

# PVC chemical resistance chart

Chemical resistance data below is based on total immersion of the PVC in the chemical named. Corrosion of the PVC due to fumes from the chemicals in the atmosphere is much less pronounced in most cases.

PVC Chemical Resistance Guidelines		Chemical & Solutions		21°C	60°C
(Purchaser should test for own application).					
R = Resistant					
NR = Not Resistant (not recommended)					
Chemical & Solutions	21°C	60°C	Chemical & Solutions	21°C	60°C
Acetaldehyde	NR	NR	"Butane, Type II"	NR	NR
Acetic Acid 20%	R	R	"Butanol, Primary, Type I"	R	R
Acetic Acid 80%	R	NR	"Butanol, Primary, Type II"	NR	NR
"Acetic acid, glacial"	R	NR	"Butanol, Secondary, Type I"	R	NR
Acetic Anhydride	R	R	"Butanol, Secondary, Type II"	NR	NR
Acetone	NR	NR	"Butyl Acetate, Type I"	R	NR
Acetylene	R	R	"Butyl Acetate, Type II"	NR	NR
Acetyl Nitrile	NR	NR	"Butyl Alcohol, Type II"	R	NR
Acylic Acid Ethyl Ether	NR	NR	"Butyl Mercaptan, Type II"	NR	NR
Adipic Acid	R	R	Butyl Phenol	R	NR
Aqua Regia	R	NR	"Butynedid, Type I"	R	NR
Ally Chloride	NR	NR	"Butynediol, Type II"	NR	NR
"Allyl Alcohol, 96% Type I"	R	NR	"Butyric Acid, Type I"	R	NR
"Allyl alcohol, 96% Type II"	NR	NR	"Butyric Acid, Type II"	NR	NR
Aluminium Chloride	R	R	Calcium Bisulphide	R	R
Aluminium Sulphate	R	R	Calcium Carbonate	R	R
Alums	R	R	Calcium Chloride	R	R
Ammonia (liquid)	NR	NR	Calcium Hydroxide	R	R
Ammonia Carbonate	R	R	Calcium Nitrate	R	R
Ammonia Gas	R	R	Calcium Sulphate	R	R
Ammonium Alum	R	R	Cane Sugar Liquors	R	R
Ammonium Bisulfide	R	R	Carbon Disulphide	NR	NR
Ammonium Chloride	R	R	Carbon Monoxide	R	R
"Ammonium Fluoride, 25% Type I"	R	NR	"Carbon Tetrachloride, Type I"	R	NR
"Ammonium Fluoride, 25% Type II"	NR	NR	"Carbon Tetrachloride, Type II"	NR	NR
Ammonium Hydroxide	R	R	Carbonic Acid	R	R
Ammonium Phosphate	R	R	Castor Oil	R	R
Ammonium Sulphate	R	R	Caustic Potash	R	R
Ammonium Sulphide	R	R	Caustic Soda	R	R
Ammonium Thiocyanate	R	R	Chlorinated Solvents	NR	NR
Amyl Acetate	NR	NR	Chlorine Water	R	R
"Amyl Alcohol, Type I"	R	NR	"Chlorine (Gas Liquid)"	NR	NR
"Amyl Alcohol, Type II"	NR	NR	Chloroform	NR	NR
Amyl Chloride	NR	NR	Chloropicrin	NR	NR
Aniline	NR	NR	Chlorosulfonic Acid	R	NR
Aniline Chlorohydrate	NR	NR	Chlorobenzene	NR	NR
Aniline Hydrochloride	NR	NR	"Chromoic/Nitric Acid, Type I"	R	R
Aromatic Hydrocarbons	NR	NR	"15%-35%, Type II"	NR	NR
