
Melamine (Triazane), N-C(NH ₂)N-C(NH ₂)N-C(NH ₂)N-C(NH ₂)													C		D	D			
Mercuric Chloride, HgCl ₂	5.4	A	A	A	A	A	A		A	A	A	A	A	A	D	D	A	B	
Mercuric Cyanide, Hg(CN) ₂	4.0	A	A	A	A	A	A			A	B	B	A	A	A	A			
Mercuric Nitrate, HgNO ₃	4.8						A			A	A	A		A					
Mercuric Sulfate		A	A	A	A		A			A	A		A						
Mercurous Chloride																			
Mercurous Nitrate		A	A	A	A	A	A			A	A								
Mercury (Quicksilver), Hg	13.59	A	A	A	A	A	A	A	A	A	A	A	A	A	A			B	A
Methacrylic Acid Glacial	1.015	D							D										
Methane (Methyl Hydride), CH ₄		A	A	A	A		A	A	D	A	C	B	A	B					
Methane Sulfonic Acid					A		A												
Methanol (See Alcohol, Methyl), CH ₃ OH	0.8						A	D		D	A	A	A	A					
Methoxyethyl Oleate	0.898	A																	
Methyl Cellosolve		D	D	A	A				D	D	B	D	D						
Methyl Acetate, CH ₃ CO ₂ CH ₃	0.9244	D	D	B	A		A	D	D	D	B	C	D	C	A				A
Methyl Acetone						D	A			D	D	D	D		A				
Methyl Acrylate, CH ₂ =CHCOOCH ₃				A			A		D	D	B	C	D		A				
Methyl Alcohol*, CH ₃ OH		A	A	A	A	C	A	A	A	C	A		A	A					
Methyl Benzene (See Toluene)							A			A	D	D	D	D					
Methyl Bromide, CH ₃ Br	1.732	D	D	D	A	D	C	A	D		C	D	D						
Methyl Butanol (See Alcohol, Amyl)							A			B		A	A						

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CHEMICAL RESISTANCE CHART

CHEMICAL	APPROX. SP. GR. AT 100% CONCENTRATION	THERMOPLASTICS					GASKETS					ALLOYS						
		PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	TEFLON	ABS	SBR	EPDM	BUNA N (NITRILE)	316 STAINLESS STEEL	TITANIUM	304 STAINLESS STEEL	HASTELLOY C			
Methyl Butyl Ketone, $\text{CH}_3\text{CO}(\text{CH}_2)_3\text{CH}_3$	1.3	D	D	D	A	D	A	D	D	C	C	D	C	D	A	C	A	A
Methyl Chloride* (Chloromethane), CH_3Cl		D	D	C	A		A			B	D		C	D				
Methyl Chloroform (Trichloroethane)							A			C	C	C	B	C				
Methyl Ether (See Dimethyl Ether)							A			C	C	C	B	C				
Methyl Ethyl Ketone* (MEK), $\text{CH}_3\text{CO}\cdot\text{CH}_2\text{CH}_3$	0.82	D	D	C	D	D	D	D	D	D	A	D	D	D	A	A	A	A
Methyl Formate, HCOOCH_3								D	D	A								
Methyl Isobutyl Alcohol												D	D					
Methyl Isobutyl Carbinol							A			A	A							
Methyl Isobutyl Ketone, $\text{CH}_3\text{C}\cdot\text{NOHCH}(\text{CH}_3)_2$		D	D	C	A		A		D	D	B	D	D		A	A	A	A
Methyl Isopropyl Ketone		D	D	B	A		A			D	C	D	D	D	A			
Methyl Methacrylate*, $\text{CH}_2\text{C}(\text{CH}_3)\text{COCH}_3$	0.95	A					A		D	D	D	C	D	B				
Methyl Propanol							A			A	B	A	A	A				
Methyl Salicylate (Wintergreen Oil)	1.180	A	A	A	A													
Methyl Sulfate		B	A	A	A							C						
Methylamine, CH_3NH_2		D	D	D	C		A				A	A	B		A			
Methylene Bromide, BrCH_2	2.47	D			D													
Methylene Chloride*, CH_2Cl_2	1.335	D	D	D	C	D	D	A			B	D	D	D	D	A	A	A
Methylene Iodine, CH_2I_2		D			C			A			A							
Methylhexane							A				A	A	D	B	A	D		
Methylisobutyl Carbinol		A	A	A	A						A	A						
Methylmethacrylate					A		A		D	D	D							
Methylsulfuric Acid		A	A	A	A	C	A	A	A	A	A				A	A		
Milk		A	A	A	A	A	A	A	A	A	A	A	A	B	A	A		
Mineral Oil		B	A	A	A	D	D	A	A	D	A	C	A	A	A	A		
Molasses		A	A	A	A	B	A	A	A	A	C	A	A	A	A	A		
Monochloroacetic Acid (See Chloroacetic Acid)		A	A	B	A			A	D		B	C						
Monochlorobenzene (See Chlorobenzene), $\text{C}_6\text{H}_5\text{Cl}$				B	A			A		D	A	D						
Monoethanolamine		D			D			A		D	A	A	D	A				
Morpholine	1.002						A	A	D						A			
Motor Oil		A	A	C	A		A	A	D		A	D		A				
Mustard		A	A	A	A					A	A	C	B		A	A		
Naphtha*		A	A	A	A	D	D	A	D	D	A	D	D	C	A	A		
Naphthalene* (Tar Camphor), C_{10}H_8	1.15	D	D	B	A	C		A	D	D	B	D	D	D	B	A	A	B
Natural Gas		A	A	A	A					D	A	D	A	A	A	A		
Neon							A				A	A	A	A	A			
Nickel		A	A	A	A	A	A	A			A	A	A	A				
Nickel Acetate		A	A	A	A					A	D	A	B	B	D			
Nickel Chloride, NiCl_2	3.5	A	A	A	A	B	A	A	A		A	A	A	B	A	B	A	A
Nickel Cyanide, $\text{Ni}(\text{CN})_2\cdot 4\text{H}_2\text{O}$		A	A															

