

CHEMICAL RESISTANCE CHART

Reagent	ABS	Acetal	HDPE	LDPE	PC	PP	Santoprene	Silicone	Reagent	ABS	Acetal	HDPE	LDPE	PC	PP	Santoprene	Silicone	
Nickel Nitrate	A	-	B	A	D	A2	-	-	- Fluoborate Bath 100°F	-	C	-	-	-	-	A	-	-
Nickel Sulfate	B	A	B	A	A	A	-	A	- Chromium Plating:	-	D	-	-	-	-	A	-	-
Nitrating Acid (<1% Acid)	-	-	-	-	-	C	-	-	- Barrel Chrome Bath 95°F	-	D	-	-	-	-	A	-	-
Nitrating Acid (<15% H ₂ SO ₄)	-	-	-	-	-	C	-	-	- Black Chrome Bath 115°F	-	D	-	-	-	-	A	-	-
Nitrating Acid (>15% H ₂ SO ₄)	-	D	-	-	-	C	-	-	- Chromic-Sulfuric Bath 130°F	-	D	-	-	-	-	A	-	-
Nitrating Acid (<15% HNO ₃)	-	-	-	-	-	C	-	-	- Fluoride Bath 130°F	-	D	-	-	-	-	A	-	-
Nitric Acid (5-10%)	B	D	A	B	A	A ²	D	D	- Fluosilicate Bath 95°F	-	D	-	-	-	-	D	-	-
Nitric Acid (20%)	B	D	B	C	B ¹	B	D	D	- Copper Plating (Cyanide):	-	A	-	-	-	-	A	-	-
Nitric Acid (50%)	C	D	D	B ¹	B	B	D	D	- Cooper Strike Bath 120°F	-	B	-	-	-	-	A	-	-
Nitric Acid (Concentrated)	D	D	D	C ¹	C ¹	D	D	D	- High-Speed Bath 180°F	-	B	-	-	-	-	A	-	-
Nitrobenzene	D	C	D	C ¹	D	B ¹	-	D	- Rochelle Salt Bath 150°F	-	B	-	-	-	-	A	-	-
Nitrogen Fertilizer	-	-	-	-	-	-	-	-	- Copper Plating (Acid):	-	-	-	-	-	-	-	-	-
Nitromethane	D	A	D	A	D	B ²	-	D	- Copper Fluoborate Bath 120°F	-	C	-	-	-	-	A	-	-
Nitrous Acid	D	-	-	-	-	A	-	-	- Copper Sulfate Bath R.T.	-	A	-	-	-	-	A	-	-
Nitrous Oxide	-	-	-	C	-	D	-	-	- Copper Plating (Misc):	-	A	-	-	-	-	A	-	-
Oils:	-	-	-	-	-	-	-	-	- Copper Pyrophosphate	-	D	-	-	-	-	A	-	-
- Aniline	D	D	-	-	-	A	-	D	- Copper (Electroless)	-	-	-	-	-	-	A	-	-
- Anise	-	D	-	-	-	-	-	-	- Gold Plating:	-	-	-	-	-	-	A	-	-
- Bay	-	D	-	-	-	-	-	-	- Acid 75°F	-	-	-	-	-	-	A	-	-
- Bone	-	D	-	-	-	-	-	-	- Cyanide 150°F	-	-	-	-	-	-	A	-	-
- Cinnamon	-	D	D	D	D	D	-	-	- Neutral 75°F	-	-	-	-	-	-	A	-	-
- Citric	D	A	-	A	A	A	-	-	- Indium Sulfamate Plating R.T.	-	-	-	-	-	-	A	-	-
- Clove	-	-	-	-	-	-	-	-	- Castor	A	A	-	-	-	-	A	-	A
- Coconut	A	A	-	A	-	A ¹	-	A	- Iron Plating:	-	-	-	-	-	-	A	-	-
- Cod Liver	A	B	-	-	-	A ¹	-	B	- Ferrous Am Sulfate Bath 150°F	-	-	-	-	-	C	-	-	
- Corn	B	A	-	A	-	A ²	-	A	- Ferrous Chloride Bath 190°F	-	-	-	-	-	A	-	-	
- Cottonseed	A	A	-	A	-	A	-	A	- Ferrous Sulfate Bath 150°F	-	-	-	-	-	A	-	-	
- Creosote	-	D	-	C	-	C	-	D	- Fluoborate Bath 145°F	-	-	-	-	-	A	-	-	
- Crude Oil	A	A	D	-	-	A	-	-	- Sulfamate 140°F	-	-	-	-	-	A	-	-	
- Diesel Fuel (20, 30, 40, 50)	-	D	-	A	-	A ¹	-	D	- Sulfate-Chloride Bath 160°F	-	-	-	-	-	A	-	-	