Barium Carbonate	R	R	Chromic Acid 10%	R	R
Barium Chloride	R	R	Chromic Acid 50%	NR	NR
Barium Hydroxide	R	R	Citric Acid	R	R
Barium Sulphate	R	R	Coke Oven Gas	R	R
Barium Sulphide	R	R	Copper Chloride	R	R
Beer	R	R	Copper Cyanide	R	R
Beef Sugar Liquids	R	R	Copper Nitrate	R	R
"Benzaldehyde, 10%, Type I"	R	NR	Copper Sulphate	R	R
"Benzaldehyde, 10%, Type II"	NR	NR	Corn Syrup	R	R
"Benzaldehyde, above 10%"	NR	NR	Cottonseed Oil	R	R
Benzene	NR	NR	Creosol	NR	NR
Benzoic Acid	NR	NR	Crotonaldehyde	NR	NR
Bismuth Carbonate	R	R	Cyclohexane	NR	NR
Black Liquor	R	R	Cyclohexanol	NR	NR
Bleach 12.5% Active Cl	R	NR	Cyclohexanone	NR	NR
Borax	R	R	Detergents	R	R
Boric Acid	R	R	Dextrose	R	R
Bromic Acid	R	R	Diacetone Alcohol	R	NR
"Bromine, Liquid"	NR	NR	Dibutoxy Ethyl Phthalate	NR	NR
"Bromine Water, Type I"	R	R	Dibutyl Phthalate	NR	NR
"Bromine Water, Type II"	NR	NR	Dibutyl Sebacate	R	NR
Bromobenzene	NR	NR	Dichlorobenzene	NR	NR
Bromotoluene	NR	NR	Diglycolic Acid	R	R
"Butadiene, Type I"	R	R	Dimethyl Hydrazine	NR	NR
"Butadiene, Type II"	NR	NR	"Dimethylamine, Type I"	R	NR
"Butane, Type I"	R	R	"Dimethylamine, Type II"	NR	NR
			Diocetylphthalate	NR	NR
			"1, 4-Dioxane"	NR	NR
			Disodium Phosphate	R	R
			Distilled Water	R	R
			Esters	NR	NR
			Ethers	NR	NR
			Ethyl Acetate	NR	NR
			Ethyl Acrylate	NR	NR
			Ethyl Alcohol	R	R

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Chemical & Solutions	21°C	60°C	Chemical & Solutions	21°C	60°C
Ethyl Chloride	NR	NR	Mixed Acids	R	R
Ethyl Chloroacetate	NR	NR	Molasses	R	R
Ethyl Ether	NR	NR	Muriatic Acid	R	R
Ethylene Bromide	NR	NR	"Naphtha, Type I"	R	R
Ethylene Chlorohydrin	NR	NR	"Naphtha, Type II"	R	NR
Ethylene Dichloride	NR	NR	Naphthalene	NR	NR
Ethylene Glycol	R	R	Nickel Chloride	R	R
Ethylene Oxide	NR	NR	Nickel Nitrate	R	R
Fatty Acids	R	R	Nickel Sulphate	R	R
Ferric Acetate	R	NR	Nicotine	R	R
Ferric Chloride	R	R	Nicotine Acid	R	R
Ferrous Chloride	R	R	"Nitric Acid 10%,30%,60%, Type I"	R	R
Ferrous Sulphate	R	R	"Nitric Acid 10%,30%,60%, Type II"	R	NR
Fish Solubles	R	R	"Nitric Acid 68%, Type I"	R	NR
Fluorine (gas wet)	R	R	"Nitric Acid 68%, Type II"	NR	NR
"Fluorine Gas, type I"	R	NR	Nitric Acid Anhydrous	NR	NR
"Fluorine Gas, Type II"	NR	NR	Nitrobenzene	NR	NR
Fluorosilicic Acid	R	R	Nitroglycerine	NR	NR
Formaldehyde Type I	R	R	Nitroglycol	NR	NR
Formaldehyde Type II	NR	NR	Nitrous Oxide	R	NR