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS							GASKETS					ALLOYS					
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	VITON	EPDM	NEOPRENE	BUNA N (NITRILE)	HYALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM
Nickel Nitrate, Ni(NO ₃) ₂ ·6H ₂ O	2.1	A	A	A	A	A	A	A		A	B	B	A	A				
Nickel Sulfate, NiSo ₄	3.7	A	A	A	A	A	A		B	A	A	B	A	A	C			B
Nicotine*		A	A	D	C	C	A	A				B	C					
Nicotine Acid*		A	A	A	A	A	A	A				A						
Nitric Acid 10%		A	A	A	A	A	A	A	A	D	A	B	B	D	A	A	A	A
Nitric Acid 20%		A	A	A	B	A	A	A	B	D	A	D	D	D				
Nitric Acid 30%		A	A	A	B	A	A	A	C	D	A	B	D	D				
Nitric Acid 40%		A	A	C	B	C	B	A	D	D	A	D	D	D				
Nitric Acid 50%		A	A	C	B	C	A	A	D	D	A	D	D	D				
Nitric Acid 70%		D	D	D	D	C	C	A	D	D	C	D	D	D				
Nitric Acid Concentrate*, HNO ₃	1.5	D	D	D	D	D	D	A	D	D	C	D	D	D	C			
Nitric Acid Fuming*, HNO ₃		D	D	D	D	D	D	A	D	D	C	C	D	C	D	B	A	A
Nitrobenzene* (Oil of Mirbane), C ₆ H ₅ NO ₂	1.1987	D	D	C	A	D	D	A	D	D	C	C	D	C	D	B	A	A
Nitroethane, CH ₃ NO ₂	1.13				A			A		B	D	A	A	A				
Nitrogen, N								A		A	A	A	A	A		A		
Nitrogen Dioxide, NO ₂					A			A					A					
Nitrogen Solutions														A				
Nitroglycerine	1.6009	D																
Nitromethane					A			A						A				
Nitrous Oxide		A	A	A	A			A	B		A	A		A	A			
Ocenol		A	A	D	A													
Octane					A			A		D	A	D						
Octyl Acid (Caprylic Acid), CH ₃ (CH ₂) ₆ COOH	0.9105				A			A		D				C	B			
Octylamine																		
Oils*		A	A	A	A	C					D			C	C			
Oils, Aniline		D		A				A								A	A	A
Oils, Anise																A	A	A
Oils, Bay*																A	A	A
Oils, Bone*																A	A	A
Oils, Castor*		A									A	B	A	A	A	A	A	
Oils, Cinnamon*		A									A		D			A	A	
Oils, Citric*				A							A		D	A		A	A	
Oils, Clove*				B										A		A	A	
Oils, Coconut*				A							A	A	A	A		A	A	
Oils, Cod Liver				A							A	A	A	A		A	A	
Oils, Corn*			A	A							A	C	D	A		A	A	
Oils, Cotton Seed*		A	A	A			A				A	C	D	A		A	A	
Oils, Creosote				D							A	D	C	B		A	A	
Oils, Crude Sour*																A	A	
Oils, Diesel Fuel			A	A							A	D	D	A		A	A	
Oils, Fuel		A					A				A	D	D	B		A	A	A
Oils, Linseed		A	A	A							A	D	D	A		A	A	
Oils, Mineral		A		A							A	D	A	A		A	A	
Oils, Olive		A	A	A			A	A	D		A	D	D	A		A	A	
Oils, Pine		A					A	A			A	B	D	C		A		
Oils, Silicone				A							A		A	A		A	A	

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CHEMICAL RESISTANCE CHART

CHEMICAL	APPROX. SP. GR. AT 100% CONCENTRATION	THERMOPLASTICS					GASKETS					ALLOYS							
		PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	EPDM	VITON	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Oils, Vegetable*		A	A	A	A	D	D	A	A	D	A	C	B	A	B	A	A		B
Oleic Acid (Red Oil)	0.895	A	B	A	A	D	D	A		D	B	C	B	B	A	A		B	
Oleum		D	D	D	D	A	D	A			D	D	D	D	A				
Orange Extract		A	A	A	A	A	A	A			A	A	B	B	A				
Oxalic Acid, (COOH) ₂	1.7	A	A	A	A	A	A	A			A	A	B	B	A		C	B	
Oxygen Gas		A	A	A	A	C	C	A	B	A	A	A	C	A					
Ozone		B	B	C	A			D	D	A	A	B	D	A					
Palmitic Acid 10%		A	A	A	A	B		A	B	A	B	C	A	C					
Palmitic Acid 70%		D	A	A	A	B		A	B	A	B	C	A	C					
Paraffin		A	A	A	A			A	B	B	D	B	A	D	A	A			
Pentane (Amyl Hydride)								A		A	D	B	A	B	C	C		B	
Peracetic Acid 40%	1.15	D	D	D	A			A		A	B		D	D					
Perchloric Acid 10%		A	A	A	A	A		A		A	B		D	D					
Perchloric Acid 70%, HClO ₄	1.764	D	D	A	A			A		A	A		D	D					
Perchloroethylene, (CCl ₂) ₂	1.6	D	D	C	A			A	D	D	A		D	D	A	A			
Perphosphate		A	A	A	A			A		A	A		A	B	A				
Petrolatum (Petroleum Jelly)		A	A	A	A			A		A	C	B	A	B	A				
Petroleum (Sour)*		A	A	B	A			A	D	A	D		A	A					
Petroleum Oils		A	A	A	A			A	D	A	D	C	A	C					
Phenols 100% (Carbolic Acid), C ₆ H ₅ OH	1.1	D	A	A	A	B	D	A	D	B	C	D	D	C	A	A	C	A	
Phenylacetate	1.073							A		D	B	D	D	C					
Phenylhydrazine		D	D	D	A			A		C	C	D	D	D					
Phenylhydrazine Hydrochloride		D	A	D	A			D	B										
Phosgene Gas		D	D	C	A			D		D	A	C	D						
Phosgene Liquid	1.392	D	D	D	C			D		D	A	C	D						
Phosphoric Acid 10%		A	A	A	A			A	D	A	A	C	C	A	A	D	B	A	
Phosphoric Acid 20%		A	A	A	A			A	D	A	A	B	C	A					
Phosphoric Acid 40%		A		A		B		A	D	A	B	D	D	A	B	A	A		
Phosphoric Acid 50%		A	A	A	A	A		A	D	A	A	C	C	B	D	B	A	A	
Phosphoric Acid 80%		A	A	A	A			A	D	A	A								
Phosphoric Acid 85%	1.8	A	A	A	B	B	A	A	D	A	A	C	C	B	B	D	C	A	
Phosphoric Acid 100%		A		A		C	A	A	D	A	B	D	D	C	B	C	B	A	
Phosphoric Acid Crude, H ₃ PO ₄	1.834					C		A		A	B	D	C	A	C	D	C	A	
Phosphorus Oxychloride	1.675							A				D		D					
Phosphorus Red		A	A	A	A			A											
Phosphorus Trichloride, PCl ₃	1.574	D	D	C	A	A		A	D	C	C	D	D		A	A			
Phosphorus Yellow		A	A	A	A			A				C							
Photographic Developer		A	A	A	A	B	A	A		A		A	A		A	C	A	A	
Photographic Solutions*		A	A	A	A	A		A		A		A	A						
Phthalic Acid (Terephthalic Acid)		D	D	D	A			A	D	A	A								
Phthalic Anhydride, C ₆ H ₄ (CO) ₂ O		D	D	D				A		A	A		C		B	A		A	
Pickle Brine		A	A	A	A							A		A					
Pickling Solutions*		A	A	A	A			A		B	C	D	D	D	A				
Picric Acid		D	C	A	A	C	A	A	D	B	A	C	A	B	A	A		A	

