

CHEMICAL RESISTANCE CHART

General

The GTPEX Chemical Resistance List is based upon information included in the professional literature. The list is only intended as a guide. Changes in the composition of the medium or special working conditions could lead to deviations. It is recommended to consult the experts of "GTGlobe Industrial Products" in each specific case.

Classification

- R.** Resistant. Can be used within the working pressures.
CR. Conditionally resistant. Restrictions must be made as regards pressures.
CR60. Conditionally resistant. Can be used within pressures up to 60% of the working pressures.
CR20. Conditionally resistant. Can be used within pressures up to 20% of the working pressures.
NR. Not recommended.

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Accumulator Acid	R	R	R	
Acetaldehyde 40%	R	R		CR
Acetaldehyde 100%	NR			
Acetamide	R	R	R	
Acetic Acid 05%	R	R		
Acetic Acid 10%	R	R		
Acetic Acid 20%	R	R		
Acetic Acid 50%	R	R		
Acetic Acid 60%	R	R		
Acetic Acid 80%	R	R		
Acetic Acid Ethyl Ester	R	R		
Acetic Anhydride	R	CR20		
Acetoacetic Acid	R			
Acetone	CR60			
Acetophenone			CR	
Acetyl Bromide	NR			
Acetyl Chloride			CR	
Acetylene	R	R	R	
Acetylene Dichloride	see Dichloroethylene			
Acid mixture H 2SO4-HNO3-H2O	NR			
Acid mixture H 2SO4-H3PO4-H2O		CR		
Acrylic emulsions	R			
Acroline dispersion	R			
Acroline solution	CR			
Acronal	CR60			
Acrylonitrile	R	R	R	
Acrylic Acid	R	R		
Adipic Acid	R	R	R	
Adipic Coldester	R	CR60		
Air	R	R	R	
Aktivin	R	R		
Alcohol	see Ethylalcohol			
Aliphatic Esters	R	R	R	
Allyl Acetate	R	CR60		
Allyl Alcohol 7%	R	R	R	NR
Allyl Alcohol 95%	R			

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Allyl Aldehyde				see Acroline
Allyl Chloride	CR60	NR		
Alum	R	R	R	CR
Aluminium Acetate	R	R	R	
Aluminium Chloride	R	R	R	
Aluminium Fluoride	R	R	R	
Aluminium Hydroxide	R	R	R	
Aluminium Metaphosphate	R	R		
Aluminium Nitrate sol.	R	R	R	
Aluminium Phosphate	R	R	R	
Aluminium Potassium Phosphate	R	R	R	
Aluminium Potassium Sulphate	R	R	R	R
Aluminium Sodium Sulphate sol.	R	R	R	
Aluminium Sulphate	R	R	R	
Amino Acids	R	R		
Aminoacetic Acid	CR	CR		
Ammonia Aqueous	R	R	R	
Ammonia, dry gas	R	R	R	
Ammoniacal Liquor	R	R		
Ammonium Acetate	R	R	R	
Ammonium Aluminium Sulphate	R			
Ammonium Bromide	CR	CR		
Ammonium Carbonate	R	R	R	
Ammonium Chloride	R	R	R	
Ammonium Fluoride 20%	R	R	R	
Ammonium Hydrogen Carbonate	R	R	R	
Ammonium Hydrogen Sulphide	R	R	R	
Ammonium Hydroxide	R	R	R	
Ammonium Metaphosphate	R	R	R	
Ammonium Molybdate	R			
Ammonium Nitrate	R	R	R	
Ammonium Persulphate	R	R	R	
Ammonium Phosphate	R	R	R	
Ammonium Sulfide	R	R	R	
Ammonium Sulphate	R	R	R	
Ammonium Sulphocyanide	R			
Ammonium Thiocyanate	R	R	R	
Amyl Acetate	R	R		

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Amyl Alcohol	R	R	R	
Amyl Chloride	NR			
Amyl Methyl Carbinol	CR			
Amyl Naphthaline	CR			
Amyl Phthalate	R	CR		
Aniline Hydrochloride	CR20			
Aniline Sulphate	NR			
Aniline, coloured	see Aniline			
Aniline, pure	R	R		
Aniline, water soluble	CR			
Animal Fats	R	R	R	
Animal Oils	CR	CR	CR	
Anis Oil	CR			
Aniseed Oil	CR60	NR		
Anisole	see Cyclohexanone			
Antifreeze solution	R	R	R	
Antimony Pentachloride	R	R	R	
Antimony Trichloride	R	R	R	
Anthroquinone Sulphonic Acid	R	R		
Aqua regia	NR			
Aromatic Acids	R	R	R	
Aromatic Hydrocarbons	NR			
Arsenic	CR	CR		
Arsenic Acid 80%	R	R	R	
Arsenic Acid Anhydride	R	R		
Arsenic Salts	R			
Arsenic Trichloride	NR			
Ascorbic Acid	R			
Asphalt	R	CR60		
ASTM Oil no. 1	R	R	R	
ASTM Oil no. 2	R	R	R	
ASTM Oil no. 3	R	R	R	
Atropine Sulphate	R			
Barium Carbonate	R	R	R	
Barium Chloride	R	R	R	
Barium Hydrosulphide, Bone Oil			CR	
Barium Hydroxide	R	R	R	
Barium Salts	R	R		
Barium Sulphate	R	R	R	
Barium Sulphide	R	R	R	
Battery Acid	R	CR		
Beater Glues	R	R		
Beer Colours	R	R	R	
Beer, trading quality	R			
Beet Juice	R	R		
Benzaldehyde 0.1%			CR60	
Benzaldehyde 100%	R	CR60		
Benzaldehyde Oxime 2%	R			
Benzaldoxime	see Benzaldehyde Oxime			
Benzene (Benzole)	CR20	NR		
Benzene Carbonic Acid	see Benzoic Acid			
Benzene Dicarboxic Acid	see Phthalic Acid			
Bezene Sulphonic Acid	R		CR	
Benzoic Acid	R	R	CR	
Benzoic Carbon Acid	see Benzoic Acid			
Benzoic Dicarboxic Acid	see Phthalic Acid			
Benzoic Sulphonic Acid	NR			
Benzyl Acetate	CR			

