

These ratings are based on information from various sources and should be considered as a general guide. The resistance of materials to chemicals can be affected by temperature, concentration, mixtures of chemicals, and other factors. Ultimately, it is the responsibility of the customer to determine the suitability of the materials used for the specific application.

Chemical Resistance Legend

- A - No Effect – Acceptable
- B - Minor Effect – Acceptable
- C - Moderate Effect – Questionable
- D - Severe effect - Not Recommended
- Not Rated

*Viton® is a registered trademark of DuPont Dow Elastomer

	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Carbon Steel	PVC	Epoxy	Teflon	Titanium	Cast Bronze	Brass	Cast Iron	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Viton(R)*	Buna N	Silicon	Neoprene	Ethylene Propylene	Natural Rubber	
Acetaldehyde	A	A	-	B	C	D	A	A	A	D	-	-	-	A	C	B	A	A	A	A	B	B	D	B	C	
Acetamide	B	A	-	-	C	-	A	-	-	-	-	-	-	-	-	-	-	-	A	A	A	-	A	A	D	
Acetate Solv.	B	A	B	B	A	B	A	A	-	A	C	B	-	A	B	D	-	A	A	D	D	-	D	-	-	
Acetic Acid, Glacial	B	A	A	B	A	C	B	A	A	C	C	D	C	D	B	B	A	A	A	D	D	D	B	C	B	C
Acetic Acid 20%	-	A	-	-	-	B	B	A	A	-	C	-	A	D	-	A	A	-	A	D	C	-	C	-	-	
Acetic Acid 80%	-	A	-	-	-	D	B	A	A	-	C	-	B	D	-	B	-	-	A	D	C	-	D	-	-	
Acetic Acid	B	A	B	B	C	A	A	A	A	C	C	D	A	D	B	A	A	A	A	C	C	-	C	B	C	
Acetic Anhydride	A	A	B	B	D	D	A	A	A	C	D	B	D	D	A	A	A	A	A	D	A	C	B	B	C	
Acetone	A	A	B	A	A	D	B	A	A	A	A	A	D	A	C	B	A	A	A	D	D	B	C	A	D	
Acetyl Chloride	C	A	-	-	-	-	A	A	-	D	-	-	-	-	-	-	A	-	-	-	-	-	-	-	A	D
Acetylene	A	A	A	A	A	B	A	-	-	B	-	A	-	A	-	D	A	A	A	A	A	C	B	A	C	
Acrylonitrile	A	C	-	B	-	-	A	-	-	A	-	C	-	-	-	B	A	A	A	C	D	-	D	D	-	
Aluminum Chloride 20%	D	C	D	B	A	A	A	-	A	D	-	D	A	A	B	A	A	A	A	A	A	-	A	A	A	
Aluminum Chloride	D	C	-	D	B	A	A	A	C	C	-	D	A	D	-	A	A	A	A	A	A	C	A	-	-	
Aluminum Flouride	D	C	D	-	A	A	A	A	D	-	-	-	A	D	B	A	-	A	-	A	A	C	A	-	C	
Aluminum Hydroxide	A	A	A	A	A	A	A	A	-	A	-	D	A	A	-	A	-	A	A	A	A	-	A	-	A	C
Alum Potassium Sulfate (ALUM), 10%	A	-	-	A	A	A	A	A	-	-	-	D	-	A	D	B	A	-	A	A	A	-	A	-	A	A
Alum Potassium Sulfate (ALUM) 100%	D	A	B	B	A	A		A	-	C	-	-	A	D	B	A	-	A	A	A	A	-				
Aluminum Sulfate	C	C	A	A	A	A	A	A	A	C	C	D	A	A	B	A	A	A	A	A	A	-	A	A	A	C
Amines	A	A	-	A	B	C	A	A	B	B	-	A	B	A	-	-	-	A	A	D	D	C	B	B	C	A
Ammonia 10%	-	A	-	-	-	A	B	A	A	-	-	-	A	A	-	A	A	-	A	A	D	-	A	-	-	
Ammonia Anhydrous	B	A	A	B	B	A	A	A	B	D	-	D	A	A	B	A	B	C	A	D	B	B	A	A	D	
Ammonia, Liquids	A	A	A	D	A	A	A	A	-	D	-	A	A	-	D	A	-	A	A	D	B	B	A	A	D	
Ammonia, Nitrate	A	A	A	C	A	B	A	-	-	D	-	-	A	-	-	A	-	A	A	-	A	-	C	-	-	
Ammonium Bifluoride	C	A	-	D	-	A	A	-	-	-	-	-	A	-	-	A	-	-	A	A	A	-	A	-	-	
Ammonium Carbonate	A	A	A	C	B	A	A	A	A	B	-	C	A	A	-	A	-	A	A	B	D	C	A	A	-	
Ammonium Casenite	-	A	-	-	-	-	A	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	A	-	-	
Ammonium Chloride	A	C	A	C	D	A	A	A	A	D	C	D	A	A	B	A	A	A	A	A	A	C	A	A	A	
Ammonium Hydroxide	A	A	A	C	C	A	A	A	A	D	D	A	A	A	B	A	A	A	A	B	B	B	A	A	C	
Ammonium Nitrate	A	A	A	B	D	A	A	A	A	D	D	A	A	D	B	A	A	A	A	A	A	C	A	A	A	
Ammonium Oxalate	A	A	A	-	A	-	A	-	-	-	-	-	-	-	-	-	-	A	-	-	A	-	A	-	-	
Ammonium Persulfate	A	A	A	C	A	A	A	A	A	A	-	D	A	D	-	A	-	A	A	C	A	-	A	A	A	
Ammonium Phosphate, Dibasic	A	A	A	B	D	A	A	A	A	C	-	-	A	A	B	A	-	A	A	A	A	B	A	A	A	
Ammonium Phosphate, Monobasic	A	A	A	B	A	A	A	A	A	D	-	-	A	A	B	A	-	A	A	A	A	B	A	A	A	
Ammonium Phosphate, Tribasic	A	A	A	B	D	A	A	A	A	C	-	C	A	A	B	A	-	A	A	A	A	B	A	A	A	
Ammonium Sulfate	A	B	A	B	C	A	A	A	A	B	C	C	A	D	B	A	A	A	A	D	A	B	A	A	A	
Ammonium Thio-Sulfate	-	A	-	-	A	-	A	-	A	-	-	D	-	-	-	-	-	A	A	-	A	-	A	-	-	
Amyl-Acetate	A	A	C	B	C	D	A	A	A	C	-	-	D	B	D	D	A	A	A	D	D	D	D	A	D	
Amyl Alcohol	A	A	-	B	A	A	A	A	A	A	-	-	C	A	B	A	-	A	A	B	B	D	A	A	C	