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS							GASKETS					ALLOYS					
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	VITON	EPDM	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM
Pine Oil		A	A	A			A		D	A	D	C	B	D	A		A	A
Plating Solutions, Antimony		A	A	A			A			A		A	A		A		A	A
Plating Solution, Arsenic		A	A	A	A	A	A			A		A	A		A		A	A
Plating Solutions, Brass		A	A	A			A			A		A	A		A		A	A
Plating Solutions, Bronze		A	A	A			A			A		A	A		A		A	A
Plating Solutions, Cadmium		A	A	C	A	A	A			A	A	C	A	D	A		A	A
Plating Solutions, Chrome		A	A	C	A	A	A		D	C	B	C	D	D	C		A	A
Plating Solutions, Copper		A	A	A	A	A	A			A		A	A		C		A	A
Plating Solutions, Gold		A	A	C	A	A	A			A		A	A		C		A	A
Plating Solutions, Indium		A	A	A			A			A		A	A		C		A	A
Plating Solutions, Iron		D	A	C	A	A	A			A		C	A		C		A	D
Plating Solutions, Lead		A	A	A	A	A	A			A		C	B		C		A	D
Plating Solutions, Nickel		A	A	A	A	A	A			A		A	A		C		A	A
Plating Solutions, Rhodium		A	A	A	A	A	A			A		A	A		D		A	D
Plating Solutions, Silver		A	A	A	A	A	A			A		A	A		A		A	A
Plating Solutions, Tin		A	A	A	A	A	A			A		C	B		C		D	A
Plating Solutions, Zinc		A	A	A	A	A	A			A		A	A		D		A	D
Polyethylene Glycol		A	A	A	A	A	A			A		A	A	A				
Polyvinyl Acetate Emulsion		A			A		A			A		A	B					
Polyvinyl Alcohol		A	D	A	A		A			A		A		A				
Potash (Potassium Carbonate), K ₂ CO ₃		A	A	A	A	B		A		C	B	D	C	A	A	A		A
Potassium Acetate, KC ₂ H ₃ O ₂	1.6	A	A	A	A		A			D	A	B	B	B				
Potassium Alum (Aluminum Potassium Sulfate)		A	A	A	A		A			A		A	A	A				
Potassium Bicarbonate, KHCO ₃	2.2	A	A	A	A	A	A			A		A	A	A	B	A	A	B
Potassium Bichromate		A	A	A	A		A			A		A	B	A	A			
Potassium Bisulfate, KHSO ₄		A	A	A	A		A			A		A	A	A				
Potassium Bromate, KBrO ₃	3.3	A	A	A	A	A	A			A		A	A	A				
Potassium Bromide, KBr	2.7	A	A	A	A	B	A			A		A	A	A	B	A	A	B
Potassium Carbonate (Potash), K ₂ CO ₃	2.4	A	A	A	A	B	A			A		A	B	A	A	A	A	B
Potassium Chlorate Aqueous, KClO ₃	2.3	A	A	A	A	B	A			A		A	C	A	A	A	A	B
Potassium Chloride, KCl	2.0	A	A	A	A	B	A	A	A	A		A	A	A	A	C	A	B
Potassium Chromate, K ₂ CrO ₄	2.7	A	A	A	A	B	A	A		A		A	A	A	B			B
Potassium Coppercyanide		A	A	A	A		A			A		A						
Potassium Cyanide, KCN	1.5	A	A	A	A	B	A		A	A		A	A	A	B	A	A	A
Potassium Dichromate, K ₂ Cr ₂ O ₇	2.7	A	A	A	A	A	A		B	A		A	A	A	A	A	A	B
Potassium Ferricyanide		A	A	A	A	A	A			A		A	A	A				
Potassium Ferrocyanide, K ₄ Fe(CN) ₆	1.9	A	A	A	A	A	A			A		A	C	A		A		B
Potassium Fluoride, KF	2.5	A	A	A	A	A	A			A		A	A	A				
Potassium Hydroxide* (Caustic Potash), KOH	2.0	A	A	A	A	C	A		B	C	B	B	C	A	C	C	C	B
Potassium Hydroxide* 25%									B									
Potassium Hydroxide* 50%		A	A	A	B				B									

