

Chemical Resistance Chart

CHART LEGEND

A	Resistant, no indication that serviceability would be impaired
B	Variable resistance, depending on conditions of use
C	Unresistant, not recommended for service applications under any conditions
_	Information not yet available

REAGENT	CONC.	TANK MATERIALS						TANK FITTING MATERIALS								
		LDPE, LMDPE & HDPE		Polypropylene		XLPE		PVC	CPVC	EPDM	NEOPRENE	VITON	316 SS	TITANIUM	HASTELLOY C	
		70 °	140 °	70 °	140 °	70 °	140 °									
Acetone		C	C	A	A	C	C	C	C	C	C	C	A	A	A	
Acetaldehyde*	100%	B	C	A	B	B	C	C	C	A	C	C	A	A	A	
Acetic Acid*	10%	A	A	A	A	A	A	A	A	A	A	B	A	A	A	
Acetic Acid*	60%	A	B	A	A	A	A	A	A	A	B	B	A	A	A	
Acetic Anhydride*		C	C	_	_	C	C	C	C	B	A	C	A	A	A	
Air		A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Aluminum Chloride	all concentr.	A	A	A	A	A	A	A	A	A	A	A	C	B	A	
Aluminum Fluoride	all concentr.	A	A	A	A	A	A	A	A	A	A	A	C	A	B	
Aluminum Sulphate	all concentr.	A	A	A	A	A	A	A	A	A	A	A	B	A	B	
Alums	all types	A	A	A	A	A	A	A	A	A	A	A	A	_	A	
Ammonia	100% dry gas	A	A	A	A	A	A	B	A	A	A	A	A	C	A	
Ammonium Carbonate		A	A	A	A	A	A	A	A	A	A	_	B	A	B	
Ammonium Chloride	sat'd	A	A	A	A	A	A	A	A	A	A	A	C	B	A	
Ammonium Fluoride	sat'd	A	A	A	A	A	A	A	A	B	A	A	C	A	A	
Ammonium Hydroxide	10%	A	A	A	A	A	A	A	A	B	A	B	A	A	B	
Ammonium Hydroxide	28%	A	A	A	A	A	A	A	A	A	A	B	A	A	B	
Ammonium Nitrate	sat'd	A	A	A	A	A	A	A	A	A	B	A	A	A	B	
Ammonium Persulphate	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B	
Ammonium Sulphate	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B	
Ammonium Metaphosphate	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B	
Ammonium Sulfide	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B	
Amyl Acetate*#	100%	C	C	B	C	C	C	C	C	A	C	C	A	A	A	
Amyl Alcohol*#	100%	A	A	A	B	A	A	A	A	A	A	B	A	B	A	
Amyl Chloride*#	100%	C	C	C	C	C	C	C	C	C	C	B	A	C	A	
Aniline*#	100%	C	C	A	A	A	C	C	C	B	C	C	B	C	B	
Aqua Regia +		C	C	C	C	C	C	C	C	C	C	B	C	A	C	
Arsenic Acid	all concentr.	A	A	A	A	A	A	A	A	A	A	A	A	B	B	
Aromatic Hydrocarbons *#		C	C	_	_	C	C	C	C	C	C	A	C	_	_	
Ascorbic Acid	10%	A	A	A	A	A	A	A	A	A	A	A	_	_	_	
Barium Carbonate	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B	
Barium Chloride	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	B	
Barium Hydroxide		A	A	A	A	A	A	A	A	A	A	A	B	B	A	
Barium Sulphate	sat'd	A	A	A	A	A	A	B	B	A	A	A	B	B	_	
Barium Sulphide	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	A	
Beer		A	A	A	A	C	C	A	A	A	C	A	A	B	B	
Benzene*#		C	C	B	C	C	C	C	C	C	C	A	B	A	B	
Benzoic Acid	all concentr.	A	A	A	A	A	A	A	A	C	A	A	B	B	A	
Bismuth Carbonate	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	B	
Bleachlye	10%	A	A	A	A	A	A	A	A	A	A	A	A	B	B	
Borax	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	B	A	
Boric Acid	all concentr.	A	A	A	A	A	A	A	A	B	A	A	A	A	A	
Boron Trifluoride		A	A	_	_	A	A	A	A	A	A	A	_	B	_	