- Fuel (1, 2, 3, 5A, 5B, 6)	D	D	-	B	B	B	-	C	Plating Solutions, continued	-	-	-	-	-	-	A	-	-
- Ginger	-	A	-	-	-	-	-	-	- Lead Fluoborate Plating	-	-	-	-	-	-	A	-	-
- Hydraulic Oil (Petro)	-	B	-	C	-	D	-	B	- Nickel Plating:	-	-	-	-	-	-	D	-	-
- Hydraulic Oil (Synthetic)	-	-	-	A	-	D	-	B	- Electroless 200°F	-	-	-	-	-	-	A	-	-
- Lemon	C	D	-	-	-	-	-	-	- Fluoborate 100-170°F	-	-	-	-	-	-	A	-	-
- Linseed	-	A	-	A	-	A	-	A	- High-Chloride 130-140°F	-	-	-	-	-	-	A	-	-
- Mineral	A	A	A	B ¹	B	A	-	C	- Watts Type 115-160°F	-	-	-	-	-	-	A	-	-
- Olive	A	A	A	A ¹	A ²	A	-	D	- Rhodium Plating 120°F	-	-	-	-	-	-	A	-	-
- Orange	-	D	C	C ¹	C ¹	A	-	D	- Silver Plating 80-120°F	-	-	-	-	-	-	A	-	-
- Palm	A	A	-	A	-	-	-	-	- Tin-Fluoborate Plating 100°F	-	-	-	-	-	-	A	-	-
- Peanut	-	A	-	A	-	D	-	A	- Tin-Lead Plating 100°F	-	-	-	-	-	-	A	-	-
- Peppermint	D	D	-	-	-	-	-	-	- Zinc Plating:	-	-	-	-	-	-	A	-	-
- Pine	D	A	B	D	A	B	-	D	- Acid Chloride 140°F	-	-	-	-	-	A	-	-	
- Rapeseed	-	A	-	D	-	D	-	D	- Acid Fluoborate Bath R.T.	-	-	-	-	-	A	-	-	
- Rosin	-	-	-	B ²	-	A ²	-	-	- Acid Sulfate Bath 150°F	-	-	-	-	-	A	-	-	
- Sesame Seed	A	D	-	-	-	A	-	-	- Alkaline Cyanide Bath R.T.	-	-	-	-	-	A	-	-	
- Silicone	A	A	A	A	-	A	-	C	Potash (Potassium Carbonate)	A	B	B	A ¹	-	A	-	-	
- Soybean	A	A	-	A ¹	-	A ¹	-	A	Potassium Bicarbonate	A	-	B	A	-	A	-	A ¹	
- Sperm (whale)	A	D	-	-	-	-	-	-	Potassium Bromide	A ¹	A	B	A	A ¹	A	-	A ¹	
- Tanning	-	D	-	-	-	-	-	-	Potassium Chlorate	A	B	B	A ¹	A ¹	A	-	B	
- Transformer	-	A	-	C ¹	-	B	-	B	Potassium Chloride	A	A	A	A ¹	A	A	-	A	
- Turbine	-	A	-	C	C	B ¹	-	D	Potassium Chromate	-	C	-	A	-	A	-	-	
Oleic Acid	D	A	C	C ²	-	B ¹	-	D	Potassium Cyanide Solutions	A	C	-	A	-	A	-	A	
Oleum 25%	-	D	-	D	-	D	-	D	Potassium Dichromate	B ¹	A	B	A	A ¹	A	-	A	
Oleum 100%	D	D	-	D	-	D	-	D	Potassium Ferricyanide	B	B ¹	-	A ²	-	A	-	-	
Oxalic Acid (cold)	A	B	A	A ²	-	A ²	A	B	Potassium Ferrocyanide	-	-	A ¹	-	A	-	-	A	
Ozone	B	C	A	C ¹	A ¹	B	D	A	Potassium Hydroxide (Caustic Potash)	A	A	A	A	D	A	B	C	
Palmitic Acid	A	A	-	-	-	B ¹	A	D	Potassium Hypochlorite	-	-	C ¹	-	-	-	-	-	
Paraffin	A	A	B	B	A ¹	A ¹	-	B	Potassium Iodite	B	-	B	B ¹	-	A ²	-	A	
Pentane	-	B	-	D	A	D	-	B	Potassium Nitrate	B	A	B	A	A ¹	A	-	A	
Perchloric Acid	-	C	D	D	B	C	-	D	Potassium Oxalate	-	-	-	-	-	-	-	-	-
Perchloroethylene	D	B	D	D	D	D	-	D	Potassium Permanganate	B ¹	A	A	A	A ²	A ¹	-	A	