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS							GASKETS					ALLOYS					
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	VITON	EPDM	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM
Potassium Hypochlorite		A	A	A	A		A			A	A	D	D	B				
Potassium Iodide, KI		A	A	A	A		A			A	A	D	D	B				
Potassium Nitrate (Salt Peter), KNO ₃	2.1	A	A	A	A	B	A		A	B	A	A	A	A	B	A	A	B
Potassium Perborate		A	A	A	A	A	A					A						
Potassium Perchlorate, KClO ₄	2.5	A	A	A		A	A				A	C						
Potassium Permanganate, KMnO ₄	2.7	A	A	B	A	B		A		B	A	A	C		B	A	B	B
Potassium Persulfate		A	A	A	A	A	A				A	C						
Potassium Phosphate												A	A					
Potassium Salts											A	A	A					
Potassium Sulfate, K ₂ SO ₄	2.7	A	A	A	A	B	A		B	A	A	A	A	A	B	A	A	B
Potassium Sulfide, K ₂ S	1.8	A				A	A			A	A	A	A	A		A		B
Potassium Thiosulfate, K ₂ S ₂ O ₃							A			A	A	A	A	A				
Propane (Dimethyl-methane), C ₃ H ₈		A	A	B	A		A	A	D	A	D	B	A	B	A	A		
Propanol (See Alcohol, Propyl)							A	D		A	A	A	A	A				
Propargyl Alcohol		A	A	A	A	A												
Propyl Acetate, C ₃ H ₇ OOCCCH ₃	0.887				A		A		D	D	B	D	D	D				
Propyl Alcohol, CH ₃ CH ₂ CH ₂ OH	0.8	A	A	A	A	A	A		A	A	A	A	A	A				
Propylene, CH ₃ CH:CH ₂							A		D	A	D	D	D	D				
Propylene Dichloride		D	D	C	A	C	D	A		B	D	D	D	D				
Propylene Glycol, CH ₂ OHCH ₂ OH	1.0		C			B	A	A	B		A	A	C	A	A	B		
Pyridine*, C ₅ H ₅ N	1.0	D	D	C	C	C	A	B	D	D	D	C	D	D	C	C		A
Pyrogallol (Pyrogallol)		B			D		A	A		A			A	A	A	A		B
Quaternary Ammonium Salts																		
Rayon Coagulating Bath*		A	A	A	A	C	A											
Rhodan Salts		A	A	A	A		A			A	A							
Rosins				A			A			A	A	A	A	B	A	A		B
Rum		A		A			A			B	A	A	A	A	A	A		
Rust Inhibitors				A						A		C	A		A	A		
Salad Dressings		A		A						A			A		A	A		
Salicylaldehyde		D			C		A			A	A							
Salicylic Acid, C ₆ H ₄ (OH)(COOH)		A			A		A		B	A	A	C	C	A				
Saline Solutions		A	A	A	A				A			A	A					
Salt Brine		A	A	A	A		A		A	A	A	A	A	A				
Sea Water		A	A	A	A	B	A		A	A	A	B	A		C	A	A	
Selenic Acid, H ₂ SeO ₄	2.609	A	A	A	A	B	A					A						
Sewage		A	A	A	A				A	A	A	A	A	A				
Shellac Bleached				A			A						A		A	A		
Shellac Orange				A			A						A					
Silicic Acid, SiO ₂ ·nH ₂ O		A	A	A	A	A	A		A	A	A	A	A	A	A			
Silicone Oil		A	A	A			A	A	A	A	A	A	A	A	A			
Silver Bromide, AgBr															C	C		A

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS					GASKETS					ALLOYS								
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-ETHYLENE (PE)	TEFLON	SBR	EPDM	BUNA N (NITRILE)	316 STAINLESS STEEL	TITANIUM	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE-CROSS LINKED (XLPE)	ABS	VITON	NEOPRENE	HYPALON	304 STAINLESS STEEL	NASTELLOY C
Silver Cyanide, AgCN		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Silver Nitrate, AgNO ₂		A	A	A	A	B	A	A	C	A	A	A	A	A	A	C	A	B	A
Silver Salts		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Silver Sulfate, AgSO ₄		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	C	A	A
Soap Solutions*		A	A	A	A	B	A	A	A	B	A	A	A	A	A	A	A	A	B
Soda Ash (Sodium Carbonate), NaCO ₃						A		A	A	A	A	A	A	A	A	A	A		
Sodium, Na		A	A	A	A		A												
Sodium Acetate, NaC ₂ H ₃ O ₂	1.5	A	A	A	A	B	A	A	A	D	C	A	A	B	C	B	A	B	A
Sodium Alum		A	A	A	A		A				A	A	A	A	A	A			
Sodium Aluminate, Na ₂ Al ₂ O ₄							A				A	A	A	A	A	A		B	B
Sodium Benzoate, C ₆ H ₅ COOH ₂		A	A	A	A		A	D											
Sodium Bicarbonate, NaHCO ₃	2.2	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A		A	A
Sodium Bichromate		A	A	A	A		A												
Sodium Bisulfate, NaHSO ₄ •H ₂ O	2.4	A	A	A	A	B	A	A	B	A	A	A	A	B	A	A	A	A	B
Sodium Bisulfite, NaHSO ₃	1.5	A	A	A	A	A	A		B	A	A	A	A	A	A	A	A	A	B
Sodium Borate (Borax), Na ₂ •B ₄ O ₇	1.7	C	A	A	A	A	A		A	A	A	A	A	A	A	A		A	A
Sodium Bromate, NaBrO ₃																			
Sodium Bromide, NaBr		A	A	A	A	A	A	A											
Sodium Carbonate (Soda Ash), NaCO ₃		A	A	A	A	B	A	A									A	A	A
Sodium Chlorate, NaClO ₃	2.5	A	A	A	A	B	A	A	A	A	A	A	A	A	C	A	B	A	B
Sodium Chloride (Salt), NaCl	2.2	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	C	C
Sodium Chlorite, NaClO ₂		D	D	D			B				D	D							B
Sodium Chromate, Na ₂ CrO ₄				A			A	A			B	B		A	A	C	A	A	B
Sodium Cyanide, NaCN		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Sodium Dichromate, Na ₂ Cr ₂ O ₇	2.5	A	A	A	A	A	A	A			A	A	A	A	B	A	B		
Sodium Ferricyanide, Na ₃ Fe(CN) ₆	1.5	A	A	A	A	A	A	A			A	A							
Sodium Ferrocyanide, Na ₄ Fe(CN) ₆	1.5	A	A	A	A	A	A	A			A	A							
Sodium Fluoride, NaF	2.6	A	A	A	A	A	A	A			B	A	C	C				C	A
Sodium Hydrosulfide							A							A					A
Sodium Hydrosulfite		C													A				A
Sodium Hydroxide 15%		A	A	A	A		A	A	A	A	C	A	A	A	A	A	A	B	A
Sodium Hydroxide 20%		A	A	A	A	C	A	A	A	A	C	A	A	A	A	A	A	B	A
Sodium Hydroxide 30%		A	A	A	A	C	A	A	A	A	C	A	A	A	A	A	A	B	A
Sodium Hydroxide* 50%	2.1	A	A	A	A	A	A	A	A	A	C	A	B	D	A	A	B	B	A
Sodium Hydroxide* 70%		A	A	B	B	C	A	A	A	A	D	A	B	D	A	A			B
Sodium Hydroxide Conc. (Caustic Soda), NaOH		A	A	A	A	D	A	A	A	B	A	B	D	D	D	D	B		
Sodium Hypochlorite 20% (Bleach), NaOCl		A	A	B	A	B	A	A	B	D	A	B	D	C			C	C	A
Sodium Hypochlorite Conc., NaClO		A	A	B	A	A	A	A	D	D	D	D	D	D	D	D	A		