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Benzyl Alcohol	R	R	CR	
Benzyl Benzoate		CR		
Benzyl Chloride	R			
Bichromate Sulfuric Acid	CR	NR		
Bismuth Carbonate	R	R	R	
Bisulfite	see Sodium Bisulfite			
Bitumen	R	CR60		
Black Liquor	CR	CR		
Bleach	CR20	NR		
Bleach Lye 10%	CR	CR		
Bloodstream Salt, red	see Potassium Ferricyanide			
Bloodstream Salt, yellow	see Potassium Ferricyanid			
Bone Oil	R	R		
Bonewax	R		NR	
Borax			see Sodium	
Tetraborate				
Boric Acid	R	R	R	
Boric Acid Methyl Ester	CR	NR		
Boric Copper Sulphate	R			
Boric Trifluoride	R			
BoronTrifluoride	R	CR20		
Brake Fluids	R	R	R	
Brandy	R			
Brines, saturated	R	R		
Brom Oil	R		CR	
Bromate Solution	R	R		
Bromethan	NR			
Bromic Acid	R	R	R	
Bromine Vapours, low conc.	CR			
Bromine Water	NR			
Bromine, Liquid	NR			
Bromochloromethane	NR			
Butadiene 50%	R	R	R	
Butadiene 100%		CR		
Butane (gas)	NR			
Butanediol up to 10%	R	R	R	
Butanediol up to 100%	CR			
Butanetriol	R	R		
Butanol 100%	R	R	R	
Butanone	R	NR		
Butene	NR			
Butoxyl	R	CR60		
Butter	R		CR	
Butter Acid	CR60			
Butter Acid in water, conc.	CR60			
Butter Acid in water, sol. 20%	CR60			
Butyl Acetate	R	CR	CR60	
Butyl Acrylate	R	CR		
Butyl Alcohol	see Butanol			
Butyl Aldehyde	R		CR	
Butyl Benzyl Phtalate	R	R		
Butyl Carbinol			CR	
Butyl Cellulose solution	NR			
Butyl Phenol	NR			
Butyl Stearate	R	R	R	
Butylene	see Butene			
Butylene Glycol	see Butanediol			
Butyric Acid	CR60	CR20		

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Cadmium Salts	R			
Caffeine Citrate	CR	CR		
Calcium Acetate	R	R	R	
Calcium Bisulphide	R	CR		
Calcium Bisulphite	R	R	R	
Calcium Bromide 50%	R	R		
Calcium Bromide 80%	R			
Calcium Carbide	R	R		
Calcium Carbonate (Soda)	R	R	R	
Calcium Chlorate	R	R	R	
Calcium Chloride	R	R	R	CR
Calcium Hydrosulphite containing SO2	R	R		
Calcium Hydroxide	R	R	R	
Calcium Hypochlorite	R	R	R	
Calcium Nitrate	R	R	R	
Calcium Oxide	R			
Calcium Phosphate	R			
Calcium Sulphate	R	R	R	
Calcium Sulphide				CR
Calcium Water	R			
Camphor	CR60			
Cane Sugar	R	R		
Cane Sugar Juice	R	R	R	
Carbamide 33%	R	R	R	
Carbazole	R	R		
Bromethan	NR			
Carbolic Acid (Phenol)	R	R		
Carbolineum	R	CR60		
Carbon Bisulfide	NR			
Carbon Dioxide	R	R	R	
Carbon Dioxide damp	R	R	R	NR
Carbon Dioxide dry	R	R	R	R
Carbon Disulphide		CR20	NR	
Carbon Monoxide - lamp gas	R	R	R	
Carbon Tetrachloride		CR20	NR	
Carbonic Acid H2CO3	R	R		
Carnbevox	R			
Carrot Juice	R	R		
Castor Oil	R	CR		
Caustic Potash	R	R		
Caustic Soda	see Sodium Hydroxide			
Cedar Leaf Oil	CR20			
Cedar Wood Oil	CR20			
Cellulose dissolver	see Ethylene Glycol, Monoethyl Ether			
Cetyl Alcohol	R	R	CR	
Chalk	R	R	R	
Cheese Enzyme	R	R	R	
Chloral Hydrate	R	R	R	
Chloramine	R	R	R	
Chloramine T	see Paratoulene Sulpho			
Chlor				
Chloride Acid	see Hydrochloric Acid			
Chlorine water 2%	R	R	R	
Chlorine water sturated	R		CR	
Chlorine, damp gas	CR60	NR		