Brine		A	A	A	A	A	A	A	A	A	A	A	C	A	A	
Bromine +	liquid	C	C	C	C	C	C	C	C	C	C	A	C	A	A	
Bromine Water #	sat- d	C	C	C	_	C	C	C	C	C	C	A	C	A	A	
Butanediol*	10%	A	A	A	A	A	A	_	_	_	_	_	_	_	_	
Butanediol*	60%	A	A	A	A	A	A	_	_	_	_	_	_	_	_	
Butanediol*	100%	A	A	A	A	A	A	_	_	_	_	_	_	_	_	
Butter*		A	A	A	A	C	C	_	A	A	B	A	A	_	_	
n-Butyl Acetate*#	100%	A	C	C	C	A	C	C	B	B	C	B	B	A	A	
n-Butyl Alcohol	100%	A	A	A	_	A	A	A	B	B	A	A	A	A	A	
Butyric Acid #	conc.	C	C	_	_	_	_	B	B	B	C	B	B	A	A	
Calcium Bisulphide		A	A	A	A	A	A	A	A	A	A	A	B	A	_	
Calcium Carbonate	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	B	B	
Calcium Chlorate	sat'd	A	A	A	A	A	A	A	A	A	_	A	_	_	_	
Calcium Chloride	sat'd	A	A	A	A	A	A	A	A	B	A	A	B	A	A	
Calcium Hydroxide	conc.	A	A	A	A	A	A	A	A	B	C	A	B	A	B	
Calcium Hypochlorite	bleach sol'n	A	A	A	B	B	B	B	B	A	C	A	C	_	B	
Calcium Nitrate	50%	A	A	A	A	A	A	A	A	A	B	A	A	A	_	
Calcium Oxide	sat'd	A	A	_	_	A	A	A	A	A	A	A	A	A	A	
Calcium Sulphate		A	A	A	A	A	A	A	A	A	C	_	B	A	A	
Camphor Oil*#		C	C	C	C	C	C	_	_	_	_	A	A	_	_	

Hexanol, Tertiary*		A	A	—	—	A	A	—	—	—	—	B	A	A	—
Hydrobromic Acid	50%	A	A	A	A	A	A	A	A	A	B	A	C	A	B
Hydrochloric Acid	all concentr.	A	A	A	A	A	A	A	A	A	—	A	C	C	A
Hydrocyanic Acid	sat'd	A	A	—	—	A	A	A	A	A	—	A	C	B	—
Hydrofluoric Acid*	60%	A	A	A	A	A	A	A	A	A	—	A	C	C	A
Hydrogen	100%	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Hydrogen Chloride	dry gas	A	A	A	A	A	A	—	—	—	—	—	—	—	—
Hydrogen Peroxide	30%	B	B	A	—	A	A	A	A	—	—	A	B	B	A
Hydrogen Peroxide	10%	A	A	A	B	A	A	A	A	—	—	A	B	B	A
Hydrogen Sulphide		A	A	A	A	A	A	A	A	A	—	A	C	B	A
Hydroquinone		A	A	A	A	A	A	A	A	—	C	A	—	—	—
Hypochlorous Acid	conc.	A	A	A	A	A	A	A	A	—	—	A	—	A	A
Inks #		A	A	A	A	A	A	A	A	—	—	A	C	A	A
Iodine +	in k1 sol'n	B	—	—	—	B	C	C	C	B	C	A	C	C	B
Isopropyl Alcohol	100%	—	—	A	A	A	A	A	A	—	—	A	A	A	A
Lead Acetate	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Lead Nitrate		A	A	—	—	A	A	A	A	A	A	A	A	A	A
Lactic Acid*	20%	A	A	A	A	A	A	A	A	A	A	A	B	B	B
Linseed Oil*	100%	B	C	A	A	A	C	A	A	—	A	A	A	A	A
Magnesium Carbonate	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Magnesium Chloride	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Magnesium Hydroxide	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Magnesium Nitrate	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Magnesium Sulphate	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Mercuric Chloride	40%	A	A	A	A	A	A	A	A	A	A	A	C	A	C
Mercuric Cyanide	sat'd	A	A	A	A	A	A	B	A	—	A	A	C	A	—
Mercury		A	A	A	A	A	A	B	A	A	A	A	A	A	A
Methyl Alcohol*	100%	A	A	A	A	A	A	A	A	B	B	C	A	A	C
Methylethyl Ketone*#	100%	B	C	A	B	B	C	C	C	A	C	C	A	A	A
Methylene Chloride*#	conc.	C	C	B	—	C	C	C	C	C	C	C	A	A	B
Milk		A	A	A	A	C	C	A	A	A	A	A	A	A	A
Mineral Oils #		B	C	A	B	A	C	A	A	A	A	A	A	A	A
Molasses		A	A	A	A	A	A	A	A	C	A	A	A	A	A
Naphtha*#		B	C	—	—	B	C	A	A	C	C	A	A	A	A
Naphthalene*#		B	—	A	A	C	C	C	C	C	C	A	A	A	A