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS					GASKETS					ALLOYS								
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	EPDM	VITON	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Sodium Hyposulfate								A					C			A	A		
Sodium Metaphosphate, Na(PO ₃) _n		A	A	C	A			A			A	A	B	A		A	A		
Sodium Metasilicate		A	A	A	A			A			A	A	A	A		A	A		
Sodium Nitrate, NaNO ₃	2.3	A	A	A	A	A	A	A	B		B	B	A	C	A	B	A	A	B
Sodium Nitrite, NaNO ₂	2.2	A	A	A	A			A			A	A	A		A	B	A		
Sodium Palmitate		A	A	A	A			A											
Sodium Perborate, NaBO ₃		A	A	A	A			A		B	A	A	C	C	B	C			
Sodium Perchlorate		A	A	A	A			A											
Sodium Peroxide, Na ₂ O ₂		A	A	A	A			A		B	A	B	C	C	B	A			B
Sodium Phosphate Acid (Di Basic), Na ₂ HPO ₄		A	A	A	A			A	A	A	A	A	C	A					
Sodium Phosphate Alkaline (Mono Basic), NaH ₂ PO ₄		A	A	A	A			A			A	A		A					B
Sodium Phosphate Neutral (Tri Basic), Na ₃ PO ₄		A	A	A	A			A			A	A		A					
Sodium Polyphosphate		A	A	A	A			A			A	A	D	B	B	A	A	A	A
Sodium Silicate, NaSiO ₃		A	A	A	A	A	A	A	A	B	A	A	A	A	A	B	B	A	A
Sodium Sulfate, Na ₂ SO ₄	2.7	A	A	A	A			A			A	A	A	A		A	A	A	B
Sodium Sulfide, Na ₂ S	1.4	A	A	A	A	A	A	A			A	A	A	C		B	A	A	B
Sodium Sulfite, Na ₂ SO ₃	2.6	A	A	A	A	A	A	A			A	A	A	A		C	C	A	A
Sodium Tetraborate		A	A	A	A			A			A	A	A	A		A			
Sodium Thiocyanate, NaSCN		A	A	A	A			A			A	A	A						
Sodium Thiosulfate, Na ₂ S ₂ O ₃ •5H ₂ O	1.7	A	A	A	A			A	A	B	A	A		B		A			
Sorghum											A		A	A		A	A		
Soy Sauce											A		A	A		A	A		
Soybean Oil		A	A	A	A			A		D	A	A	A	A	A				
Stannic Chloride, SnCl ₄	2.3	A	A	A	A	B		A		A	A	A	C	A	A			A	
Stannic Salts		A	A	A	A	A	A	A			A	A	A	A					
Stannous Chloride (Tin Salts)		A	A	A	A	A		A	A	B	B	C	C	A	C	D	A	A	
Starch (Amylum), C ₆ H ₁₀ O ₅	1.513	A	A	A		B		A	A		A	A	A	A	A	A	A		
Stearic Acid*, CH ₃ (CH ₂) ₁₆ COOH		A	A	B	A	C	A	A	B		A	C	C	B	C	B	A	A	A
Stoddard Solvent		D	D	C	A	D		A		D	A	D	D	B		A	A	A	A
Strontium Carbonate, SrCO ₃																			
Styrene								A		D	C	D	D	D	D	A	A		
Succinic Acid (Butanedioic Acid), CO ₂ H(CH ₂) ₂ CO ₂ H		A	A	A	A			A			A	A							
Sugar Solutions								A	A		A		B	A	A	A	A		A
Sulfamic Acid, HSO ₃ NH ₂		D	D	D	D														
Sulfate Liquors		A	A	A	A						A	A	C	A	A	C	C		A
Sulfated Detergents		A	A	A	A														
Sulfur 10%		A	A	A	A	B		A		D	A	D	D	C		C	D	A	A
Sulfur Dioxide		D		D		C		A	D	D	C	A	B	D		A	A	A	B
Sulfite Liquor		A	A	A	A			A			A	A	C	B					
Sulfur		A	A	D	A	B	A	A	D	D	A	C	B	C	A				
Sulfur Chloride, S ₂ Cl ₂	1.690	A	A	C	A	A		A		D	A	D	D	D	A	D	D		
Sulfur Dioxide Dry, SO ₂		A	A	A	A			A	D	D	A	A	D	D	B	A			B
Sulfur Dioxide Wet		D	A	A	A	B		A	D		A	A	C	D	C				