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Chlorine, dry gas	CR			NR
Chlorine, liquid	NR			
Chloro Acetic Acid Ethyl Ester	R	R		
Chloro Acetic Acid Methyl Ester	R	R		
Chloro Carbonic Acid	R	CR60		
Chloroacetic Acid 85%	CR	CR		
Chloroacetic Acid 98%	CR			NR
Chloroacetic Acid 100%		CR		
Chlorobenzene	CR20	NR		
Chlorocalcium (in H2O)	R	R	R	
Chloroethane	see Ethyl Chloride			
Chloroethanol	R	R	R	
Chloroethyl Alcohol		see		
Chloroethanol				
Chloroethyl Phosphate	R	R		
Chloroform	CR20	NR		
Chloromethane	see Methyl Chloride			
Chloropicrin	NR			
Chloropropane	see Glycerine Chlorhydrin			
Chlorosulfonic Acid	NR			
Chrome Alum	R	R	R	
Chrome Anode Mud	R	R		
Chrome Mercury	CR			
Chromic Acid 50%	R	R	R	
Chromic Acid 80%	R		CR	
Chromic Acid Anhydride	see Chromium Trioxide			
Chromium Oxide	see Chromium Trioxide			
Chromium Salts	R			
Chromium Trioxide 20%	R	R	R	
Chromium Trioxide 50%				CR
Chromium Trioxide 80%	R			
Chromo Sulfuric Acid	R	NR		
Cider	R	CR		
Cinnamon	CR	CR60		
Cinnamon Oil	CR20			
Cis - Oxime	see Benzaldehyde			
Oxime				
Citric Acid	R			
Citronella	CR	CR20		
Citrus Juices	R	R		
Cloves	CR60	CR60		
Coal Tar	CR20	NR		
Cobalt Chloride	R	R	R	
Coca Cola	R	R		
Coca Cola Syrup	R	CR		
Cocanut Oil Alcohols	CR	CR60		
Cocoa Fat	R	R	R	
Cocoa Fat Alcohol	R	R	R	
Coconut Oil	R	CR		
Cod Liver Oil	CR	CR60		
Coffee	R			
Cognac	R			
Colanut, concentrated	R	R	R	
Cooking Salt	see Sodium Chloride			
Copper Acetate				CR
Copper Chloride (cupric)	R	R	R	
Copper Chloride (cuprous)	R	R	R	
Copper Cyanide	R	R	R	

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Copper Fluoride	R	R	R	
Copper Nitrate	R	R	R	
Copper Salts	R	R		
Copper Sulphate	R	R	R	
Corn Oil	R	R	R	
Corn Syrup	R	R		
Cotton Seed Oil	R	CR	CR60	
Coumarone Resins	R	R		
Cranberry Sauce	CR	CR		
Creosote	R	CR		
Cresol 100%	R	CR60		
Cresol diluted	R	CR60		
Crop Protection Agent	R	R		
Croton Aldehyde	R	CR60		
Cupric Salts	R			
Cuprous Chloride, saturated	CR	CR		
Cuprous Oxide	CR	CR		
Cyanides	R	R	R	
Cyclanone	R	R		
Cyclohexane	CR60	CR20		
Cyclohexanol	R			
Cyclohexanone	CR20	NR		
Cyclohexyl Alcohol	R	CR		
DDT	R	R		
Decahydro Naphthalene	CR	CR60		
Decalin	R	CR60		
Defoamer	R	CR60		
Denatured Spirit	see Methyl Alcohol			
Deodorants	R	R		
Detergents	R	CR		
Dextrine	R	R	R	
Dextrose	R	R	R	R
Diacetone	R	R	R	
Diacetone Alcohol	R			
Diammonium Salts	R	R	R	
Diazo Salts	R	R		
Dibenzyl Ether			CR	
Dibromoethane	CR20	NR		
Dibutyl Ether	CR	CR20		
Dibutyl Phthalate	CR	CR60		
Dibutyl Sebacate	R	CR	CR	
Dichloroacetic Acid	R	R	R	
Dichloroacetic Acid Methylene Ester	R	R	R	
Dichlorobenzene	CR60	NR		
Dichloroethane	see Ethyl Chloride			
Dichloroethylene	NR			
Dichloromethane	see Methyl Chloride			
Dicyclohexamine			CR	
Diesel Fuel	R			
Diesel Oil	R	CR	CR60	
Diethylene Glycol Monobutylene	R			
Diethyl Benzene				CR
Diethyl Ether	see Ethyl Ether			
Diethyl Ketone	CR	CR60		
Diethyl Phthalate	R			
Diethylamine			CR	
Diethylene Dioxide	see Dioxane			
Diethylene Glycol	R	R		

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Diglycolic Acid	R	R	R	
Dihexyl Phthalate	R	R	R	
Diisobutylene				CR
Diisopropyl Ether	CR	NR		
Diisopropyl Ketone	R	R	R	
Dimethyl Amine	CR60	NR		
Dimethyl Aniline				CR
Dimethyl Benzole	see Xylol			
Dimethyl Formamide	R	CR		
Dimethyl Ketone	see Acetone			
Dimethyl Phthalate	R	R	R	
Dimethyl Sulphoxide	R	R		
Dioctyl Phthalate	CR	CR60		
Dioctyl Sebacate				CR
Dioxalane				CR
Dioxane	R	CR	CR60	
Dioxyethyl Ether	see Diethylene Glycol			
Diphenyl				CR
Diphenyl Amine	R	CR60		
Diphenyl Oxide	CR	CR60		
Dishwash Detergents	R	R	CR	
Disodium Phosphate	R	R		
Disodium Sulphate	R	R		
Dispersions	R			
Dodecylbenzene Sulfonic Acid	R	CR60		
Dop (Diethylhexyl Phthalate)	R	CR60		
Edible Oil	R			
Electrolyte 10%	R	R	R	
Elementine normal conc.	R	R	R	R
Emulsions, Photographic	R	R	R	
Engine Oils	R	CR60		
Ephetin	R	R		
Epichlorohydrin	R	R	CR	
Epoxy Ethane	see Ethylene Oxide			
Epsom Salts	R	R		
Essential Oils	CR60	NR		
Esteric Oils	CR	CR	CR	
Ethanal	see Acetaldehyde			
Ethandiol	see Ethylene Glycol			
Ethane	R	R		
Ethane Diamine	see Ethylene Diamine			
Ethanol	see Ethyl Alcohol			
Ethanolamine	R	R	CR	
Ethers	CR60	CR20	NR	
Ethoxyethane	see Ethyl Ether			
Ethyl Acetate	R	CR	CR60	
Ethyl Alcohol	R	R	R	CR
Denaturated with 2% Toluol plus Acetic Acid, quality use	R			
Ethyl Benzene	CR20	NR		
Ethyl Benzoate	CR			
Ethyl Carbitol				CR
Ethyl Cellulose				CR
Ethyl Chloride	CR60	NR		
Ethyl Dibromide	CR60	NR		
Ethyl Ether	CR60	CR20	NR	
Ethyl Formate				CR
Ethyl Glycol				CR