Nickel Chloride	conc.	A	A	A	A	A	A	A	A	A	A	A	C	A	B
Nickel Nitrate	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	B	B
Nickel Sulphate	conc.	A	A	A	A	A	A	A	A	A	A	A	B	B	B
Nicotine*	dilute	A	A	A	A	A	A	A	A	—	—	—	—	—	—
Nitric Acid	0-30%	A	A	C	C	A	A	A	A	B	A	A	A	A	A
Nitric Acid +	30-50%	A	B	C	C	A	B	B	B	B	A	A	A	A	A
Nitric Acid +	70%	A	B	C	C	A	B	C	C	C	A	A	A	A	A
Nitric Acid +	95-98%	C	C	C	C	C	C	C	C	C	—	A	A	A	A
Nitrobenzene*#	100%	C	C	C	C	C	C	C	C	C	B	A	A	C	—
n-Octane		A	A	—	—	A	A	—	—	—	—	—	—	—	—
Oleic Acid		B	C	A	B	A	C	A	A	B	C	B	B	C	B
Oxalic Acid*	sat'd	A	A	A	B	A	A	A	C	A	B	A	B	C	B
Perchloroethylene#		C	C	—	—	C	C	C	B	C	C	A	A	A	B
Phosphoric Acid	95%	A	A	A	A	A	B	B	A	B	B	A	B	B	A
Photographic Solutions		A	A	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	A	A	A	A
Cadium	any con.	A	A	A	A	A	A	A	C	C	—	A	A	C	A
Chromium	any con.	A	A	A	A	A	A	A	A	—	B	A	C	C	C
Copper		A	A	A	A	A	A	A	A	—	A	A	A	A	A
Gold		A	A	A	A	A	A	A	A	—	A	A	A	A	A
Indium		A	A	A	A	A	A	A	A	—	A	A	—	—	—
Lead		A	A	A	A	A	A	A	A	—	—	A	C	C	A
Nickel		A	A	A	A	A	A	A	A	—	—	A	C	A	C
Rhodium		A	A	A	A	A	A	A	A	—	—	A	A	C	A
Silver		A	A	A	A	A	A	A	A	—	—	A	C	C	A
Tin		A	A	A	A	A	A	A	A	—	—	A	C	A	A
Zinc		A	A	A	A	A	A	A	A	—	A	A	C	A	B
Potassium Bicarbonate	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Bromide	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Bromate	10%	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Carbonate		A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Chlorate	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Chloride	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Chromate	40%	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Cyanide	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Dichromate	40%	A	A	A	A	A	A	A	A	A	A	A	B	A	B

Potassium Ferri/Ferro-Cyanide	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Fluoride		A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Hydroxide	conc.	A	A	A	A	A	A	A	A	A	B	B	B	A	B
Potassium Nitrate	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Perborate	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Perchlorate	10%	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Permanganate	20%	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Potassium Persulphate	sat'd	A	A	—	—	A	A	A	A	A	A	A	B	A	B
Potassium Sulphate	conc.	A	A	A	A	A	A	A	A	A	C	A	B	A	B
Potassium Sulphide	conc.	A	A	A	A	A	A	A	A	A	C	A	B	A	B
Potassium Sulphite	conc.	A	A	A	A	A	A	A	A	A	C	A	B	A	B
Propargyl Alcohol*		A	A	—	—	A	A	—	—	—	—	—	—	—	—
n-Propyl Alcohol*		A	A	A	A	A	A	A	—	—	A	A	A	A	A
Propylene Dichloride*#	100%	C	C	—	—	C	C	A	—	—	—	A	C	A	B
Propylene Glycol*		A	A	—	—	A	A	C))	C	A	B	A	B
Pyridine*		A	—	A	—	A	C	C	B	B	C	C	A	B	B
Resorcinol	sat'd	A	A	—	—	A	A	—	—	—	—	—	—	—	—
Salicylic Acid	sat'd	A	A	—	—	A	A	A	A	A	A	A	A	A	A
Sea Water		A	A	A	A	A	A	A	A	A	A	A	A	A	A