	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Carbon Steel	PVC	Epoxy	Teflon	Titanium	Cast Bronze	Brass	Cast Iron	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Viton(R)*	Buna N	Silicon	Neoprene	Ethylene Propylene	Natural Rubber
Amyl Chloride	C	B	-	D	A	D	A	A	-	A	-	-	D	C	D	D	-	A	A	A	D	-	D	D	D
Aniline	A	A	A	C	C	D	A	A	C	C	-	-	D	C	C	B	A	A	A	D	D	C	D	B	D
Anti-Freeze	A	A	-	A	C	A	A	A	-	B	B	B	A	A	B	A	A	A	A	A	A	C	A	A	A
Antimony Plating 130° F	-	A	-	-	-	A	B	A	A	-	-	-	A	D	-	A	-	-	A	A	A	D	A	-	-
Antimony Trichloride	D	D	-	D	-	A	A	A	-	-	-	-	D	D	A	-	-	-	A	-	-	-	C	-	A
Aqua Regia (80%, HCl, 20%, HNO)	D	D	-	D	-	D	D	A	A	D	-	-	D	D	D	C	-	-	D	C	D	C	D	D	D
Arochlor 1248	-	-	-	-	A	-	A	-	-	-	-	-	D	-	-	-	-	A	-	A	D	-	D	B	D
Aromatic Hydrocarbons	-	A	-	A	A	D	A	-	-	A	-	A	D	-	C	-	-	A	-	A	D	-	D	D	D
Arsenic Acid	A	A	-	D	D	A	A	A	-	D	B	D	A	A	B	A	-	A	A	A	A	-	A	-	C
Arsenic Plating 110° F	-	A	-	-	-	A	B	A	A	-	-	-	A	A	-	A	-	-	C	A	A	D	A	-	-
Asphalt	B	A	-	C	B	A	A	-	-	A	-	C	-	A	-	A	A	-	A	A	B	C	B	D	D
Barium Carbonate	A	A	A	B	A	A	A	A	A	B	-	B	A	A	B	A	-	A	A	A	A	-	A	-	A
Barium Chloride	A	A	A	D	C	A	A	A	A	B	-	N	A	B	B	A	A	A	A	A	A	B	A	A	A
Barium Cyanide	-	A	-	-	A	-	A	-	-	C	-	-	-	-	B	-	-	A	-	A	C	-	A	A	-
Barium Hydroxide	C	A	A	D	C	A	A	A	B	B	-	C	A	A	B	A	A	A	A	A	A	C	A	A	A
Barium Nitrate	A	A	-	-	A	B	B	-	A	D	-	A	A	-	-	-	-	A	A	A	A	-	A	A	-
Barium Sulfate	A	A	A	D	C	A	B	A	A	C	-	C	A	A	B	A	A	A	B	A	A	D	A	A	-
Barium Sulfide	A	A	-	D	C	A	A	A	-	C	-	C	A	A	B	A	-	A	A	A	A	C	A	A	A
Beer	A	A	-	A	D	A	A	A	A	A	B	D	A	D	B	D	-	A	A	A	D	C	A	A	A
Beet Sugar Liquids	A	A	-	A	-	A	A	A	-	A	B	A	A	A	-	A	-	A	A	A	A	-	B	A	A
Benzaldehyde	A	A	-	B	A	D	A	A	A	A	-	B	D	C	D	D	A	A	A	D	D	B	D	A	D
Benzene	A	A	A	B	C	D	A	A	A	B	A	B	D	A	D	D	A	A	A	A	D	-	D	D	D
Benzoic Acid	A	A	A	B	-	A	A	A	A	B	-	D	A	D	B	D	-	A	B	A	D	-	D	D	D
Benzol	A	A	-	B	-	D	A	A	A	B	A	-	D	A	-	A	-	A	A	D	D	-	D	-	-
Benzyl Alcohol	A	A	-	B	-	D	A	-	A	A	C	-	A	A	D	A	-	A	A	A	D	-	B	B	D
Borax (Sodium Borate)	A	A	A	C	C	A	A	A	-	A	B	A	A	A	B	A	A	A	A	A	B	C	A	A	C
Boric Acid	A	A	A	B	-	A	A	A	A	B	C	D	A	A	B	A	-	A	A	A	A	-	A	A	A
Brewery Slop	-	A	-	-	-	-	A	-	-	A	-	A	-	-	-	-	-	A	A	A	A	-	A	-	-
Bromine (Wet)	D	D	D	D	D	B	C	A	A	C	-	D	D	D	D	D	D	A	A	A	D	D	D	D	D
Butadiene	A	A	-	A	C	A	A	A	-	C	A	C	-	A	-	-	B	A	A	A	A	-	B	A	-
Butanes	A	A	-	A	C	A	A	A	-	A	A	C	D	A	C	D	A	A	A	A	A	D	B	D	D
Butanol	A	A	-	A	-	-	-	A	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butter	B	A	-	A	-	-	A	-	-	D	-	D	B	-	-	-	-	A	A	A	A	-	B	A	D
Buttermilk	A	A	A	A	-	-	A	A	-	D	-	D	A	A	-	-	-	A	A	A	A	-	A	-	D
Butylene	-	A	-	A	A	B	A	A	-	A	A	A	-	-	-	-	A	A	A	A	B	-	-	D	D
Butyl Acetate	-	C	-	A	A	D	A	A	-	A	-	-	D	-	C	D	A	A	A	D	B	D	D	B	D
Butyl Alcohol	A	A	-	B	C	A	A	A	B	B	C	C	A	A	B	B	A	A	A	A	A	D	A	A	A
Butyric Acid	B	A	A	B	-	B	A	A	A	C	-	D	A	D	-	A	-	A	D	D	D	-	D	B	-
Calcium Bisulfate	D	A	-	D	-	A	A	A	-	D	D	D	-	A	-	-	-	-	-	A	A	C	C	-	A
Calcium Bisulfide	-	B	-	C	-	A	A	A	A	C	-	-	A	A	B	A	-	-	A	A	A	-	A	D	-
Calcium Bisulfite	D	A	-	C	-	A	-	A	A	C	-	-	A	A	-	A	-	-	A	A	A	-	A	-	A
Calcium Carbonate	A	A	A	C	-	A	A	A	A	C	-	D	A	A	B	A	-	A	A	A	A	-	A	-	A
Calcium Chlorate	C	A	-	-	-	A	A	A	-	C	-	-	-	A	A	-	-	A	-	A	-	-	A	-	A
Calcium Chloride	A	D	C	C	-	A	A	A	A	B	-	C	A	A	B	A	A	A	A	A	A	B	D	A	A
Calcium Hydroxide	A	A	-	C	-	A	A	A	A	B	-	-	A	A	B	A	-	A	A	A	A	C	A	A	A
Calcium Hypochlorite	A	C	C	C	-	D	A	A	A	D	-	D	A	D	B	A	-	A	A	A	B	C	D	A	C
Calcium Sulfate	A	A	A	B	-	A	A	A	A	B	-	-	A	A	B	A	A	A	A	A	A	-	D	-	C