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Ethyl Methyl Ketone	see Butanone			
Ethyl Oxalate	R	R		R
Ethyl Pentachloro Benzene	NR			
Ethyl Salicylate	CR			
Ethyl Silicate	R	R		R
Ethyl Valerate	R			
Ethylamine	R	R		R
Ethylene	R	CR		
Ethylene Chlorhydrin	NR			
Ethylene Chloride	NR			
Ethylene Diamine	R	R		
Ethylene Diamine Tetraacetic Acid	R	R		
Ethylene Dichloride	CR20	NR		
Ethylene Glycol 100% trading quality	R	R	R	CR NR
Ethylene Glycol Monoethyl Ether	R			
Ethylene Oxide, gaseous	R	R		
Ethylene Oxide, liquid	NR			
Ethylene Trichloride	CR20			
Ethylhexyl Alcohol	R	CR		
"Eugenol"	CR			
Euron B	CR	CR		
Euron G	R	R		
Fatty Acid	R	CR		CR60
Fatty Acid Amides	R	CR60		
Fatty Alcohols	R	CR60		
Fatty Oils	R	CR60		
Ferric Chloride	see Iron Chloride			
Ferric Nitrate	see Iron Nitrate			
Ferrous Ammonium Citrate	R	CR		
Ferrous Chloride	R	CR		
Ferrous Sulphate Fe SO3	R	R		
Fertilizer Salts	R	R	R	CR
Fir Wool Oil	R	CR60		
Fish Oil	R	R		R
Fish Solubles	CR			
Fluoboric Acid	R	CR		
Fluorbenzene	NR			
Fluorides	R	R		R
Fluorine, liquid	CR60			
Fluorine (solution)	NR			
Fluosilicic Acid 25%	R	CR60		
Formaldehyde 40%	R	R		
Formaldehyde, diluted	R	R		R
Formamide	R	R		R
Formic Acid	R	R		CR
Freon 12	CR60	NR		
Freon 13	R	R		R
Freon 21	NR			
Freon 22	R	R		R
Freon 113	R			
Freon 114	R	R		R
Frigen®	CR60	NR		
Fructose	R	R		
Fruit Juice	R	R		R
Fruit Mass (fruit pulp)	R	R		R
Fruit Sugar	R			
Fuel Oils	R	CR20		

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Fuming Sulphuric Acid	see Oleum			
Furan	CR20			
Furfural	R	CR60		NR
Furfural Alcohol	R	CR		
Gallic Acid	R	R		
Gas Liquor	R	R		
Gas, Natural	see Natural Gas			
Gases, containing				
Carbon Dioxide,				
Carbon Acid all conc.	R	R	R	R
Chlorine all conc.	R	R	R	CR
Fluorine traces	R	R	R	NR
Gases, containing				
Nitrous Oxide traces	R	R	R	NR
Oleum, low conc.	NR			
Sulphur Dioxide 50%	R	R		
Sulphur Dioxide, low conc. A		R	R	CR
Sulphuric Acid, all conc.	R	R	R	
Gases -	See "Waste Gases with..."			
Gasoline-Benzene mixture 80/20 B				CR60
Gasoline, Leaded	R			
Gasoline, pure, 100 Octane	CR	CR60		
Gasoline, Sour	R			
Gasoline, Unleaded	R			
Gelatine	R	R		R
Genantin	R	R		
Gin	R	R		
Glaubers Salt	R	R		
Glucose	see Dextrose			
Glycerine Chlorhydrin	R	R		R
Glycerine, Glycerol	R	R		R
Glycerol Chloro Hydrin	R	R		
Glycine	see Glycol			
Glycois	R	R		
Glycol 10%	R	R		
Glycol Dichloride	see Ethylene Chloride			
Glycol Ester	R	R		R
Glycolic Acid 37%	R	CR		
Glycolic Acid Butyl Ester	R	R		
Glystantin®	R	R		
Grape Juice	R	R		
Grape Sugar	R	R		
Grapefruit Juice	R	R		
Grease	R			
Grisiron 8302	CR	CR		
Grisiron 8702	R	R		
Hair Oil/Tonic Oil	R	R		
Halothane	CR60	CR20		
Hand Lotions	R	R		
Heating Oil, Barrel Oil	R			
Heavy Emulsion	see Barium Carbonate			
Heavy Oil				CR
Heptane	CR	CR20		
Hexachlorobenzene	R	CR		
Hexadecylalcohol	R	R		
Hexane	CR60	CR20		
Hexane Triol	R	R		
Hexyl Alcohol	CR20			