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS						GASKETS						ALLOYS						
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	VITON	EPDM	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Sulfur Slurries		A	A	A	A														
Sulfur Trioxide Dry, SO ₃		C	C	D	D			B	D	C	C	C	C	C	C			A	A
Sulfuric Acid 10%		A	A	A	A	B		A		A	B	C	C	C	C				
Sulfuric Acid 30%		A	A	A	A	A		A	D	A	A	A	C	C	D			C	B
Sulfuric Acid 50%	1.8	A	A	A	A	A		A		A	B	C	C	C	D			C	B
Sulfuric Acid 60%		A	A	A	B	B		A		A	B	D	D		D			C	B
Sulfuric Acid 70%		A	A	C	A	B		A		A	A	D	C		D			C	B
Sulfuric Acid 80%		A	A	A	A	C		A		A	A	D	C	A	D			D	A
Sulfuric Acid 90% @ 23°C		A	A	C	A	D		A		A	A	D	C		D			D	A
Sulfuric Acid 95%		D	C	D	A	D		A		A	D	D	D	C	D	A		D	A
Sulfuric Acid 98%*, H ₂ SO ₄	1.84	D	D	D	A	D		B		D	D	D			D			D	B
Sulfuric Acid 100%, H ₂ SO ₄		D	D	D	C			B	D	C	D	D	D	D	C			D	B
Sulfurous Acid, H ₂ SO ₃	1.03	A	A	A	A	B		A	B	A	C	D	D		B	C		A	B
Sulfuryl Chloride	1.667	A		A				A							A	A			
Syrup		A		A				A				B	A		A	A			
Tall Oil		A	A	A	A			A		A	D	B	A	C					
Tallow	0.86	A	A	A	A	B		A		A	A	B	A	C	A	A		A	B
Tannic Acid*, C ₇₆ H ₅₂ O ₄₆		A	A	A	A	C		A	B	A	B	A	C	A	C	A		A	B
Tanning Liquors		A	A	A	A			A		A	B	A	C		A	A		A	A
Tar		D	D	B	A			A	D	A	D		C		A	A			A
Tartaric Acid (Dihydroxy-succinic Acid), C ₄ H ₆ O ₆	1.8	A	A	A	A	B		A	B	A	B	B	C	A	B	A		A	B
Tertiary Butyl Alcohol		A	A	A	A			A		B	A	B							
Tetrachlorethane, (Cl ₂ HC) ₂		D		A				A		D	A	D			A			A	A
Tetrachloroethane				A				A		D	A	D							
Tetraethyl Lead, Pb(C ₂ H ₅) ₄		B	A	A	A			A	D	D	B		C						
Tetrahydrofuran*		D	D	B	B	D		A	D	D	D	D	D		A	A			
Tetralin, C ₁₀ H ₁₂		D	D	D	A			A	D	D	A	D	D	D					
Thionyl Chloride, SOCl ₂	1.638	D	D	D	D	D		A	D	D									
Thread Cutting Oils		A	A	A	A						D								
Titanium Tetrachloride		D	D	D	D			C	A	D	A	D	C	D					
Titanous Sulfate	1.47	A	A	A	A			A											
Toluene*, CH ₃ C ₆ H ₅	0.9	D	D	C	A	D		A	D	D	B	D			A	A			
Toluene Toluol, C ₇ H ₈		D	D	C	B	D		A			C	D	D	D	A	A		A	A
Tomato Juice		A	A	C	A			A			C	A	A		A	A		A	A
Toxaphene-Xylene		D	D	D	A			A				A	A		A	A			
Transformer Oil		A	A	A	A	C		A		D	A	D	B	A	D				
Tributyl Phosphate, (C ₄ H ₉) ₃ PO ₄		D	D	C	A			A	D	D	D	A	D	D					
Trichloroacetic Acid, CCl ₃ COOH	1.6	A	A	C	A			A	D	B	D	D	D	D	D	D			
Trichloroethane, C ₂ H ₃ Cl ₃								A	D	D	A	D	D	D	A	C		A	A
Trichloroethylene, CICH=CCl ₂	1.1	D	D	B	A	D		A	D	D	A	D	D	C	D	A	C	B	
Trichloropropane	1.3888							A				C	A		A				
Tricresyl Phosphate		D						A		B	A	D	D		A			B	A
Triethanolamine		B		C	C			A		D	A								
Triethyl Phosphate		A	A	A	A			A		A	A				A	A			
Triethylamine		A	A	D	C					A	A	C	A						

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CHEMICAL RESISTANCE CHART

CHEMICAL	THERMOPLASTICS						GASKETS						ALLOYS						
	APPROX. SP. GR. AT 100% CONCENTRATION	PVC	CPVC	POLY-PROPYLENE (PP)	POLY-VINYLIDENE FLUORIDE (PVDF)	POLY-ETHYLENE (PE)	POLY-ETHYLENE-CROSS LINKED (XLPE)	TEFLON	ABS	SBR	VITON	EPDM	NEOPRENE	BUNA N (NITRILE)	HYPALON	316 STAINLESS STEEL	304 STAINLESS STEEL	TITANIUM	HASTELLOY C
Trimethylpropane		A	A	A	A	A	A	A											
Trisodium Phosphate		A	A	A	A	A	A												
Turbine Oil		A	A	B	A	D	D	A	D	A	D	D	B	D	A	A			
Turpentine*, C ₁₀ H ₁₆	0.9	D	A	B	A	D	D	A	D	A	C	D	C	D	A	A			A
Urea*, CO(NH ₂) ₂	1.3	A	A	A	A	C	A	A	A	A	A	A	C	A					
Urine		A	A	A	A	A	A	A	A	A	A	D	A		A	A			
Vanilla Extract*				A	A	C	A	A											
Varnish				A	A		A	A	D	A	D	D	B	D	A	A			
Vaseline		D	A	A	A		A	A		A	D	B	A	D					
Vegetable Oil		A	C	A	A		A		D	A	A	D	A		A				
Vinegar		A	A	A	A	A	A	A	B	A	A	B	C	B	A	A	A	A	A
Vinyl Acetate	0.9345	D	D		A		A	A	D	D	B	C	D	C					
Vinyl Chloride, CH ₂ CHCL							A	A	D	A	C	A	D	D					
Vinyl Ether, CH ₂ CHOCH:CH ₂	0.769						A	A		D			B	D					
Water Acid Mine		A	A	A	A		A	A		A	A	C	A	A	A	A			
Water Deionized		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
Water Demineralized		A	A	A	A		A	A	A	A	A	A	A	A	A	A			
Water Distilled		A	A	A	A		A	A	A	A	A	C	A	A	A	A			
Water Potable, H ₂ O		A	A	A	A		A	A	A	A	A	A	A	A	A	A			
Water Salt		A	A	A	A		A	A	A	A	A	A	A	A	A	A			
Water Sewage		A	A	A	A		A	A	A	A	A		A		A	A			
Weed Killers												C	B		A	A			
Whey													A		A	A			
Whiskey	0.9	A	A	A	A	C	A	A	A	A	A	A	A	A	A	A			
White Acid					A		A	A											
White Liquor		A	A	A	A		A			A	A	A	B		A	A			A
Wines		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
Xenon, Xe																			
Xylene*, C ₆ H ₄ (CH ₃) ₃	0.9	D	D	D	A	C	C	A	D	B	D	D	D	D	A	A			A
Xylol		D	D	D	A		A			A	D	D	C	D					
Yeast				A	A	A	A	A		A	A	A							
Zeolite									A	A	A	C	B	A					
Zinc Acetate		A	A	A	A				A	C	A	B	B	C					
Zinc Carbonate, ZnCO ₃													A	A					
Zinc Chloride, ZnCl ₂	2.9	A	A	A	A	A	A		A	A	A	A	A	A	B	C	A	C	
Zinc Chromate								A						C					
Zinc Nitrate		A	A	A	A			A		A	A								
Zinc Phosphate, Zn ₃ (PO ₄) ₂																			
Zinc Salts				A	A	A	A	A		A	A	A	A	A					
Zinc Sulfate, ZnSO ₄ ·7H ₂ O	2.0	A	A	A	A	B	A	A	B	A	A	A	A	A	A	A	A	A	B
Zirlite							A			C	A	A	B	B					

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* May cause stress cracking of L.D.P.E and H.D.P.E under certain conditions.