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	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Carbon Steel	PVC	Epoxy	Teflon	Titanium	Cast Bronze	Brass	Cast Iron	Noryl	Nylon	Polyethylene	Polypropylene	Rylon	Carbon	Ceramic	Viton(R)*	Buna N	Silicon	Neoprene	Ethylene Propylene	Natural Rubber
Calgon	A	A	-	-	-	-	A	-	-	C	-	D	A	-	-	A	-	A	A	A	A	-	A	-	-
Cane Juice	A	A	-	B	-	A	A	-	-	B	C	A	-	A	-	D	-	A	A	-	A	-	A	-	A
Carboic Acid (See Phenol)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Bisulfide	A	A	A	A	-	D	A	-	-	C	-	B	-	A	-	D	-	A	A	A	D	-	D	D	D
Carbon Dioxide (Wet)	A	A	-	C	-	-	-	A	-	C	C	C	-	-	-	-	-	A	A	-	-	-	-	-	-
Carbon Disulfide	B	A	-	C	C	D	A	A	-	C	C	B	D	A	D	D	A	A	B	A	D	-	D	D	D
Carbon Monoxide	A	A	-	A	-	A	A	-	-	-	-	-	B	A	B	A	-	A	A	A	A	B	B	A	C
Carbon Tetrachloride	C	B	A	C	D	C	C	A	A	C	A	C	D	A	D	D	C	A	A	A	C	C	D	-	D
Carbonated Water	A	A	A	A	-	A	A	-	-	B	-	D	A	A	-	A	-	A	A	A	A	-	A	A	-
Carbonic	A	B	A	A	-	A	A	A	-	B	-	D	A	A	B	A	-	A	A	A	B	B	A	A	A
Catsup	A	A	A	D	-	A	A	-	-	C	-	D	A	A	A	-	A	A	A	A	A	-	C	-	-
Chloroacetic Acid	D	D	D	C	-	A	B	A	A	D	-	D	-	D	D	D	-	A	A	A	D	-	D	B	D
Chloric Acid	D	D	-	-	-	D	D	A	-	-	-	-	-	-	-	-	-	-	-	-	D	-	D	-	-
Chlorinated Glue	A	A	-	D	-	-	A	-	-	C	-	D	C	C	-	-	-	-	A	A	C	-	D	B	D
Chlorine,																									
Anhydrous Liquid	D	D	D	D	-	D	B	A	D	D	-	C	A	D	D	D	C	A	D	A	D	-	D	B	D
Chlorine (Dry)	A	A	-	D	-	-	D	A	D	A	B	A	-	-	-	-	C	A	A	D	-	-	D	-	D
Chlorine Water	-	D	-	D	-	A	-	A	A	D	D	D	C	D	-	D	C	C	A	A	D	C	D	-	-
Chlorobenzene (Mono)	A	A	-	B	C	D	A	A	-	B	-	B	D	A	D	D	A	A	A	A	D	-	D	D	D
Chlorosulfonic Acid	D	-	D	D	D	C	C	A	A	D	-	-	D	D	D	D	D	-	C	D	D	D	D	D	D
Chlorox (Bleach)	A	A	-	C	C	A	A	A	-	A	-	D	A	D	-	D	C	A	A	A	C	-	B	B	D
Chocolate Syrup	A	A	-	A	-	-	A	-	-	-	-	D	A	A	A	-	A	-	A	A	A	-	A	-	D
Chromic Acid 5%	A	A	B	C	-	A	B	-	A	D	D	D	C	D	B	A	A	D	C	A	D	C	D	A	B
Chromic Acid 10%	B	-	-	-	-	A	C	A	A	-	D	-	A	D	-	A	-	-	A	A	D	-	D	-	-
Chromic Acid 30%	B	-	-	-	-	A	D	A	A	-	D	-	D	D	-	A	-	-	A	A	D	-	D	-	-
Chromic Acid 50%	B	B	-	C	-	B	C	A	A	D	D	D	D	D	C	B	B	D	A	A	D	-	D	A	D
Cider	A	A	A	B	-	A	A	-	-	A	-	D	A	-	B	-	-	A	A	A	A	-	A	-	-
Citric Acid	A	A	A	C	-	A	A	A	A	D	C	D	A	C	B	B	-	A	A	A	D	C	A	A	A
Citric Oils	A	A	-	C	-	-	A	-	-	B	-	-	A	-	-	A	-	A	A	A	A	C	D	-	-
Coffee	A	A	A	A	-	-	A	A	-	B	-	C	A	A	-	A	-	A	A	A	A	-	A	-	A
Copper Chloride	D	D	B	D	-	A	A	A	A	D	-	D	A	D	B	A	A	-	A	A	A	-	A	A	A
Copper Cyanide	A	A	A	D	-	A	C	A	A	C	-	D	A	A	B	A	A	A	A	B	B	-	A	A	A
Copper Florobate	D	D	-	D	-	A	A	A	-	D	-	D	-	-	A	-	-	A	-	A	B	-	A	-	A
Copper Nitrate	A	A	B	D	-	A	A	A	A	D	-	-	A	D	B	A	-	A	A	A	A	-	A	-	-
Copper Sulfate (5% Solution)	A	A	A	D	-	A	A	A	A	D	D	D	A	D	B	A	A	A	A	A	A	C	A	-	C
Copper Sulfate	B	-	-	-	-	A	A	A	A	C	D	-	A	C	-	A	-	-	A	B	B	-	A	A	-
Cream	A	A	-	A	-	-	A	-	-	C	-	D	A	A	-	A	-	A	A	A	A	-	C	-	-
Cresols	A	A	-	B	-	D	A	-	-	D	C	-	-	-	D	C	A	A	A	A	D	D	D	D	D
Cresylic Acid	A	A	-	C	-	B	A	A	A	C	-	-	-	D	C	-	-	A	A	A	D	-	D	D	D
Cyclohexane	A	-	-	A	A	-	A	-	-	A	-	-	D	-	-	D	A	A	A	A	A	D	D	D	D
Cyanic Acid	A	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	D	-	-
Detergents	A	A	-	A	A	A	A	-	-	A	-	-	A	A	B	A	A	A	A	A	A	-	B	A	C
Diacetone Alcohol	A	A	-	A	A	D	A	-	-	A	C	-	A	A	-	D	-	A	A	D	D	-	D	A	D
Dichlorethane	A	A	-	-	-	D	A	A	-	-	-	-	-	A	D	-	-	-	-	C	-	-	D	-	D
Diesel Fuel	A	A	-	A	A	-	A	-	-	A	-	A	D	-	-	D	A	A	A	A	A	-	D	D	D
Diethylamine	A	-	-	A	-	D	A	A	-	A	-	-	B	-	-	C	-	A	A	D	B	-	B	B	C
Diethylene Gycol	A	-	-	-	-	-	A	-	-	A	-	-	A	A	B	-	-	A	A	A	A	C	A	A	A

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	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Carbon Steel	PVC	Epoxy	Teflon	Titanium	Cast Bronze	Brass	Cast Iron	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Viton(R)*	Buna N	Silicon	Neoprene	Ethylene Propylene	Natural Rubber
Diphenyl Oxide	A	-	-	-	-	-	A	-	-	A	-	-	-	-	-	-	-	A	A	A	D	-	D	D	D
Dyes	A	A	-	B	-	-	A	-	-	C	-	-	A	-	-	-	-	-	-	A	-	-	C	-	-
Epsom Salts(Magnesium Sulfate)	A	A	A	A	-	A	A	-	A	B	-	-	A	-	-	A	-	A	A	A	A	-	A	-	C
Ethane	A	-	-	A	-	-	A	-	-	A	-	-	D	-	-	-	-	A	A	A	A	-	B	D	D
Ethanolamine	A	A	-	-	C	-	A	-	-	-	-	-	-	-	-	-	A	A	A	D	B	C	B	-	C
Ether	A	A	A	A	D	D	A	-	-	B	A	-	D	C	-	-	A	A	A	C	D	-	D	C	D
Ethyl Acetate	A	A	-	B	C	D	A	A	-	B	-	-	D	A	C	C	A	A	A	D	D	C	D	B	D
Ethyl Alcohol	A	A	A	B	A	A	A	-	A	A	C	A	A	A	B	A	-	A	A	A	A	B	A	B	A
Ethyl Chloride	A	A	A	B	D	D	A	A	A	B	-	C	D	A	D	D	A	A	A	A	D	D	C	A	A
Ethyl Sulfate	D	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	A	A	A	A	-	-	-	-
Ethylene Chloride	A	A	-	C	C	D	A	A	B	A	-	C	D	-	-	D	A	A	A	A	D	D	D	C	D
Ethylene Dichloride	A	A	-	D	C	D	A	A	A	C	-	-	D	A	D	A	A	C	A	A	D	D	D	C	D
Ethylene Glycol	A	A	-	A	C	A	A	A	-	B	B	B	A	A	B	A	A	A	A	A	D	C	A	A	A
Ethylene Oxide	-	A	-	A	-	D	A	A	-	A	-	-	A	A	-	-	-	A	A	D	D	D	D	C	D
Fatty Acids	A	A	-	B	-	A	A	A	A	C	-	D	B	A	B	A	-	A	A	A	C	C	B	C	C
Ferric Chloride	D	D	D	D	-	A	A	A	A	D	D	D	A	D	B	A	A	A	A	A	D	C	B	A	A
Ferric Nitrate	A	A	A	D	-	A	A	A	A	D	-	-	A	D	B	A	A	A	A	A	A	D	A	A	A
Ferric Sulfate	A	C	A	D	-	A	A	A	A	D	D	D	A	A	-	A	A	C	A	A	B	C	A	-	A
Ferrous Chloride	D	D	-	D	-	A	A	A	A	C	-	D	A	D	B	A	A	A	A	A	B	C	A	-	A
Ferrous Sulfate	A	C	-	D	D	A	A	A	A	C	-	D	A	D	B	A	A	A	A	A	B	-	A	-	A
Fluoboric Acid	D	B	-	-	-	A	A	A	D	-	-	D	B	C	B	A	-	A	D	A	B	-	A	-	-
Fluorine	D	D	-	D	D	C	D	C	D	D	-	D	-	D	C	-	-	D	-	-	-	-	-	-	-
Fluosilicic Acid	-	B	-	D	-	A	C	A	D	-	-	D	A	D	B	A	-	A	D	B	A	-	A	-	-
Formaldehyde 40%	-	A	-	-	-	B	A	A	A	-	-	-	A	D	-	A	A	-	A	D	B	B	A	-	-
Formaldehyde	A	A	-	A	A	A	A	A	A	A	B	D	D	A	B	A	A	A	A	A	C	B	D	B	C
Formic Acid	A	B	B	D	D	D	B	A	C	C	C	D	A	D	B	A	A	A	A	B	D	C	D	A	C
Freon 11	-	A	-	B	B	B	A	A	-	B	-	C	D	A	C	-	A	A	A	C	C	D	D	D	D
Freon 12 (wet)	-	D	-	B	-	B	A	A	-	B	-	-	D	A	C	A	A	A	A	A	A	D	B	B	D
Freon 22	-	A	-	B	-	D	A	-	-	B	-	-	B	A	-	-	A	A	A	D	D	D	A	A	A
Freon 113	-	A	-	B	-	C	A	-	-	B	-	-	-	A	-	-	A	A	A	C	A	D	A	-	D
Freon T.F.	-	A	-	B	-	B	A	-	-	B	-	-	D	A	-	-	D	A	A	B	A	D	A	D	D
Fruit Juice	A	A	A	B	D	A	A	D	-	B	-	D	A	A	B	A	-	A	A	A	A	-	A	-	-
Fuel Oils	A	A	-	A	B	A	A	A	A	B	-	C	A	A	D	B	A	A	A	A	A	C	B	D	D
Furan Resin	A	A	-	A	A	-	A	A	-	A	-	A	-	-	-	-	A	-	A	A	D	-	D	-	D
Furfural	A	A	-	A	A	D	A	A	-	A	-	-	D	A	D	D	A	A	A	D	D	D	D	B	D
Gallic Acid	A	A	-	A	D	A	-	A	-	A	-	D	-	A	-	-	-	-	B	A	-	-	-	-	-
Gasoline	A	A	A	A	A	C	A	A	D	A	-	A	D	A	D	C	A	A	A	A	A	D	D	C	D
Gelatin	A	A	A	A	D	A	A	A	-	A	C	D	A	A	A	-	A	-	A	A	A	-	A	A	A
Glucose	-	A	-	A	B	A	A	A	-	A	A	B	B	A	B	A	-	A	A	A	A	B	A	A	A
Glue P.V.A.	B	A	-	B	A	A	A	A	A	A	-	-	-	A	-	-	-	A	A	A	A	-	A	-	-
Glycerine	A	A	A	A	B	A	A	A	A	A	B	B	A	A	-	A	-	A	A	A	A	B	A	A	A
Cyclic Acid	-	-	-	-	-	-	A	-	-	-	-	-	A	-	B	A	A	A	-	A	A	-	A	-	-
Gold Monocyanide	-	A	-	-	-	-	A	-	-	A	-	D	-	-	-	-	-	A	A	A	A	-	A	-	-
Grape Juice	A	A	-	B	-	A	A	-	-	B	-	D	A	-	B	-	-	A	A	A	A	-	A	-	-
Grease	A	A	-	A	A	-	A	A	-	B	-	A	-	A	-	-	-	A	A	A	A	-	D	-	-
Heptane	-	A	-	A	B	A	A	A	-	A	-	-	D	A	D	D	A	A	A	A	A	-	B	D	-
Hexane	A	A	-	A	B	C	A	A	-	B	-	-	D	A	-	C	A	A	A	A	A	B	B	D	D