Petrolatum	-	B	-	B	-	D	-	D	Potassium Sulfate	B	B	B	A ²	A ¹	A	-	A	
Petroleum	B	B	D	C ¹	-	B ¹	C	D	Potassium Sulfide	B	-	-	A ²	-	A	-	A	
Phenol (10%)	D	B	D	B	B ¹	B ¹	D	D	Propane (liquefied)	-	A	D	C ¹	A	-	D	D	
Phenol (Carbolic Acid)	D	D	D	D	D	D	B	D	Propylene	B	-	-	-	-	-	-	-	-
Phosphoric Acid (<40%)	B	D	A	A	A	A ²	A	C	Propylene Glycol	B	B	A	B ²	B ¹	A ²	-	A	
Phosphoric Acid (>40%)	C	D	A	B ¹	A	A ²	C	D	Pyridine	-	B	D	B ¹	D	A ²	A	D	
Phosphoric Acid (crude)	C	D	B	B ¹	A	B ²	-	D	Pyrogalllic Acid	-	D	-	-	A	D	-	-	
Phosphoric Acid (molten)	D	D	D	-	-	D	-	-	Resorcinol	A	-	-	B ²	B ¹	A ²	-	A	
Phosphoric Acid Anhydride	-	D	A	-	D	A	-	-	Rosins	-	B	B	B ¹	-	A ²	-	A	
Phosphorus	-	B	-	B	-	A	-	-	Rum	-	A	-	-	-	-	A	-	A
Phosphorus Trichloride	D	D	A	B	C	-	-	-	Rust Inhibitors	-	A	-	-	-	-	A	-	-
Photographic Developer	B	D	-	A	A ²	A	-	B	Salad Dressing	-	A	-	-	-	-	A	-	-
Photographic Solutions	-	D	A	A	A ¹	A ²	-	A	Salicylic Acid	-	A	-	-	-	-	A	-	-
Phthalic Acid	B	C	B	B ²	-	A	-	B ¹	Salt Brine (NaCl saturated)	-	A	A	A ²	A ²	A	A	A ¹	
Phthalic Anhydride	B	C	B	-	A ¹	D	-	D	Sea Water	-	A	A	A ²	A ²	A	A	A ¹	
Picric Acid	A	A	D	A	D	B ¹	D	D	Shellac (Bleached)	-	A	-	A ¹	-	A	-	C	
Plating Solutions	-	-	-	-	-	A	-	-	Shellac (Orange)	-	A	-	A ¹	-	A	-	-	
- Antimony Plating 130°F	-	A	-	-	-	A	-	-	Silicone	D	A	-	-	A ²	A	-	-	
- Arsenic Plating 110°F	-	A	-	-	-	A	-	-	Silver Bromite	-	C	-	A	-	-	-	A	
- Brass Plating:	-	A	-	B	-	A	-	-	Silver Nitrate	B	A	A	A	A ²	A ¹	-	A	
- Regular Brass Bath 100°F	-	A	-	B	-	A	-	-	Soap Solutions	A	A	B	D	A ¹	A	A	-	
- High-Speed Brass Bath 110°F	-	A	-	B	-	A	-	-	Soda Ash (see Sodium Carbonate)	B	A	A	B	A	A	-	A	
- Bronze Plating:	-	A	-	-	-	A	-	-	Sodium Acetate	B	B	A	A	A ¹	A	-	D	
- Cu-Cd Bronze Bath R.T.	-	A	-	-	-	A	-	-	Sodium Aluminite	-	B	-	-	-	-	-	-	
- Cu-Sn Bronze Bath 160°F	-	B	-	-	-	A	-	-	Sodium Benzoate	A	-	B	A ²	A ²	A	-	A	
- Cu-Zn Bronze Bath 100°F	-	A	-	-	-	A	-	-	Sodium Bicarbonate	A	A	A	A ²	A ²	A	-	A	
- Cadmium Plating:	-	A	-	-	-	A	-	-	Sodium Bisulfate	A	B	B	A ²	A ¹	A	-	A	
- Cyanide Bath 90°F	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	

A- No effect

B- Minor effect

C- Moderate effect

D- Severe effect;
not recommended

- No data available

Explanation of
footnotes:

1- Satisfactory to 72 °F (22 °C)

2- Satisfactory to 120 °F (48 °C)

3- Satisfactory to 90 °F (32 °C)

4- Satisfactory to 200 °F (93 °C)