CHEMICAL FORMULA INDEX

AgCl	Silver Chloride	$C_6H_7(OH)_3COOH \cdot H_2O$	Gallic Acid
AgCN	Silver Cyanide	$CH_2SH \cdot COOH$	Thioglycolic Acid
AgI	Silver Iodide	$CH_2 + H_2O$	Carbonic Acid
AgNO ₃	Silver Nitrate	$COOH(CH_2)_2CH(NH_2)COOH$	Glutamic Acid
AlCl ₃	Aluminum Chloride	$COOH(CH_2)_4COOH$	Adipic Acid
AlK(SO ₄) ₂ · 12H ₂ O	Potassium Alum	$COOH(CHOH)_2COOH$	Tartaric Acid
AlNH ₄ (SO ₄) ₂ · 12H ₂ O	Ammonium Alum	$(COOH)_2 \cdot 2H_2O$	Oxalic Acid
Al ₂ O ₃ · 3H ₂ O	Alumina Trihydrate	$HOOCCH_2C(OH)(COOH)CH_2COOH \cdot H_2O$	Citric Acid
Al ₂ (SO ₄) ₃	Aluminum Sulfate	$(CH_3CO)_2O$	Acetic Anhydride
BaSO ₄	Barium Sulfate	$C_6H_4(CO)_2O$	Phthalic Anhydride
Br + H ₂ O	Bromine Water	CCl ₄	Carbon Tetrachloride
CaCl ₂	Calcium Chloride	C ₂ Cl ₄	Perchloroethylene
CaCO ₃	Calcium Carbonate	$(ClC_6H_4)_2CHCl$	DDT
Ca(HSO ₃) ₂	Calcium Bisulfite	C ₂ H ₅ Br	Ethyl Bromide
CaO	Calcium Oxide	CHCl ₃	Chloroform
Ca(OH) ₂	Calcium Hydroxide (Lime)	CH ₂ Cl ₂	Methylene Chloride
Ca(OCl) ₂	Calcium Hypochlorite	C ₂ H ₄ Cl ₂	Ethylene Dichloride
CaSO ₄	Calcium Sulfate	CHClCCl ₂	Trichloroethylene
CaSO ₄ · 2H ₂ O	Gypsum	CH ₂ CHCl	Vinyl Chloride Monomer
Cl ₂	Chlorine	$(-CH_2CHCl-)_n$	PVC
ClO ₂	Chlorine Dioxide	CH ₂ OCHCH ₂ Cl	Epichlorhydrin
CH ₂ C(CH ₃)COOCH ₃	Ethylene Oxide	C ₆ H ₆	Benzene
CH ₂ CHCN	Acrylonitrile	C ₆ H ₁₄	Hexane
CH ₃ C ₆ H ₂ (NO ₂) ₃	Trinitrotoluene (TNT)	C ₆ H ₅ CH ₃	Toluene
C ₆ H ₄ (COOC ₄ H ₉) ₂	Dibutyl Phthalate	C ₆ H ₄ (CH ₃) ₂	Xylene
CH ₂ NO ₃ CHNO ₃ CH ₂ NO ₃	Nitroglycerine or Trinitro	C ₆ H ₅ CHCH ₂	Styrene
(C ₂ H ₅) ₂ O	Ether	C ₄ H ₁₀ O ₂	Ethyl Cellosolve
C ₂ H ₆ O ₂	Methyl Methacrylate Slurry	C ₂ H ₂	Acetylene
$(-CH_2-O-)_n$	Acetal Resin Slurry	C ₃ H ₈	Propane
C ₆ H ₇ O ₅ (NO ₂) ₃	Nitrocellulose	C ₄ H ₁₀	Butane
(C ₆ H ₁₀ O ₅) _x	Starch	CH ₂ CHCHCH ₂	Butadiene
COOH(CH ₂) ₂ CH(NH ₂)COONa	Sodium Glutamate (MSG)	CO ₂	Carbon Dioxide
CH ₂ CHCN	Acrylonitrile	$(CH_3)_2CHCH_2COCH_3$	Methyl Isobutyl Ketone
CH ₂ CHCH ₂ OH	Allyl Alcohol	CH ₃ COCH ₃	Acetone
CH ₃ CH ₂ CH ₂ OH	Propyl Alcohol	CH ₃ COC ₂ H ₅	Methyl Ethyl Ketone (MEK)
CH ₃ (CH ₂) ₄ OH	Amyl Alcohol	CH ₃ CH ₂ NH ₂	Ethylamine
C ₆ H ₅ CH ₂ OH	Benzyl Alcohol	$(CH_2OHCH_2)_3N$	Triethanolamine
CH ₃ (CH ₂) ₃ OH	Butyl Alcohol	CH ₃ CONH ₂	Acetamide
C ₄ H ₃ OCH ₂ OH	Furfuryl Alcohol	C ₅ H ₅ N	Pyridine
(C _n H _{2n+1} OH)	Alcohol General Formula	C ₆ H ₅ NH ₂	Aniline
C ₆ H ₅ OH	Carbolic Acid (Phenol)	C ₂ H ₄ (NH ₂) ₂	Ethylenediamine
C ₃ H ₅ (OH) ₃	Glycerin, Glycerol	$(CH_3)_2NNH_2$	Dimethyl Hydrazine
CH ₃ OH	Methyl Alcohol	CO(NH ₂) ₂	Urea
C ₂ H ₅ OH	Ethyl Alcohol	CH ₃ CHO	Acetaldehyde
CH ₂ OHCH ₂ OH	Ethylene Alcohol (Glycol)	CH ₂ O	Formaldehyde
CH ₂ OHCH ₂ OCH ₂ CH ₂ OCH ₂ CH ₂ OH	Triethylene Glycol	CH ₃ COOC ₅ H ₁₁	Amyl Acetate
CH ₂ ClCOOH	Chloroacetic Acid (mono-)	CH ₃ COOC ₄ H ₉	Butyl Acetate
CH ₃ (CH ₂) ₂ COOH	Butyric Acid	CH ₃ COOC ₂ H ₅	Ethyl Acetate
CH ₃ CH ₂ COOH	Propionic Acid	CH ₃ COONa	Sodium Acetate
CH ₃ (CH ₂) ₁₆ COOH	Stearic Acid	C ₁₇ H ₃₅ COONa	Sodium Stearate
CH ₃ (CH) ₄ COOH	Sorbic Acid	$(CH_3COO)_2Zn$	Zinc Acetate
CH ₃ CHOH COOH	Lactic Acid	C ₆ H ₅ SO ₃ Na	Sodium Benzene Sulfonate
CH ₃ COOH	Acetic Acid	CS ₂	Carbon Bi or Disulfide
C ₆ H ₅ COOH	Benzoic Acid	CrCl ₃	Chromic Chloride
(CH COOH) ₂	Maleic Acid	Cr ₂ (SO ₄) ₃	Chromium Sulfate
C _n J _{2n+1} COOH	General Formula for	CuCl ₂	Copper Chloride
	Fatty Acids	Cu(CN) ₂	Copper Cyanide
C ₇ H ₅ O ₄	Tannic Acid	Cu(NO ₃) ₂ · H ₂ O	Copper Nitrate