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Honey	R			
Household Cleaners	R	CR		
Hydrobromic Acid 20%	R	R		
Hydrobromic Acid 50%	R	R		
Hydrochloric Acid 10%	R	R	R	NR
Hydrochloric Acid 20%	R	R	CR	NR
Hydrochloric Acid •30%	R	R	R	NR
Hydrochloric Acid •30%	R		CR	NR
Hydrochloric dry gas	R			
Hydrocyanic Acid	see Hydrogen Cyanide			
Hydrocyanic Acid 10%	R	CR60		
Hydrofluoric Acid 20%	R	CR60		
Hydrofluoric Acid 50%	R	CR60		
Hydrofluoric Acid 75%, HF	R	CR60		
Hydrofluosilicic Acid	R	R		
Hydrogen	R	R	R	
Hydrogen Bromide	R	R	R	
Hydrogen Chloride gas, dry and moist	R	R	R	
Hydrogen Cyanide	R	R	R	
Hydrogen Fluoride 40%	R	R		
Hydrogen Fluoride 70%	R			
Hydrogen Peroxide 30%	R	R	R	
Hydrogen Peroxide 50%	CR			
Hydrogen Peroxide 90%	CR60			
Hydrogen Peroxide 100%	R	NR		
Hydrogen Phosphide	R			
Hydrogen Sulphide, H	R			
Hydrogen Sulphide (Aq. Sol.)	R	R		
Hydrogen Sulphide, dry	R	R	R	
Hydroquinone	R	R		
Hydrosulphite	R	R		
Hydroxylamine Sulphate	R	R		
Hypochlorous Acid	R	R		
Hydraulic Fluids	R	CR		
Hyrazine Hydrate	R	R		
Igepal	R	R	R	
Ink	R	R	R	
Iodine	R		NR	
Iodine, alcoholic sol.	CR			
Iodine ink	R			
Iodine-Potassium Iodide, 3%	R	R		
Iodine Solution	NR			
Iodine, Tincture of	R	CR60		
Iron (II) Chloride	R	R	R	
Iron (II) Sulphate	R	R	R	
Iron (III) Chloride	R	R	R	R
Iron (III) Nitrate	R	R	R	
Iron (III) Sulphate	R	R	R	
Isobutyl Alcohol	R	R		
Isooctane	R	CR		
Isopropanol	R	R		
Isopropyl Acetate	R	CR60		
Isopropyl Ether	CR20	NR		
Jams	R	R		
Kerosene	CR	CR60		
Kerosine	CR	CR60		
Ketones	CR	CR20		

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Labarraques Solution	CR20	NR		
Lacquer	NR			
Lactic Acid 90%	R	R	R	
Lactose	R	R		
Lanolin	R	R	R	
Latex	R			
Lauryl Alcohol	CR			
Lavender Oil				CR
Lead Acetate	R	R	R	CR
Lead Arsenate	R			
Lead Nitrate	R	R	R	
Lead Sulphamate	R	R	R	
Lemon Juice	R	R		
Lemon Oil	CR	NR		
Lime	R	R		
Lime Chloride	R	R		
Lime Juice	CR	CR		
Lime Water	R	R		
Linseed Oil	R	CR	CR60	
Liquor, Trading Quality	CR60	NR		
Lithium Bromide	R	R		
LPG	R	R		
Lubricating Oils	R	CR60		
Machine Oils	R	CR		
Magnesium Carbonate	R	R	R	
Magnesium Chloride	R	R	R	
Magnesium Fluosilicate	R	R		
Magnesium Hydroxide	R	R	R	
Magnesium Iodine	R	R		
Magnesium Nitrate	R	R	R	
Magnesium Salts	R	R		
Magnesium Sulphate	R	R	R	R
Maleic Acid	R	R	R	R
Malic Acid	R	R		
Manganese Sulphate	R	R	R	
Manure, liquid	R	R		
Margarine	CR	CR60		
Marmelade	R	R	R	
Masa	R	R		
Mascara	R	R	R	
Mash	R	R		
Mayonnaise	R			
Melase spices, industrial conc.	R	R	R	
Melase, industrial conc.	R	R	R	R
Menthanol	see Menthol			
Menthol	R	CR60		
Mercuric Chloride	R	CR		
Mercuric Cyanide	CR	CR		
Mercurochrome	R	R		
Mercurous Nitrate	CR	CR		
Mercury	R	R	R	
Mercury Salts	R	R	R	
Mesityl Oxide				CR
Metallic Mordants	R	R		
Methacrylate	R	R		
Methacrylic Acid	R	R		
Methane				CR
Methane Amide	see Formamide			

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Methanol	see Methyl Alcohol			
Methoxy Butanol	R	R	R	
Methoxybutyl Alcohol	R	CR		
Methyl-2-Pentanone (4-)	R	R		
Methyl Acetate			CR	
Methyl Alcohol	R	R	R	
Methyl Amine, 32%	R			
Methyl Bromide	see Bromethane			
Methyl Butyl Ketone	R	R	R	
Methyl Cellulose Solvent	R			
Methyl Chloride	CR20	NR		
Methyl Ethyl Ketone	CR	CR20		
Methyl Formate			CR	
Methyl Glycol	R	R	R	
Methyl Isobutyl Ketone	R	CR60		
Methyl Methacrylate	R	R	CR	
Methyl n-Propyl Ketone	R	CR		
Methyl Oleate	R	R	R	
Methyl Phenol	see Cresol			
Methyl Pyrrolidone	R	R		
Methyl Salicate	CR			
Methyl Salicylate	R	CR		
Methyl Sulphate	R	R		
Methyl Sulphuric Acid up to 50%	CR	CR		
Methylbenzene	CR20	NR		
Methylcyclohexane	CR60	CR20		
Methylene Chloride	CR60	NR		
Milk	R	R	R	
Mineral Oils	CR	NR		
Mineral Spirits	R	CR60		
Mineral Water	R	R	R	
Molasses	R	R		
Mold Release	R	R		
Monochloride Acetic Acid	R	R	R	
Monochloride Acetic Acid Ethylester	R	R	R	
Monochloride Acetic Acid Methyl ester	R	R	R	
Monochloro Benzene	CR20			
Monoethanolamine	R			
Monoethyl Ether	R	R	R	
Monomethyl Aniline	R	R	R	
Morpholine	R	R		
Motor Oil			CR60	
Mowilth	R	R		
Mustard	R	CR		
Nafta	CR	NR		
Naphthalene, Naphthaline	R	CR60		
Natural gas	R	R		
Nickel	R			
Nickel Chloride	R	CR		
Nickel Nitrate	R	CR		
Nickel Salts	R	R		
Nickel Sulphate	R	CR		
Nicotine	R	R		
Nicotine Acid	CR	CR		
Nitric Acid •30%	R	R		
Nitric Acid 30-50%	CR	CR60		
Nitric Acid 40%	CR			
Nitric Acid 70%	CR60			