Formic Acid	R	NR	Oils and Fats	R	R
"Freon 21,22"	NR	NR	Oleic Acid	R	R
"Freon II, Type II"	NR	NR	Oleum	NR	NR
Fructose	R	R	Oxalic Acid	R	R
Fruit Juice and Pulp	R	R	Palmitic Acid 10%	R	R
Furfural	NR	NR	"Palmitic Acid, 70%, Type I"	R	NR
Gas (Coke Oven)	NR	NR	"Palmitic Acid, 70%, Type II"	NR	NR
Gasoline (Refined)	R	NR	"Peracetic Acid, 40%, Type I"	R	NR
Glucose	R	R	"Peracetic Acid 40%, Type II"	NR	NR
Glycerine	R	R	Perchloric Acid, 10%	R	R
Glycolic Acid	R	R	"Perchloric Acid, 15%, Type I"	R	NR
"Heptane, Type I"	R	R	"Perchloric Acid, 15%, Type II"	NR	NR
"Heptane, Type II"	R	NR	"Perchloric Acid, 70%, Type I"	R	NR
"Hexane, Type I"	R	NR	"Perchloric Acid, 70%, Type II"	NR	NR
"Hexane, Type II"	NR	NR	Petroleum Oils (Sour)	R	NR
Hydrazine (Anhydrous)97%	NR	NR	Phenol	NR	NR
Hydrochloric Acid	NR	NR	Phenylhydrazine Hydrochloride	NR	NR
Hydrocyanic Acid 50%	R	R	Phosgene Gas	R	R
Hydrofluoric Acid 50%	NR	NR	"Phosgene, Liquid"	NR	NR
"Hydrogen Phosphide, Type II"	NR	NR	Phosphoric Acid 25%	R	R
Hydrogen Sulphide (Dry)	R	R	Phosphoric Acid 50%	R	R
Hydroquinone	R	R	Phosphorous Trichloride	NR	NR
Hypochlorous Acid	R	R	"Phosphorus (Yellow), Type I"	R	NR
Iodine	NR	NR	"Phosphorus (Yellow), Type II"	R	NR
Iodine Solution	NR	NR	"Phosphorus Pentoxide, Type I"	R	NR
Iodine Tincture	R	R	"Phosphorus Pentoxide, Type II"	NR	NR
Kerosene	R	R	Photographic Solutions	R	R
Ketones	NR	NR	Phthalic Anhydride	R	R
"Lauryl Chloride, Type I"	R	R	Picric Acid	NR	NR
"Lauryl Chloride, Type II"	R	NR	Plating Solutions	R	R
Lead Chloride	R	R	"Potassium Amyl Xanthate, Type I"	R	NR
Lead Nitrate	R	R	"Potassium Amyl Xanthate, Type II"	NR	NR
Lead Sulphate	R	R	Potassium Carbonate	R	R
"Linoleic Oil, Type I"	R	R	Potassium Chloride	R	R
"Linoleic Oil, Type II"	R	NR	Potassium Cyanide	R	R
Linseed Oil	R	R	Potassium Dichromate	R	R
Liquers	NR	NR	"Potassium Ethyl Xanthate, Type I"	R	NR
"Lubricating Oils ASTM#1,2"	R	R	"Potassium Ethyl Xanthate, Type II"	NR	NR
"Lubricating Oils ASTM#3, Type I"	R	R	Potassium Hydroxide	R	R
"Lubricating Oils ASTM#3, Type II"	R	NR	Potassium Nitrate	R	R
Magnesium Carbonate	R	R	Potassium Sulphate	R	R
Magnesium Chloride	R	R	Potassium Permanganate 10%	R	R
Magnesium Sulphate	R	R	"Propargyl Alcohol, Type I"	R	R
Magnesium Nitrate	R	R	"Propargyl Alcohol, Type II"	R	NR
Maleic Acid	R	NR	Proylene Dichloride	NR	NR
Malic Acid	R	R	"Pyridine, Type I"	NR	NR
Mercury	R	R	Pyrogalllic Acid	R	NR