CHEMICAL FORMULA INDEX

CuS	Copper Sulfide	Na ₂ CO ₃	Sodium Carbonate
CUSO ₄ · 5H ₂ O	Copper Sulfate	NaF	Sodium Fluoride
D ₂ O	Heavy Water, Deuterium Oxide	NaHCO ₃	Sodium Bicarbonate
F ₂	Fluorine	NaH ₂ PO ₄	Sodium Phosphate (Mono)
FeCl ₃	Ferric Chloride	NaHSO ₃	Sodium Bisulfite
Fe ₂ O ₃	Iron Oxide	NaNO ₃	Sodium Nitrate
H ₂	Hydrogen	Na ₂ O ₂	Sodium Peroxide
He	Helium	Na(OCl)	Sodium Hypochlorite
H ₃ AsO ₄ · 1/2H ₂ O	Arsenic Acid	NaOH	Sodium Hydroxide (Caustic)
HBF ₄	Fluoboric Acid (Boro & Hydro)	NaS	Sodium Sulfide
H ₃ BO ₃	Boric Acid	Na ₂ SO ₃	Sodium Sulfite
HBrO ₃	Bromic Acid	Na ₂ SO ₄	Sodium Sulfate
HCl	Hydrochloric Acid	Na ₂ S ₂ O ₈	Sodium Persulfate
HCl + HNO ₃	Aqua Regia	Na ₂ S ₂ O ₃ · 5H ₂ O	Sodium Thiosulfate (Hypo)
HCN	Hydrocyanic Acid (Prussic)	Na ₂ SiF ₆	Sodium Silicofluoride
HCOOH	Formic Acid	Na ₂ SiO ₃	Sodium Metasilicate
H ₂ CrO ₄	Chromic Acid	NH ₃	Ammonia
HF	Hydrofluoric Acid	NH ₄ Cl	Ammonium Chloride
HNO ₃	Nitric Acid	(NH ₄)HPO ₄	Ammonium Phosphate, (DI)
H ₂ NNH ₂	Hydrazine	NH ₄ NO ₃	Ammonium Nitrate
H ₂ O	Water	NH ₄ OH	Ammonium Hydroxide
H ₂ O ₂	Hydrogen Peroxide	(NH ₄) ₂ S ₂ O ₈	Ammonium Persulfate
HOCl	Hypochlorous Acid	(NH ₄) ₂ SO ₄	Ammonium Sulfate
H ₃ PO ₄	Phosphoric Acid	NiCl ₂	Nickel Chloride
H ₂ SiF ₆	Fluosilicic Acid (Hydro)	NiSO ₄	Nickel Sulfate
H ₂ SO ₃	Sulfurous Acid	O ₂	Oxygen
H ₂ SO ₄	Sulfuric Acid	O ₃	Ozone
HSO ₃ NH ₂	Sulfamic Acid	Pb ₃ (AsO ₄) ₂	Lead Arsenate
KClO ₄	Potassium Perchlorate	Pb(C ₂ H ₅) ₄	Lead Tetraethyl
K ₂ CrO ₄	Potassium Chromate	Pb(C ₂ H ₃ O ₂) ₂ · 3H ₂ O	Lead Acetate
K ₂ Cr ₂ O ₇	Potassium Di Chromate	Pb ₃ O ₄ (Also PbO)	Lead Oxide Litharge
KH ₂ PO ₄	Potassium Phosphate (Mono)	PCl ₃	Phosphorous Trichloride
KI	Potassium Iodide	POCl ₁	Phosphorous Oxychloride
KMnO ₄	Potassium Permanganate	S	Sulfur
KNO ₃	Potassium Nitrate	SiCl ₄	Silicon Tetrachloride
KOCl	Potassium Hypochlorite	SiO ₂	Silica
KOH	Potassium Hydroxide (Potash)	SnCl ₂	Stannic Chloride
K ₂ SO ₄	Potassium Sulfate	SnF ₂	Stannous Fluoride
LiBr	Lithium Bromide	SO ₂	Sulfur Dioxide
MgCl ₂ · 6H ₂ O	Magnesium Chloride	SO ₂ ClOH	Chlorosulfonic Acid
MgCO ₃	Magnesium Carbonate	TiO ₂	Titanium Dioxide
MgO	Magnesium Oxide	ZnCl ₂	Zinc Chloride
Mg(OH) ₂	Magnesium Hydroxide	ZnO	Zinc Oxide
MgSO ₄	Magnesium Sulfate	ZnS	Zinc Sulfide
Mg ₃ Si ₄ O ₁₀ (OH) ₂	Talc Slurry	ZnSO ₄ · 7H ₂ O	Zinc Sulfate
N ₂	Nitrogen		
Na ₂ B ₄ O ₇ · 10H ₂ O	Borax, Sodium Borate		
NaBO ₂ · H ₂ O ₂ · 10H ₂ O	Sodium Perborate		
NaCl	Sodium Chloride		
Na ₂ Cr ₂ O ₇ · 2H ₂ O	Sodium Bichromate		
Na ₂ CrO ₄ · 10H ₂ O	Sodium Chromate		
NaCN	Sodium Cyanide		
NaClO ₃	Sodium Chlorate		