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 - Not Rated

	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Carbon Steel	PVC	Epoxy	Teflon	Titanium	Cast Bronze	Brass	Cast Iron	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Viton(R)*	Buna N	Silicon	Neoprene	Ethylene Propylene	Natural Rubber
Hexyl Alcohol	A	A	-	A	A	A	A	-	A	A	C	-	A	A	-	A	-	A	A	A	A	D	B	A	A
Honey	A	A	-	A	-	A	A	-	-	A	-	A	A	A	-	A	-	A	A	A	A	-	A	A	-
Hydraulic Oils (Petroleum)	A	A	-	A	A	-	A	A	-	B	-	A	-	A	-	D	-	A	A	A	A	-	B	D	D
Hydraulic Oils (Synthetic)	A	A	-	A	-	-	A	-	-	A	-	A	-	A	-	D	-	A	A	A	C	D	-	-	-
Hydrazine	A	A	-	-	-	-	A	-	-	-	-	C	-	-	-	-	-	A	-	A	B	D	B	A	C
Hydrobromic Acid 20%	-	D	-	-	-	A	B	A	A	-	-	-	A	D	-	A	-	-	B	A	D	-	C	-	-
Hydrobromic Acid	D	D	D	D	D	A	A	A	A	D	-	D	C	D	B	B	-	A	A	A	D	D	D	A	A
Hydrochloric Acid (Dry Gas)	C	A	-	D	D	A	A	A	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	A	-
Hydrochloric Acid (20%)	D	D	D	D	-	A	A	A	C	D	-	D	A	D	A	A	D	A	A	A	C	-	C	A	C
Hydrochloric Acid (37%)	D	D	D	D	-	A	A	A	C	D	-	D	A	D	A	A	D	A	C	A	C	C	C	C	D
Hydrochloric Acid 100%	D	D	-	D	-	A	A	A	D	D	-	D	-	D	A	-	-	A	C	C	D	-	C	-	A
Hydrocyanic Acid	A	A	C	A	C	A	A	A	A	D	D	-	A	A	B	A	-	A	A	A	C	-	B	-	A
Hydrocyanic Acid (Gas 10%)	D	D	-	-	-	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	A	C
Hydrofluoric Acid (20%) ₁	D	D	D	D	-	D	B	A	D	D	-	D	A	D	C	A	C	B	C	A	D	-	C	A	C
Hydrofluoric Acid (75%)	C	D	-	D	-	C	C	A	D	D	-	D	D	D	C	B	C	D	D	A	D	D	D	C	C
Hydrofluoric Acid 100%	D	D	-	D	D	C	A	A	D	D	-	D	-	-	D	-	C	D	D	-	D	-	D	-	D
Hydrofluosilicic Acid (20%)	D	D	-	D	-	D	C	A	D	A	-	D	B	D	-	A	-	A	D	A	B	-	B	A	A
Hydrofluosilicic Acid	D	D	-	C	-	-	-	A	-	D	-	-	-	-	-	-	-	A	-	-	-	D	A	-	-
Hydrogen Gas	A	A	-	A	B	A	A	A	-	A	-	B	-	-	-	-	-	-	-	A	-	-	-	-	-
Hydrogen Peroxide 10%	C	C	-	A	-	A	D	A	C	D	D	D	-	B	A	-	B	A	A	-	A	-	D	-	C
Hydrogen Peroxide 30%	-	B	-	-	-	A	B	A	B	-	D	-	-	B	-	A	C	-	-	A	D	-	C	-	-
Hydrogen Peroxide	A	B	A	A	D	A	A	A	B	D	D	D	B	B	B	A	C	-	A	A	D	C	D	C	C
Hydrogen Sulfide, Aqueous Solution	A	A	C	C	-	A	A	A	A	D	C	D	A	B	B	A	A	A	A	B	C	-	B	A	D
Hydrogen Sulfide (Dry)	C	A	-	D	B	A	A	A	-	D	C	B	-	B	-	-	A	-	A	A	-	-	-	-	A
Hydroxyacetic Acid (70%)	-	-	-	D	-	A	A	-	B	-	-	-	-	-	-	-	-	A	A	A	A	-	A	A	-
Ink	A	A	-	C	D	-	A	-	-	C	-	D	B	A	B	-	-	A	A	A	A	-	A	-	-
Iodine	D	D	D	D	-	D	A	A	A	D	-	D	A	D	D	D	-	D	A	A	B	-	D	B	D
Iodine (In Alcohol)	-	B	-	-	-	D	-	A	D	-	-	-	C	D	-	B	-	-	A	A	D	-	D	-	-
Iodoform	D	A	-	A	B	-	-	A	-	C	-	C	-	A	-	-	-	-	-	C	-	-	-	-	-
Isobutyl Alcohol	A	A	-	B	A	-	A	-	A	A	C	-	A	A	-	-	-	A	A	A	C	B	A	A	A
Isopropyl Alcohol	A	A	-	B	A	-	A	-	A	A	C	C	A	A	-	A	-	A	A	A	C	C	B	A	A
Isopropyl Acetate	-	B	-	C	-	-	A	-	-	-	-	-	-	-	-	-	-	A	A	D	D	-	D	B	D
Isopropyl Ether	-	A	-	A	A	-	-	A	-	A	-	-	D	-	-	D	-	A	A	D	B	-	D	D	D
Isotane	-	-	-	A	-	-	A	-	-	-	-	-	D	-	-	D	-	-	A	A	A	-	-	-	D
Jet Fuel (JP3,JP4,JP5)	A	A	-	A	A	A	A	A	-	A	-	A	D	A	-	D	A	A	A	A	A	D	D	D	D
Kerosene	A	A	A	A	B	A	A	A	A	A	A	A	D	A	D	D	A	A	A	A	A	D	D	A	D
Ketones	A	A	-	B	A	D	C	A	A	A	-	A	D	A	D	D	A	C	A	D	D	-	D	D	C
Lacquers	A	A	-	A	C	-	A	-	-	A	C	C	C	A	-	A	-	A	A	D	D	-	D	-	D
Lacquer Thinners	-	A	-	-	-	C	-	A	A	-	C	-	D	A	-	B	-	-	A	-	D	-	D	A	-
Lactic Acid	A	B	C	C	D	A	A	A	A	D	-	D	A	C	B	A	A	A	A	B	B	-	A	B	A
Lard	A	A	A	A	C	A	A	-	-	A	-	A	-	A	-	A	-	A	A	A	A	C	B	-	D
Latex	A	A	-	A	-	-	A	-	-	A	-	-	A	A	B	-	-	-	A	A	A	-	C	A	-
Lead Acetate	A	A	-	D	D	A	A	A	A	C	-	-	A	A	B	A	-	A	A	D	B	-	D	A	A
Lead Fluoroborate Plating	-	C	-	-	-	A	A	A	D	-	-	-	A	D	-	A	-	-	D	A	B	-	C	-	-
Lead Sulfamate	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	A	-	-	-	A	B	C	A	D	C
Ligroin	-	A	-	-	-	-	A	-	-	A	-	-	D	-	-	D	-	-	A	A	A	-	B	A	D