Selenic Acid		A	A	—	—	A	A	A	A	A	—	—	—	—	—
Shortening*		A	A	A	A	A	A	A	A	A	A	A	A	A	A
Silver Nitrate Solution		A	A	A	A	A	A	A	A	A	A	A	A	A	A
Soap Solution*	any con.	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Sodium Acetate	sat'd	A	A	A	A	A	A	A	B	B	A	B	C	B	A
Sodium Benzoate	35%	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Sodium Bicarbonate	sat'd	A	A	A	A	A	A	A	A	A	B	C	B	B	B
Sodium Bisulphate	sat'd	A	A	A	A	A	A	A	A	A	C	A	B	B	A
Sodium Bisulphite	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	B	A
Sodium Borate		A	A	A	A	A	A	A	A	A	A	A	B	A	A
Sodium Bromide	dilute	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Sodium Carbonate	cons.	A	A	A	A	A	A	A	A	A	A	C	A	A	A
Sodium Chlorate	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Sodium Chloride	sat'd	A	A	A	A	A	A	A	A	A	A	A	C	A	A
Sodium Cyanide		A	A	A	A	A	A	A	A	A	A	A	B	A	A
Sodium Dichromate	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Sodium Ferri/Ferro Cyanide	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Sodium Fluoride	sat'd	A	A	A	A	A	A	A	A	A	C	A	C	A	A
Sodium Hydroxide	conc.	A	A	A	A	A	A	A	A	A	B	A	B	B	B
Sodium Hypochlorite 1		A	A	A	B	B	B	B	B	B	C	A	C	C	B
Sodium Nitrate		A	A	A	A	A	A	A	A	A	B	A	B	A	B
Sodium Sulphate		A	A	A	A	A	A	A	A	A	B	A	B	A	B
Sodium Sulphide	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Sodium Sulphite	sat'd	A	A	A	A	A	A	A	A	A	A	A	B	A	B
Stannic Chloride	sat'd	A	A	A	A	A	A	A	A	B	C	A	C	A	B
Stannous Chloride	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	B
Starch Solution*	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Stearic Acid*	100%	A	A	A	A	A	A	B	B	B	B	A	A	A	B
Sulphuric Acid	0-50%	A	A	A	B	A	A	A	A	B	C	A	C	C	B
Sulphuric Acid +	70%	A	B	A	B	A	B	A	A	B	C	A	C	C	B
Sulphuric Acid +	80%	A	C	C	C	A	B	A	A	B	—	A	C	C	B
Sulphuric Acid +	96%	B	C	C	—	A	B	C	B	B	C	A	C	C	B
Sulphuric Acid +	98-conc.	B	C	C	—	B	C	C	B	B	C	A	C	C	B
Sulphuric Acid +	fuming	C	C	C	C	C	C	C	B	V	V	A	C	C	C
Sulphurous Acid		A	A	A	A	A	A	A	A	B	C	A	B	A	B
Tallow #		A	—	A	A	A	B	—	—	—	—	A	A	—	—
Tannic Acid*	sat'd	A	A	A	A	A	A	A	A	A	B	A	A	A	B
Tartaric Acid		A	A	A	A	A	A	A	A	B	B	A	C	A	B
Tetrahydrofuran*#		B	C	C	C	C	C	C	C	B	C	C	A	A	A
Titanium Tetrachloride*	sat'd	C	—	—	—	C	C	—	—	—	—	—	A	—	—
Toluene*		B	B	C	C	C	C	C	C	C	C	C	A	A	A
Trichloroethylene*#		C	C	C	C	C	C	C	C	C	C	A	B	A	B
Triethylene Glycol*		A	A	—	—	A	A	—	—	—	—	—	A	A	A
Trisodium Phosphate	sat'd	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Turpentine #		C	C	C	C	C	C	B	B	C	C	A	A	B	B
Urea	30%	A	A	A	A	A	A	B	B	—	—	—	A	—	—
Urine		A	A	A	A	A	A	A	A	A	C	A	A	—	—
Vanilla Extract*		A	A	A	A	A	A	—	—	—	—	—	—	—	—
Vinegar		A	A	A	A	A	A	A	A	A	C	A	A	A	A
Water		A	A	A	A	A	A	A	A	A	A	A	A	A	A
Wetting Agent*		A	A	A	A	A	A	—	—	—	—	—	—	—	—
Whiskey*		A	A	A	A	C	C	A	A	A	A	A	A	A	A
Wines*		A	A	A	A	A	C	C	A	A	A	A	A	A	A
Xylene #		C	C	C	C	C	C	C	C	C	C	C	A	A	A