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Nitric Acid 98%				NR
Nitrobenzene (Oil of Mirbane)	CR60	NR		
Nitrocellulose	R			
Nitroethane	R			NR
Nitrogen	R	R		R
Nitroglycerin	CR	CR20		
Nitromethane	R			NR
Nitrotoluene	R	CR		
Nitrotoluol	R			CR
Nitrous gases, conc.	R			NR
Nonyl Alcohol	R	R		
Octane	R	CR		
Octyl Alcohol	R			CR
Octyl Cresol	CR	NR		
Oil	CR60	CR60		
Oil Acid				CR60
Oleic Acid	R	CR60		
Oleic Acid (Red Oil)	NR			
Oleum	NR			
Oleum vapore (SO3)	CR			
Olive Oil	R	R		R
Optical Brighteners	R	R		
Orange Extract	R	R		
Ortho-Boric Acid	see Boric Acid			
Oxalic Acid	R	CR		
Oxyacetic Acid	see Glycolic Acid			
Oxybensole	see Phenol			
Oxydiethanole	see Diethylene Glycol			
Oxygen	R	R		
Oxypropionic Acid	see Lactic Acid			
Oxyrane	see Ethylene Oxide			
I-Oxytoluol	see Benzyl Alcohol			
m-Oxytoluol	see Cresol			
Ozone	CR60			NR
Painting Turpentine	see Thinner			
Palm Kernal Oil	R	R		
Palm Oil	CR	CR		
Palmitic Acid	R	R		CR
Palmityl Alcohol	R	R		
Palmolive Oil	R			
Paraffin	R	CR		CR60
Paraffin emulsion, trading qual.		CR		
Paraffin Oil	R	R		R
Paraformaldehyde	R	R		
Paratoluene Sulpho Chlora	R			
Amide Sodium 1%				
Peanut Butter	CR	CR		
Pentanol	see Amyl Alcohol			
Pentanol Acetate	see Amyl Acetate			
Pepper	CR	CR		
Peppermint Oil	CR	CR20		
Perchloric Acid 10%	R	R		
Perchloric Acid 20%	R	R		R
Perchloric Acid 50%	R	CR		CR60
Perchloric Acid 70%	R	CR20		
Perchloro Ethylene	NR			
Perfumes	CR60	NR		
Petrol Ether				CR60

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Petroleum	R	CR	CR60	
Petroleum Ether	R	CR20		
Petroleum Jelly	CR	CR		
Petroleum Spirits	CR60	CR20		
Phenol up to 90%	R	R		NR
Phenolic Resins	R	R		
Phenols 100% (Carbolic Acid)	CR20			
Phenyl Alcohol	see Benzyl Alcohol			
Phenyl Ethane	see Ethyl Benzene			
Phenyl Ethyl Alcohol	R	R		
Phenyl Hydrazine	CR60	CR20		
Phenyl Hydrazine Hydrochloride	R	NR		
Phenyl Methane	see Toluol			
Phenyl Methyl Ether	see Cyclohexanone			
Phenyl Sulfonate	R	R		
Phosgene, gas	NR			
Phosphates	R	R	R	
Phosphoric Acid 80%	R	R	R	NR
Phosphoric Acid 95%	R	R		
Phosphorus Oxychloride	R	CR	CR	
Phosphorus Pentoxide	R	R	R	
Phosphorus Trichloride	R	CR		
Phosphorus Yellow	R			
Photographic Developer	R	R		
Photographic solution, Fixer	R	R	R	
Phthalic Acid 50%	R	R	R	
Phthalic Acid Ester	R	CR60		
Phthalic Anhydride	CR	CR		
Pickling Baths	CR	CR60		
Picric Acid 1%	R		CR	
Pine Oil	CR	CR20		
Pineapple Juice	R	R		
Pinene			CR	
Plasticizers of Polyester	R	CR		
Plating Solutions, Brass	R	CR		
Plating Solutions, Cadmium	R	CR		
Plating Solutions, Copper	R	CR		
Plating Solutions, Gold	R	CR		
Plating Solutions, Indium	R	CR		
Plating Solutions, Iron	R	CR		
Plating Solutions, Lead	R	CR		
Plating Solutions, Nickel	R	CR		
Plating Solutions, Rhodium	R	CR		
Plating Solutions, Silver	R	CR		
Plating Solutions, Tin	R	CR		
Plating Solutions, Zinc	R	CR		
Polyesters (Resins)	CR60	NR		
Polyglycols	R	R		
Polysolvan O	R	R		
Potash Alum	R	R		
Potassium Acetate			CR	
Potassium Bicarbonate	R	CR		
Potassium Bichromate 40%	see Potassium Dichromate			
Potassium Bisulfate	R	R		
Potassium Borate 1%	R	R	R	
Potassium Bromate	R	R	R	
Potassium Bromide	R	R	R	
Potassium Carbonate	R	R	R	