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	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Carbon Steel	PVC	Epoxy	Teflon	Titanium	Cast Bronze	Brass	Cast Iron	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Viton(R)*	Buna N	Silicon	Neoprene	Ethylene Propylene	Natural Rubber
Lime	A	A	-	C	-	A	A	-	A	A	-	A	A	-	-	-	A	A	A	A	A	C	B	D	-
Lubricants	A	A	-	A	-	A	A	A	A	B	-	-	-	A	-	A	A	A	A	A	A	C	D	-	D
Magnesium Carbonate	A	A	A	-	-	A	A	-	-	-	-	-	A	-	B	A	-	-	A	-	A	-	A	A	-
Magnesium Chloride	B	B	A	D	C	A	A	A	A	B	C	D	A	A	B	A	A	-	A	A	A	-	A	A	A
Magnesium Hydroxide	A	A	-	D	B	A	A	A	A	C	B	B	A	A	B	A	A	-	A	A	B	-	A	-	C
Magnesium Nitrate	A	A	A	-	-	A	A	A	A	-	-	-	A	A	A	A	-	-	A	A	A	-	A	-	-
Magnesium Oxide	A	A	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	A	-	A	-	A	A	-
Magnesium Sulfate	B	A	-	B	B	A	A	A	A	B	B	C	A	A	B	A	A	A	A	A	A	-	A	D	C
Maleic Acid	A	A	A	B	B	A	A	A	A	C	-	-	A	A	-	C	-	A	A	A	D	-	A	D	D
Maleic Anhydride	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	A	A	A	D	-	D	-	D
Malic Acid	A	A	-	C	D	A	-	A	-	D	-	-	-	A	-	-	-	A	C	-	-	-	A	-	A
Mash	A	A	-	-	-	-	A	-	-	A	-	-	A	-	-	-	-	A	A	-	A	-	A	-	-
Mayonnaise	A	A	-	D	D	-	A	A	-	D	-	D	A	A	-	A	-	A	A	A	A	-	-	-	-
Melamine	D	D	-	-	-	-	A	-	-	D	-	-	-	-	-	-	-	A	A	-	C	-	-	-	-
Mercuric Chloride (Dilute Solution)	D	D	D	D	D	A	A	A	A	D	D	D	A	A	B	A	-	A	A	A	A	-	A	A	A
Mercuric Cyanide	A	A	-	D	D	A	A	A	A	D	-	-	A	-	B	A	-	A	A	-	A	-	-	-	-
Mercury	A	A	A	C	A	A	A	A	C	D	D	A	A	A	B	A	-	A	A	A	A	-	A	A	A
Methanol (See Alcohol Methyl)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Acetate	-	A	-	A	B	-	-	A	-	A	-	-	-	-	-	-	-	A	A	D	D	D	B	B	D
Methyl Acetone	-	A	-	A	A	-	C	A	-	A	-	A	D	-	-	-	-	-	A	D	D	-	D	-	-
Methyl Alcohol 10%	-	A	-	C	B	A	A	A	-	C	-	-	-	A	-	-	-	-	-	-	B	-	-	-	A
Methyl Alcohol	A	A	A	B	A	B	A	A	A	A	C	A	A	A	B	A	-	A	A	C	B	-	A	A	A
Methyl Bromide	-	-	-	-	-	-	B	-	-	-	-	-	-	-	D	-	-	A	A	A	B	-	D	D	D
Methyl Butyl Ketone	-	A	-	A	-	-	B	-	-	-	-	-	D	-	-	-	-	A	A	D	D	C	D	A	D
Methyl Cellosolve	-	-	-	A	-	-	C	-	-	A	-	-	C	-	-	A	-	A	A	D	D	-	D	B	D
Methyl Chloride	C	A	-	D	-	D	A	A	A	A	-	-	D	A	D	D	-	A	A	A	D	D	D	C	D
Methyl Dichloride	-	-	-	-	-	-	A	-	-	-	-	-	D	-	-	-	-	A	A	A	D	-	D	D	D
Methyl Ethyl Ketone	A	A	-	A	-	D	B	A	A	A	-	-	D	A	D	A	A	A	A	D	D	C	D	A	D
Methyl Isobutyl Ketone	-	A	-	-	-	D	B	A	A	-	-	-	D	A	-	-	-	A	A	D	D	C	D	C	D
Methyl Isopropyl Ketone	-	A	-	-	-	-	B	-	-	-	-	-	D	A	-	-	-	A	A	D	D	B	D	B	D
Methyl Methacrylate	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	A	A	D	D	-	D	D	D
Methylamine	-	A	-	A	B	-	A	-	-	D	-	B	B	-	-	-	-	A	A	-	B	-	-	-	-
Methylene Chloride	A	A	-	A	B	D	A	A	A	A	C	-	D	D	D	D	-	A	A	B	D	-	D	D	D
Milk	A	A	A	A	D	A	A	-	-	C	C	D	A	A	B	A	-	A	A	A	A	B	A	A	A
Molasses	A	A	A	A	A	A	A	-	-	A	B	A	B	A	B	A	-	A	A	A	A	-	A	-	-
Mustard	A	A	A	B	B	A	A	-	-	B	-	C	B	A	-	A	-	A	A	A	B	C	C	-	-
Naptha	A	A	A	A	B	A	A	A	A	B	-	B	D	A	D	A	A	A	A	A	B	D	D	D	D
Napthalene	A	B	-	B	A	D	A	A	A	C	-	B	D	-	D	B	A	A	A	C	D	-	D	D	D
Nickel Chloride	A	B	-	D	-	A	A	A	A	D	-	D	A	A	B	A	-	A	A	A	A	-	A	A	A
Nickel Sulfate	A	B	-	D	D	A	A	A	A	C	C	D	A	A	B	A	-	A	A	A	A	-	A	A	C
Nitric Acid (10% Solution)	A	A	A	D	D	A	A	A	A	D	-	D	A	D	B	A	D	C	B	A	D	-	D	B	D
Nitric Acid (20% Solution)	A	A	A	D	-	A	B	A	A	D	-	D	A	D	B	A	C	D	C	A	D	-	D	D	D
Nitric Acid (50% Solution)	A	A	A	D	-	A	D	A	A	D	-	D	A	D	C	D	C	D	A	A	D	-	D	D	D
Nitric Acid (Concentrated Solution)	D	B	A	B	-	D	D	A	A	D	D	D	D	D	D	D	C	D	A	B	D	-	D	D	D
Nitrobenzene	A	B	-	C	B	D	B	A	A	D	-	B	D	C	D	C	B	A	A	D	D	D	D	D	D
OILS - Aniline	A	A	-	C	-	D	A	A	A	A	-	A	D	C	-	A	-	A	A	A	D	-	D	B	D
Anise	A	A	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	D	-	-

A - No Effect – Acceptable
 B - Minor Effect – Acceptable
 C - Moderate Effect – Questionable
 D - Severe effect - Not Recommended
 - Not Rated