Mercuric Chloride	R	R	Sea Water	R	R
Methyl Alcohol	R	R	Silver Cyanide	R	R
Methyl Cellosolve	NR	NR	Silver Nitrate	R	R
Methyl Chloride	NR	NR	Silver Plating Solutions	R	R
Methyl Ethyl Ketone	NR	NR	Soaps	R	R
Methyl Methacrylate	R	NR	Sodium Acetate	R	R
Methyl Salicylate	R	NR	Sodium Benzoate	R	R
Methyl Sulphate	R	NR	Sodium Bicarbonate	R	R
Methylamine	NR	NR	Sodium Bisulphite	R	R
Methylene Bromide	NR	NR	Sodium Chloride	R	R
Methylene Chlorobromide	NR	NR	Sodium Chlorite	NR	NR
Methylene Chloride	NR	NR	Sodium Cyanide	R	R
Methylene Iodine	NR	NR	Sodium Dichromate	R	R
Methylene Iso-Butyl Ketone	NR	NR	Sodium Ferrocyanide	R	R
Milk	R	R	Sodium Hydroxide	R	R
Mineral Oils	R	R	Sodium Hypochlorite 12.5% C1	R	R

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Chemical & Solutions	21°C	60°C	Chemical & Solutions	21°C	60°C
Sodium Sulphate	R	R	Thionyl Chloride	NR	NR
Sodium Sulphide	R	R	Titanium Tetrachloride	R	NR
Sodium Sulphite	R	R	Toluene	NR	NR
Sodium Thiosulphate	R	R	Tributyl Citrate	R	NR
Sour Crude Oil	R	R	Tributyl Phosphate	NR	NR
Stannic Chloride	R	R	Trichloroethylene	NR	NR
Stannous Chloride	R	R	Triethanolamine	R	R
Starch	R	R	Trilonex	NR	NR
Stearic Acid	R	R	"Trimethyl Propane, Type I"	R	R
Stoddards Solvent	NR	NR	"Trimethyl Propane, Type II"	R	NR
Succinic Acid	R	R	"Trimethylamine, Type I"	R	NR
Sulphuric/Nitric (50/50)	NR	NR	"Trimethylamine, Type II"	NR	NR
Sulphur Dioxide (Dry)	R	R	Trisodium Phosphate	R	R
"Sulphur Dioxide, (Wet), Type I"	R	NR	Turpentine	R	R
Sulphur Trioxide	R	R	"Turpentine, Type I"	R	R
"Sulphuric Acid, 80%, Type I"	R	R	"Turpentine, Type II"	NR	NR
"Sulphuric Acid, 80%, Type II"	NR	NR	<b>Urea</b>	R	R
"Sulphuric Acid, 85%, Type I"	R	R	Urine	R	R
"Sulphuric Acid, 85%, Type II"	NR	NR	<b>Vaseline</b>	NR	NR
"Sulphuric Acid, 90%, Type I, Grade I"	R	NR	Vegetable Oil	R	R
"Sulphuric Acid, 90%, Type I, Grade II"	NR	NR	Vinegar	R	R
"Sulphuric Acid, 90%, Type II"	NR	NR	Vinyl Acetate	NR	NR
Sulphuric Acid 10%	R	R	<b>Water (Acid Mine Water)</b>	R	R
Sulphuric Acid 70%	R	NR	Water (Fresh)	R	R
Sulphurous Acid	R	R	Water (Salt)	R	R
Tall Oil	R	R	Whiskey	R	R
Tannic Acid	R	R	White Liquor	R	R
Tanning Lotions	R	R	Wines	R	R
Tartaric Acid	R	R	<b>Xylene</b>	NR	NR
"Tetraethyl Lead, Type II"	R	NR	Zinc Chloride	R	R
Tetrahydrofurane	NR	NR	Zinc Chromate	R	R
Tetrahydrofurane	NR	NR	Zinc Nitrate	R	R
			Zinc Sulphate	R	R