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Potassium Chlorate	R	R	R	
Potassium Chloride	R	R	R	
Potassium Chromate	R	R	R	
Potassium Chromium Sulphate	R	R	R	CR
Potassium Cupro Cyanide	R	R	R	
Potassium Cyanide	R	R	R	
Potassium Dichromate 40%	R	R	R	
Potassium Ferricyanide	R	R	R	CR
Potassium Ferrocyanide	R	CR		
Potassium Fluoride	R	R	R	
Potassium Hydrogen Carbonate	R	R	R	
Potassium Hydrogen Sulphate	R	R	R	
Potassium Hydrogen Sulphite				
Potassium Hydrogen solution	R	R	R	
Potassium Hydroxide 50%	R	R	R	NR
Potassium Hydroxide 60%	R	R	CR	
Potassium Hypochlorite, solution	R		CR	
Potassium Iodide, cold saturated	R	R	R	
Potassium Nitrate	R	R	R	
Potassium Orthophosphate	R	R	R	
Potassium Perborate	R	R	R	
Potassium Perchlorate 1%	R	R	R	R
Potassium Perchlorate 10%	R			
Potassium Permanganate 18%	R	R	R	
Potassium Persulfate	R			
Potassium Phosphate	R	R	R	
Potassium Salts	R			
Potassium Sulphate	R	R	R	
Potassium Sulphate, cold				
Potassium Sulphate saturated	R	R	R	
Potassium Sulphide	R	R	R	
Potassium Sulphite	R	R		
Potassium Supersulphate	R	R	R	NR
Potassium Tetracyano Cuprate	R	R		
Potassium Thiosulphate	R	R		
Propargyl Alcohol	R			
Propane Acid	see Propionic Acid			
Propane Diol	see Propylene Glycol			
Propane Triol	see Glycerine			
Propane, gas	R	CR		
Propane, liquid	CR			
Propanol	R	R	R	
Propanone	see Acetone			
Propargyl Alcohol	R	CR		
Propene	R	R	R	
Propionic Acid	R	R	R	
Propyl Acetate			CR	
Propyl Alcohol	see Propanol			
Propylene Dichloride	NR			
Propylene Glycol	R	R	R	
Propylene Oxide	R	R		
Prune Juice	R			
Pseudo Cumol/Pseudo Cumene	CR	CR		
Pyridine	R	CR	CR60	
Pyrol			CR	
Quinine	R	R		
Rayon Coagulating Bath	R	CR		
Resorcinol	R	CR		



Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Ricine Oil	R		CR	
Rinser Loosener	R	R	R	
Road Tar	NR			
Roasting Gases	R	R		
Rouge	R	R		
Rubbers Dispersions/Latex	R	R		
Sagrotan	R	CR		
Salicylic Acid	R	R	R	
Salicylic Acid Methyl Ester	R	CR		
Sauerkraut	R	R		
Sea Water	R	R		
Selenic Acid	R	R		
Shampoos, Shaving Lotion	R	R		
Shortening	R	CR		
Silicic Acid	R	R		
Silicone Fats	R	R	R	
Silicone Oils	R	R	R	
Silver Nitrate •80%	R	R	R	CR
Silver Salts, cold saturated	R	R	R	
Soap	R	R	R	
Soap Loosener	R	R	R	
Soap Solution	R	R	R	
Soda	see Sodium Carbonate			
Sodium Acetate	R	R	R	
Sodium Aluminate	R	R	R	
Sodium Aluminium Sulphate	R	R	R	
Sodium Benzoate	R	R	R	
Sodium Benzoate to 36%	R	R	R	
Sodium Bicarbonate	R	R	R	
Sodium Bisulphate	R	R	R	
Sodium Bisulphite	R	R	R	R
Sodium Borate	R	R	R	
Sodium Bromide	R	R	R	
Sodium Carbonate	R	R	R	
Sodium Chlorate	R	R	R	
Sodium Chloride	R	R	R	R
Sodium Chlorite 50%	R			
Sodium Chlorite and Bleach	R		CR	
Sodium Chlorite and Water	R			
Sodium Chromate	R	R		
Sodium Cyanide	R	R	R	
Sodium Dichromate	R	R		
Sodium Dodecylbenzene Sulfonate	R	R		
Sodium Ferricyanide	R	R	R	
Sodium Ferrocyanide	R	R	R	
Sodium Fluoride	R	R	R	
Sodium Hexacyano Ferrate	R	R		
Sodium Hexametaphosphate	R			
Sodium Hydrogen Carbonate	R	R	R	
Sodium Hydrogen Phosphate	R	R	R	
Sodium Hydrogen Sulphite sol.	R	R	R	
Sodium Hydrosulphite 10%	R	R	R	
Sodium Hydroxide 15%	R	R		
Sodium Hydroxide 20%	R	R		
Sodium Hydroxide 30%	R	R		
Sodium Hydroxide 50%	R	R		
Sodium Hydroxide 70%	R	R		
Sodium Hydroxide Conc. (Caustic Soda)	R	R		