	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Carbon Steel	PVC	Epoxy	Teflon	Titanium	Cast Bronze	Brass	Cast Iron	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Viton(R)*	Buna N	Silicon	Neoprene	Ethylene Propylene	Natural Rubber
OILS - Bay	A	A	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	A	A	A	-	-	D	-	-
Bone	A	A	-	-	-	-	A	-	-	A	-	-	-	-	-	-	-	A	A	A	A	-	D	-	-
Castor	A	A	-	A	-	A	A	-	-	A	-	A	-	-	-	-	-	A	A	A	A	-	A	B	A
Cinnamon	A	A	-	-	-	-	A	A	-	-	-	-	-	-	-	A	-	A	A	D	-	-	D	-	-
Citric	A	A	-	-	-	-	A	-	-	D	-	D	-	A	-	A	-	A	A	A	A	-	D	-	-
Clove	A	A	-	-	-	-	A	-	-	-	-	-	-	A	-	B	-	A	A	-	A	-	-	-	-
Coconut	A	A	-	B	-	-	A	-	-	A	-	A	-	A	-	A	-	A	A	A	A	-	A	A	D
Cod Liver	A	A	-	B	-	-	A	-	-	-	-	-	-	A	-	A	-	A	A	A	A	-	B	A	D
Corn	A	A	A	B	-	-	A	-	-	B	-	A	-	A	-	A	-	A	A	A	A	-	D	C	D
Cotton Seed	A	A	A	B	C	A	A	A	-	B	-	A	-	A	-	A	A	A	A	A	A	-	D	C	D
Cresote	A	A	-	A	-	-	A	-	-	-	-	-	-	-	-	D	-	A	A	A	A	-	B	D	D
Diesel Fuel (2D,3D,4D,5D)	A	A	-	A	-	-	A	-	-	A	-	-	D	A	-	A	A	A	A	A	A	-	D	D	D
Fuel (1,2,3,5A,5B,6)	A	A	-	A	-	A	A	A	A	A	-	-	D	-	-	B	-	A	A	A	B	-	D	D	D
Ginger	A	A	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	A	A	A	A	-	A	-	-
Hydraulic (See Hydraulic)																									
Lemon	A	A	-	-	-	-	A	-	-	-	-	-	-	-	-	D	-	A	A	A	-	-	D	-	-
Linseed	A	A	A	A	-	A	A	-	-	A	-	A	-	A	-	A	-	A	A	A	A	-	D	D	D
Mineral	A	A	A	A	B	A	A	-	-	A	-	A	B	A	-	B	A	A	A	A	A	-	B	D	D
Olive	A	A	-	A	B	A	A	A	-	B	-	A	-	A	-	A	-	A	A	A	A	C	B	-	D
Orange	A	A	-	-	-	-	A	A	-	-	-	-	-	A	-	A	-	A	A	A	A	-	D	-	-
Palm	A	A	-	A	-	A	A	-	-	B	-	-	-	A	-	-	-	A	A	A	A	-	D	-	-
Peanut	A	A	-	A	-	A	A	-	-	A	-	A	-	-	-	D	-	A	A	A	A	-	D	-	D
Peppermint	A	A	-	-	-	-	A	-	-	A	-	-	-	-	-	D	-	A	A	A	D	-	D	-	-
Pine	A	A	-	A	B	A	A	A	-	D	-	C	-	-	-	-	-	A	A	A	A	-	D	-	D
Rape Seed	A	A	-	-	-	A	A	-	-	A	-	-	-	-	-	-	-	A	A	A	B	-	D	-	D
Rosin	A	A	-	A	-	-	A	-	-	-	-	-	-	A	-	A	-	A	A	A	A	-	-	-	-
Sesame Seed	A	A	-	A	-	A	A	-	-	A	-	A	-	-	-	-	-	A	A	A	A	-	D	-	-
Silicone	A	A	-	-	-	-	A	-	-	A	-	A	A	A	-	A	-	A	A	A	A	-	A	-	A
Soybean	A	A	-	A	-	A	A	-	-	B	-	A	-	A	-	A	-	A	A	A	A	-	D	-	D
Tanning	A	A	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	A	A	A	A	-	D	-	-
Turbine	A	A	-	A	-	A	A	-	-	A	-	A	-	-	-	-	-	A	A	A	A	-	D	-	D
Octyl Alcohol	A	A	-	A	A	-	A	-	A	A	C	-	A	A	-	-	-	A	A	A	B	-	B	A	C
Oleic Acid	A	A	B	B	C	A	A	A	-	B	C	C	C	A	D	C	-	A	A	B	B	D	D	D	D
Oleum 25%	-	-	-	-	-	D	D	A	-	-	-	-	D	-	-	-	-	-	A	A	C	D	D	D	D
Oleum	-	A	-	B	B	D	A	A	-	C	C	-	-	-	-	D	-	-	A	A	C	D	D	D	D
Oxalic Acid (cold)	A	B	A	C	D	A	A	A	C	B	C	D	C	D	A	A	-	A	A	A	B	C	B	A	C
Paraffin	A	A	A	A	B	A	A	A	-	A	-	B	B	A	-	A	-	A	A	A	A	-	-	-	-
Pentane	C	C	-	A	B	-	A	A	-	A	-	B	D	A	-	-	-	A	A	A	A	-	B	D	D
Perchloroethylenen	A	A	-	A	B	-	A	A	-	C	-	B	D	-	-	D	A	A	A	A	C	D	D	D	D
Petrolatum	-	A	-	B	C	-	A	A	-	B	-	C	D	A	-	-	-	A	A	A	A	-	B	A	D
Phenol 10%	A	A	-	A	D	A	C	A	-	C	-	B	-	D	-	-	A	-	-	B	D	-	C	D	C
Phenol (Carbolic Acid)	A	A	A	B	D	A	B	A	C	B	D	D	C	D	D	B	A	A	D	A	D	-	D	D	D
Phosphoric Acid (to 40% Solution)	B	A	A	D	-	A	A	A	A	D	D	D	A	D	B	A	A	B	C	A	D	-	D	B	C
Phosphoric Acid (40%-100% Solution)	C	B	B	D	-	A	C	A	B	D	D	D	A	D	C	A	A	B	D	A	D	-	D	B	C
Phosphoric Acid (Crude)	D	C	C	D	D	-	A	A	C	D	D	D	-	D	C	-	A	C	D	A	D	-	D	B	-

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	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Carbon Steel	PVC	Epoxy	Teflon	Titanium	Cast Bronze	Brass	Cast Iron	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Viton(F)*	Buna N	Silicon	Neoprene	Ethylene Propylene	Natural Rubber	
Phosphoric Anhydride (Dry or Moist)	A	A	-	-	-	D	-	A	-	-	D	-	-	-	-	-	-	A	-	D	D	-	D	-	A	
Phosphoric Anhydride (Molten)	A	A	-	D	-	D	A	A	-	D	D	-	-	A	D	-	-	-	-	D	C	-	D	-	D	
Photographic (Developer)	C	A	C	C	-	A	A	-	A	-	-	D	A	-	B	A	-	A	A	A	A	A	-	A	-	-
Phthalic Anhydride	A	B	-	B	C	-	-	A	-	B	-	C	-	A	-	-	-	-	-	A	C	-	-	-	-	
Picric Acid	A	A	-	C	D	A	A	A	-	D	D	D	-	A	A	-	-	-	-	A	A	D	A	-	A	
Potash	A	-	A	C	-	A	A	-	-	C	-	B	A	A	B	A	-	A	A	A	A	A	-	B	-	B
Potassium Bicarbonate	A	-	B	C	-	A	A	A	A	B	-	D	A	A	B	A	A	A	A	A	A	A	-	A	-	B
Potassium Bromide	A	-	B	C	D	A	A	A	A	C	-	D	A	C	B	A	C	A	A	A	A	A	-	A	A	B
Potassium Carbonate	A	-	A	C	B	A	A	A	A	C	-	B	A	A	B	A	A	A	A	A	A	B	-	A	-	B
Potassium Chlorate	A	A	A	B	B	A	A	A	A	B	-	B	A	D	B	A	A	A	A	A	A	A	-	A	-	B
Potassium Chloride	A	A	B	B	B	A	A	A	A	C	C	B	A	B	B	A	A	A	A	A	A	A	-	A	A	A
Potassium Chromate	-	B	B	A	-	A	C	-	-	A	-	A	A	-	B	-	A	A	D	A	A	-	A	-	B	
Potassium Cyanide Solutions	A	B	A	D	B	A	A	A	A	D	-	B	A	A	B	A	A	C	A	B	A	-	A	A	A	
Potassium Dichromate	A	A	A	A	C	A	A	A	A	C	-	B	A	D	B	A	A	A	A	B	A	-	A	A	A	
Potassium Ferrocyanide	A	-	A	C	C	A	A	A	-	A	-	-	-	A	A	-	-	-	-	-	D	-	-	-	A	
Potassium Hydroxide (50%)	B	B	B	D	A	A	A	A	C	D	D	C	A	A	B	A	A	-	D	B	B	C	A	A	C	
Potassium Nitrate	A	B	A	B	B	A	A	A	A	B	-	-	A	C	B	A	C	A	A	B	A	-	A	A	A	
Potassium Permanganate	A	B	B	B	B	A	B	A	B	B	-	B	A	D	B	B	A	A	A	B	A	-	A	-	B	
Potassium Sulfate	A	B	B	A	B	A	A	A	A	B	B	B	A	C	B	A	A	A	A	A	A	C	A	A	C	
Potassium Sulfide	A	-	A	B	B	A	-	A	-	B	-	B	-	-	-	-	-	-	-	-	A	-	-	-	-	
Propane (Liquified)	A	-	A	A	B	D	A	A	-	A	A	-	D	A	-	D	-	A	A	A	A	D	B	D	D	
Propyl Alcohol	A	A	-	A	A	A	A	A	A	A	-	-	A	A	-	A	-	A	A	A	A	B	A	A	A	
Propylene Glycol	B	-	A	A	B	-	A	A	-	B	-	B	-	B	B	-	-	A	A	A	A	-	C	-	-	
Pyridine	C	-	B	B	A	-	A	A	-	-	-	B	D	-	C	B	A	A	A	D	D	-	D	B	D	
Pyrogalllic Acid	A	A	A	B	B	A	A	A	-	B	-	B	-	A	-	-	-	A	A	A	A	-	-	-	-	
Rhodium Plating 120° F	-	D	-	-	-	A	A	A	D	-	-	-	-	A	D	-	A	-	A	A	A	-	B	-	-	
Rosins	A	A	A	A	C	-	A	A	-	A	C	-	-	A	-	A	-	A	A	-	A	-	-	-	-	
Rum	A	-	A	-	-	A	A	-	-	-	-	-	A	A	-	A	-	A	A	A	A	-	A	-	-	
Rust Inhibitors	A	-	A	-	-	-	A	-	-	A	-	A	-	-	-	A	-	A	A	A	A	-	C	-	-	
Salad Dressing	A	-	A	B	-	A	A	-	-	B	-	D	A	A	-	A	-	A	A	A	A	-	-	-	-	
Sea Water	A	A	A	C	D	A	A	A	A	C	-	-	A	A	B	A	-	A	A	A	A	B	B	A	A	
Shellac (Bleached)	A	-	A	A	A	-	A	A	-	A	B	B	-	A	-	A	-	-	A	-	A	-	-	-	-	
Shellac (Orange)	A	-	A	A	A	-	A	A	-	A	C	C	-	A	-	A	-	-	A	-	A	-	-	-	-	
Silicone	B	-	A	B	-	-	A	-	-	A	-	-	A	A	-	A	-	A	A	A	A	B	A	A	A	
Silver Bromide	C	C	B	D	-	-	A	-	-	-	-	-	A	-	-	-	-	A	-	-	-	-	-	-	-	
Silver Nitrate	A	B	A	D	D	A	A	A	A	D	-	D	A	A	B	A	-	A	A	A	C	-	A	C	A	
Silver Plating 80-120° F	-	A	-	-	-	A	A	A	A	-	-	-	A	A	-	A	-	-	B	A	A	-	A	-	-	
Soap Solutions	A	A	A	C	A	B	A	A	A	B	-	B	A	A	B	A	A	A	A	A	A	B	B	-	C	
Soda Ash (See Sodium Carbonate)																										
Sodium Acetate	A	A	B	B	C	A	A	A	A	B	-	C	A	A	B	A	-	A	A	D	D	-	C	-	A	
Sodium Aluminate	-	-	A	C	C	-	A	A	B	B	-	-	A	A	-	-	A	A	A	A	A	-	A	A	B	
Sodium Bicarbonate	A	A	A	A	C	A	A	A	A	B	A	C	A	A	B	A	A	A	A	A	A	C	A	A	A	
Sodium Bisulfate	A	-	A	D	D	A	A	A	B	C	C	D	A	C	B	A	A	A	A	B	A	C	A	-	A	
Sodium Bisulfite	A	-	A	A	-	A	A	A	A	C	-	D	A	D	B	A	A	A	A	A	A	C	A	-	A	
Sodium Borate	A	-	A	C	C	C	-	A	-	A	-	C	-	A	A	-	-	-	-	A	-	B	A	-	-	

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	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Carbon Steel	PVC	Epoxy	Teflon	Titanium	Cast Bronze	Brass	Cast Iron	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Viton(R)*	Buna N	Silicon	Neoprene	Ethylene Propylene	Natural Rubber
Sodium Carbonate	A	B	B	C	B	A	A	A	A	B	B	B	A	A	B	A	A	B	A	A	A	-	A	A	A
Sodium Chlorate	A	-	A	B	C	A	A	A	A	B	-	-	A	A	B	A	A	A	A	A	D	-	A	-	A
Sodium Chloride	A	C	B	C	C	A	A	A	A	B	C	B	A	A	B	A	A	A	A	A	A	C	A	A	B
Sodium Chromate	A	A	-	D	B	-	C	A	-	B	-	B	A	A	-	A	A	A	B	B	A	-	A	-	-
Sodium Cyanide	A	-	A	D	B	A	A	A	A	D	D	B	A	C	B	A	A	A	A	A	A	D	A	A	A
Sodium Fluoride	C	-	C	C	D	D	A	A	A	C	-	D	-	A	C	-	-	-	C	D	-	D	-	D	
Sodium Hydrosulfite	-	-	-	A	-	C	-	A	-	C	-	-	-	A	-	-	-	-	A	A	-	-	A	-	A
Sodium Hydroxide (20%)	A	A	A	D	-	A	A	A	A	C	D	A	A	C	B	A	A	C	D	A	A	D	B	A	A
Sodium Hydroxide (50% Solution)	A	B	-	D	-	A	A	A	A	C	D	B	A	C	C	A	B	C	D	A	D	D	C	-	A
Sodium Hydroxide (80% Solution)	A	D	-	D	-	A	A	A	A	C	D	C	A	C	C	A	B	C	D	B	D	D	C	-	B
Sodium Hypochlorite (to 20%)	C	C	C	C	-	A	B	A	A	D	D	D	A	A	B	D	C	D	A	A	C	D	D	B	C
Sodium Hypochlorite	-	A	-	D	D	A	A	A	A	D	-	D	A	A	-	A	C	-	D	D	B	C	A	-	-
Sodium Hyposulfate	A	A	-	D	-	-	C	A	-	D	-	-	-	-	-	-	-	-	-	-	-	-	C	-	C
Sodium Metaphosphate	-	A	-	A	B	-	A	A	-	C	C	B	-	A	-	D	-	A	A	A	A	-	B	A	A
Sodium Metasilicate	-	A	-	B	C	-	A	A	-	B	-	C	-	-	-	-	-	A	-	A	A	D	A	-	-
Sodium Nitrate	A	A	A	A	B	A	A	A	A	B	C	A	A	A	B	A	-	A	A	B	C	D	B	A	C
Sodium Perborate	-	C	-	B	B	-	A	A	-	C	C	B	A	A	-	A	-	A	A	A	B	D	B	A	C
Sodium Peroxide	A	A	-	C	C	A	A	A	-	C	C	D	-	D	-	-	-	A	A	A	C	D	B	A	C
Sodium Polyphosphate (Mono, Di, Tribasic)	A	A	-	D	-	-	A	A	A	C	-	-	A	-	-	-	-	A	A	A	A	-	D	A	A
Sodium Silicate	A	B	A	C	B	A	A	A	A	C	C	-	A	A	-	A	-	A	A	A	A	-	A	A	A
Sodium Sulfate	A	A	C	B	B	A	A	A	A	B	B	A	A	A	B	A	A	A	A	A	A	-	A	A	C
Sodium Sulfide	A	B	-	D	B	A	A	A	A	D	D	A	A	A	B	A	A	A	A	A	C	-	A	A	C
Sodium Sulfite	C	C	-	C	-	A	A	A	A	C	-	A	-	D	A	-	-	A	A	A	A	-	A	-	A
Sodium Tetraborate	-	A	-	-	-	A	A	-	-	-	-	-	A	-	-	-	-	A	A	A	A	-	-	-	-
Sodium Thiosulphate ("Hypo")	A	A	-	B	B	A	A	A	A	D	D	C	A	A	-	A	A	A	A	A	B	-	A	A	C
Sorghum	A	A	-	-	-	-	A	-	-	-	-	A	-	A	-	-	-	A	A	A	A	-	A	-	-
Soy Sauce	A	A	-	A	-	-	A	-	-	A	-	D	A	A	-	-	-	A	A	A	A	-	A	-	D
Stannic Chloride	D	D	-	D	A	A	A	A	A	D	-	D	A	A	B	A	-	-	A	A	A	D	A	A	A
Stannic Fluoborate	-	A	-	-	-	-	A	-	-	-	-	D	A	-	A	-	-	-	A	A	A	-	A	-	-
Stannous Chloride	D	C	-	D	D	A	A	A	A	D	-	D	-	D	A	-	-	-	-	B	C	D	D	-	A
Starch	A	A	-	A	C	A	A	A	-	B	-	C	A	A	B	-	-	A	A	A	A	-	A	-	-
Stearic Acid	A	A	A	B	C	A	A	A	A	C	C	C	A	A	B	D	-	A	A	A	B	D	B	B	C
Stoddard Solvent	A	A	A	A	B	A	A	A	A	A	A	B	D	A	D	D	A	A	A	A	B	D	D	D	D
Styrene	A	A	-	A	A	-	A	A	-	A	-	-	A	-	-	-	-	A	A	B	D	D	D	D	D
Sugar (Liquids)	A	A	A	A	B	-	A	A	-	A	-	B	A	A	-	A	-	-	A	A	A	-	B	-	A
Sulfate Liquors	C	C	-	B	-	-	A	-	-	C	-	-	-	-	-	A	-	A	A	-	-	-	C	-	-
Sulfur Chloride	D	D	D	D	-	A	C	A	-	C	D	-	A	A	A	D	-	A	C	A	D	-	D	D	D
Sulfur Dioxide	A	A	C	A	-	D	A	A	A	B	-	-	D	D	C	D	A	A	A	D	D	C	B	A	D
Sulfur Dioxide (Dry)	A	A	-	A	B	D	D	A	-	A	C	A	-	A	D	-	-	A	A	A	-	-	D	-	D
Sulfur Trioxide (Dry)	A	C	-	A	B	A	A	A	-	B	-	B	D	D	-	-	-	B	A	A	D	-	D	B	C
Sulfuric Acid (to 10%)	D	C	C	C	-	A	A	A	A	D	D	D	A	D	B	A	A	A	A	C	-	D	D	D	C
Sulfuric Acid (10%-75%)	D	D	D	D	-	A	B	A	C	D	D	D	B	D	C	A	B	A	D	A	D	-	D	D	D
Sulfuric Acid 75%-100%	-	D	-	-	-	B	D	A	D	-	D	-	A	D	-	B	C	-	A	A	D	-	D	-	-
Sulfurous Acid	C	B	C	C	D	A	A	A	A	D	-	D	A	D	B	A	-	B	A	A	C	D	B	B	C
Sulfuryl Chloride	-	-	-	-	-	A	A	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-