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Sodium Hypochlorite 12%	CR		CR20	
Sodium Hypochlorite Solution	CR			
Sodium Metaphosphate	R	R	R	
Sodium Nitrate	R	R	R	
Sodium Nitrite	R	R	R	
Sodium Perborate	R		CR60	
Sodium Perchlorate	R	R		
Sodium Peroxide 10%	R	R	R	
Sodium Phosphate	R	R	R	
Sodium Polyacrylate (GR 894)	R	R	R	
Sodium Silicate	R	R	R	
Sodium Sulphate	R	R	R	
Sodium Sulphide	R	R	R	
Sodium Sulphite	R	R	R	
Sodium Tetraborate	R	R	R	
Sodium Thiosulphate	R	R	R	
Soya Oil	R	CR		
Spermaceti	R	CR		
Spindle Oil	CR60	CR20		
Spinning Oil	R			CR
Spinning-Bath Oil containing Carbon Disulphide 0.01 %	R	R		
Spinning-Bath Oil containing Carbon Disulphide 0.07 %	R	R		
Spot Solvents	R	R	R	
Stain Removers	CR60	CR20		
Stannic Chloride	R	R		
Stannic Salts	R			
Stannous Chloride	R	R		
Starch	R	R	R	
Starch Syrup	R	R	R	R
Steam	R	R	R	
Stearic Acid	R	R	CR	
Styrene	CR60	NR		
Succinic Acid	R	R		
Sucrose Solution	R	R	R	
Sugar	R	R		
Sulfuric Acid 98%	NR			
Sulphates	R	R		
Sulphur	R	R	R	
Sulphur Dioxide dry	R	R	R	CR
wet, in water solution	R	R	R	
Sulphur Solution	R			
Sulphur Trioxide	NR			
Sulphuric Acid •50%	R	R	R	
Sulphuric Acid 70%	R		CR60	
Sulphuric Acid 80-90%	R	CR60		
Sulphuric Acid 96%				CR60
Sulphuric Acid 98%	NR			
Sulphuric Ether	CR	CR60		
Sulphurous Acid	R	R		
Sulphuryl Chloride	CR			
Superchloric Acid	see Perchloric Acid			
Synthetic Washing Powder, home quality	R	R	R	
Tallow	R	CR		
Tannic Acid	R	R		
Tannin	see Ascorbic Acid			

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Tar	NR			
Tartaric Acid (Dihydrxy Succinic Acid)	R	R		
Tea	CR	CR		
Tertiary Butyl Alcohol	R	R	R	
Tetrabromo Ethane	CR20	NR		
Tetrachloro Ethane	CR20	NR		
Tetraethyl Lead	R			
Tetrahydro Furane	NR			
Tetrahydro Furfuryl Alcohol	R			
Tetrahydro Naphtalene	CR	NR		
Tetraline	see Tetrahydro Naphtalene			
Tetramethylene Oxide	see Tetrahydro Furane			
Tin Chloride	R	R		
Tin Salts	R	R	R	
Thinner	CR20			
Thioglycolic Acid	R	R		
Thionyl Chloride	CR20	NR		
Thiophene	CR20	NR		
Titanium Tetrachloride	NR			
Toluene	CR20	NR		
Tomato Juice	R	R		
Transformer Oils	R	CR60	CR20	
Tri	see Trichloro Ethylene			
Tributyle Phosphate	R	R		
Tributro Ethyl Phosphate			CR	
Trichloro Acetic Acid	R		CR	
Trichloro Acetic Acid 50%	R	CR60		
Trichloro Benzene	NR			
Trichloro Ethane	CR60		NR	
Trichloro Ethylene	NR			
Trichloro Methane	see Chloroform			
Tricresyl Phosphate	R	R		
Triethanolamine	R	CR		
Triethylene Glycol	R	R		
Trilom, trade quality	R	R	R	
Trimethyl Borate	NR			
Trimethylbenzene	see Pseudocumul			
Trimethylol Propane	R	R		
Trinitro Phenol	see Picric Acid			
Trinitro Toluene	NR			
Trioctyl Phosphate	R	CR		
Trisodium Phosphate	R	CR	CR60	
Trybutyl Phosphate	R	R	R	
Turbine Oil			CR	
Turpentine	CR20	NR		
Tutogen U	R	R		
Tween 20	CR	NR		
Tween 80	CR	NR		
Urea	R	CR		
Uric Acid	R	R		
Uric Compounds	see Carbamide			
Urine	R	R		
Urine, normal conc.	R	R	R	
Vanille Extract	R	CR		
Vaseline	R	CR	CR60	
Vaseline Oil	R		CR	
Vegetable Dyes	R	R		
Vegetable Oils	CR	CR	CR	

Compound	Chemical Resistance			
	40° C	60° C	80° C	100° C
Vinegar	R	R	R	
Vinegar Acid Anhydride	R	R	CR	NR
Vinegar Acid Butyl Ester	see Butyl Acetate			
Vinegar Acid Ethyl Ester	see Ethyl Acetate			
Vinegar Ester	see Ethyl Acetate			
Vinegar, trading quality	R	R	R	
Vinyl Acetate	R	R		
Vinyl Chloride	R	R	R	
Vinyl Cyanide	see Acryl Nitrite			
Viscose Spinning Solution	R	R		
Vitamine C	R	R		
Walnut Oil	R	CR		
Wastegases with Acid	R	R		
Wastegases with Carbon Monoxide	R	R		
Wastegases with HCL	R	R		
Wastegases with H2SO4	R	R		
Wastegases with low sodium dioxide	R	R		
Wastegases with traces of Hydrogen Fluoride	R	R		
Wastegases with traces of Nitrosyl Sulfuric Acid	R	R		
Water	R	R	R	R
Water Acid Mine	R			
Water Deionized	R			
Water Distilled	R			
Waterglass	R			
Waxes	R	CR60		
Wetting Agents	R	CR		
Whey	R	R		
Whisky	see Ethyl Alcohol			
Whitener	see Sodium Hypochlorite			
Wine Vinegar	see Vinegar			
Wine, red and white	R	R	R	
Wohlstone Acid	R	R	R	
Wood Glue, type Polyvinyl Acetate	CR			
Wood Stains	R	CR60		
Wool Fat	see Lanolin			
Xylol	CR60		NR	
Yeast	R	R	R	
Zinc Bromide	R	R		
Zinc (II) Chloride	R	R	R	CR
Zinc Carbonate	R	R	R	
Zinc Hydrate	R	R	R	
Zinc Oxide	R	R	R	
Zinc Salts	R			
Zinc Sludge	R	R		
Zinc Stearate	R	R		
Zinc Sulphate	R	R	R	