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	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Carbon Steel	PVC	Epoxy	Teflon	Titanium	Cast Bronze	Brass	Cast Iron	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Viton®	Buna N	Silicon	Neoprene	Ethylene Propylene	Natural Rubber
Syrup	A	A	A	A	-	A	A	-	-	D	-	-	A	A	-	A	-	A	A	A	A	-	B	-	A
Tallow	A	A	-	A	-	-	A	-	-	-	-	-	A	A	C	-	-	A	A	A	A	-	-	-	-
Tannic Acid	A	A	A	C	C	A	A	A	A	B	-	C	A	D	B	A	-	A	A	A	D	C	A	A	A
Tanning Liquors	A	A	-	C	-	A	A	A	A	A	-	-	-	-	-	A	-	A	A	A	C	-	-	-	-
Tartaric Acid	A	B	B	C	D	A	A	A	A	A	C	D	A	A	B	A	-	A	A	A	D	C	A	-	A
Tetrachlorethane	-	A	-	-	-	D	A	A	A	-	-	-	D	A	-	A	-	A	A	A	D	-	-	D	D
Tetrahydrofuran	A	A	-	D	A	D	A	A	-	D	-	D	D	A	D	C	A	A	A	B	D	-	D	B	D
Toluene, Toluol	A	A	-	A	A	D	A	A	A	A	A	A	D	A	D	D	A	A	A	C	D	D	D	D	D
Tomato Juice	A	A	-	A	C	-	A	A	-	C	-	C	A	A	-	A	A	A	A	A	A	-	A	-	-
Trichlorethane	C	A	-	C	-	-	A	A	A	C	-	C	D	-	-	-	-	A	A	A	D	D	D	D	D
Trichlorethylene	A	A	-	B	B	D	A	A	A	B	A	C	D	C	D	D	C	A	A	A	D	D	D	D	D
Trichloropropane	-	A	-	-	-	-	A	-	-	A	-	-	D	-	-	-	-	A	A	A	A	-	A	-	-
Tricresylphosphate	-	A	-	-	-	D	A	A	B	A	-	-	A	-	-	-	-	A	A	B	D	-	D	A	-
Triethylamine	-	-	-	-	-	A	A	-	-	A	-	-	B	-	-	-	-	A	A	A	A	D	B	-	-
Turpentine	A	A	-	C	B	A	A	A	-	B	C	B	D	A	D	B	A	A	A	A	D	-	D	D	D
Urine	A	A	-	B	-	A	A	-	-	C	-	B	A	A	B	A	-	A	A	A	A	-	D	A	-
Varnish (Use Viton® for Aromatic)	A	A	A	A	C	-	A	A	-	A	B	-	D	A	-	A	-	A	A	A	B	C	D	-	D
Vegetable Juice	A	A	-	A	-	-	A	-	-	C	-	D	A	A	-	-	-	A	A	A	A	B	D	-	D
Vinegar	A	A	A	D	D	A	A	A	A	B	B	C	A	A	B	A	A	A	A	A	C	-	B	A	C
Water, Fresh	A	A	-	A	D	A	A	A	-	A	C	B	A	A	D	A	A	A	A	A	A	-	B	A	A
Water, Salt	A	A	-	B	-	A	A	-	-	B	C	D	A	A	-	A	A	A	A	A	A	-	B	A	A
Water, Acid , Mine	A	A	-	C	-	A	A	-	-	C	D	C	A	A	-	A	B	A	A	A	A	-	B	-	B
Water, Distilled, Lab Grade 7	A	A	-	B	-	A	A	A	-	A	-	D	A	A	-	A	A	A	A	A	A	-	B	A	A
Weed Killers	A	A	-	C	-	-	A	-	-	C	-	-	-	A	-	-	-	A	A	A	B	-	C	-	-
Whey	A	A	-	B	-	-	A	-	-	-	-	-	-	-	-	-	-	A	A	A	A	-	-	-	-
Whiskey and Wines	A	A	A	D	D	A	A	A	-	B	B	D	A	A	B	A	-	A	A	A	A	B	A	A	A
White Liquor (Pulp Mill)	A	A	-	-	-	A	A	A	-	D	-	C	A	A	-	A	-	A	A	A	A	-	A	-	-
White Water (Paper Mill)	A	A	-	-	-	-	A	-	-	A	-	-	-	A	-	A	-	A	A	A	-	-	A	-	-
Xylene	A	A	-	A	B	D	A	A	-	A	A	A	D	A	D	D	A	A	A	A	D	D	D	D	D
Zinc Chloride	A	B	B	D	D	A	A	A	A	D	D	D	A	A	B	A	A	A	A	A	A	-	A	A	A
Zinc Hydrosulfate	A	A	A	D	D	C	A	A	A	B	C	C	A	A	B	A	A	A	A	A	A	-	A	A	C
Zinc Hydrosulphite	-	A	-	D	-	-	A	-	-	D	-	D	A	-	-	-	A	A	A	-	A	-	A	A	-
Zinc Sulfate	A	A	A	D	D	C	A	A	A	B	C	C	A	A	B	A	A	A	A	A	A	-	A	A	C

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