

Chemical Resistance Chart

The following chemical resistance chart is provided as a guide to help select materials for weigh module system components and hardware. The information is reprinted courtesy of Little Giant Pump Company.

These recommendations are based on information from material suppliers and careful examination of available published information and are believed to be accurate.

However, since the resistance of metals, plastics, and elastomers can be affected by concentration, temperature, presence of other chemicals, and other factors, this information should be considered as a general guide rather than an unqualified guarantee. Ultimately, the customer must determine the suitability of the materials used in various environments.

All recommendations assume ambient temperatures unless otherwise noted. The ratings for these materials are based on the chemical resistance only. Added consideration must be given to material selection when the chemical is abrasive, viscous in nature, or has a Specific Gravity greater than 1.1.

Note: Ceramagnet "A" is generically known as barium ferrite.

RATINGS—CHEMICAL EFFECT

- A—No effect—Excellent
- B—Minor effect—Good
- C—Moderate effect—Fair
- D—Severe effect—Not Recommended

FOOTNOTES

1. PVC—Satisfactory to 72°F
2. Polypropylene—Satisfactory to 72°F
3. Polypropylene—Satisfactory to 120°F
4. Buna-N—Satisfactory for O-Rings
5. Polyacetal—Satisfactory to 72°F
6. Ceramag—Satisfactory to 72°F

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Titanium	Hastelloy C	Cast Bronze	Bronze	Cast Iron	Carbon Steel	Kynar	PVC (Type I) Tygon (E-3606)	Teflon	Nylon	Polyacetal	Nylon	Cycloloc (ABS)	Polyethylene	Polypropylene	Rylon	Carbon	Ceramic	Ceramagnet "A"	Vilon	Buna-N (Nitrile)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy			
Acetaldehyde ⁵	A	A	A	-	B	A	A	D	-	-	C	-	D	D	A	-	A	A	D	C	B	A	A	A	-	D	B	B	D	B	C	A		
Acetamide	-	B	A	-	-	-	-	-	-	-	C	-	-	-	-	-	B	-	-	-	-	-	-	A	-	A	A	-	A	A	D	A		
Acetate Solv. ²	A	B	A	B	B	-	-	A	C	B	A	-	B	D	A	-	-	A	-	B	D	-	A	A	-	D	D	-	D	-	A			
Acetic Acid, Glacia ¹	-	B	A	A	B	A	A	C	C	D	A	-	C	B	A	C	D	D	D	D	B	B	A	A	A	-	D	D	B	C	B	C	B	
Acetic Acid (20%)	-	B	A	-	-	A	A	-	C	-	-	A	B	-	A	A	-	D	-	-	A	A	-	A	-	A	C	-	C	-	B			
Acetic Acid (80%)	-	B	A	-	-	A	A	-	C	-	-	A	D	-	A	B	-	D	-	-	B	-	-	A	-	A	C	-	D	-	B			
Acetic Acid	-	B	A	B	B	A	A	C	C	D	C	B	A	B	A	A	D	D	C	B	A	A	A	A	-	C	C	-	C	B	C	A		
Acetic Anhydride	B	A	A	B	B	A	A	C	D	B	D	D	D	D	A	D	D	D	D	A	A	A	A	A	-	D	A	C	B	B	C	A		
Acetone ⁶	A	A	A	B	A	A	A	A	A	A	A	D	D	D	A	D	B	A	D	C	B	A	A	A	A	A	D	D	B	C	A	D	B	
Acetyl Chloride	-	C	A	-	-	-	D	-	-	-	-	A	-	-	-	-	A	-	-	-	-	A	-	-	A	-	-	-	A	A	-	-	A	
Acetylene ²	A	A	A	A	A	B	-	B	-	A	A	-	B	-	-	-	A	A	-	-	D	A	A	A	-	A	A	C	B	A	C	A		
Acrylonitrile	A	A	C	-	B	B	B	A	-	C	-	-	-	-	-	B	-	D	-	B	A	A	A	-	C	D	-	D	D	-	A			
Alcohols																																		
Amyl	A	A	A	-	C	A	A	A	B	C	C	A	A	B	A	C	A	A	B	B	B	A	A	A	-	A	A	D	A	A	C	A		
Benzyl	-	A	A	-	B	A	A	A	C	-	-	-	D	B	-	A	A	A	D	D	A	-	A	A	-	A	D	-	B	B	D	A		
Butyl	A	A	A	-	B	B	A	B	C	C	C	A	A	B	A	A	A	A	-	B	B	A	A	-	A	A	D	A	A	A	A			
Diacetone ²	-	A	A	-	A	A	A	A	C	-	A	-	D	-	-	A	A	A	-	-	D	-	A	A	-	D	D	-	D	A	D	A		
Ethyl	-	A	A	A	B	A	A	A	C	A	A	-	A	C	-	A	B	A	B	B	A	-	A	A	A	A	B	A	B	A	A			

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Titanium	Hastelloy C	Cast Bronze	Bronze	Cast Iron	Cast Steel	Kynar	PC (Type I) Tygon (F-3606)	Teflon	Nomex	Polyacetal	Nylon	Cycloloc (ABS)	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Ceramagnel™ A	Viton	Buna-N (Nitrile)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy
Hexyl	-	A	A	-	A	A	A	A	C	-	A	-	-	-	A	A	A	-	-	A	-	A	A	-	A	A	A	A	A		
Isobutyl	-	A	A	-	B	A	A	A	C	-	A	-	-	-	A	A	A	-	-	A	-	A	A	-	A	C	B	A	A		
Isopropyl	-	A	A	-	B	A	A	A	C	C	A	-	-	-	A	A	A	-	-	A	-	A	A	-	A	C	B	A	A		
Methyl ^b	-	A	A	A	B	A	A	A	C	A	A	-	B	-	A	A	C	A	D	B	A	-	A	A	C	B	-	A	A		
Octyl	-	A	A	-	A	A	A	A	C	-	A	-	-	-	A	A	A	-	-	-	-	A	A	-	A	B	-	B	A	C	
Propyl	-	A	A	-	A	A	A	A	-	-	A	B	A	-	A	A	A	A	-	-	A	-	A	A	-	A	A	B	A	A	
Aluminum Chloride (20%)	-	D	C	D	B	A	A	D	-	D	A	-	A	B	-	A	C	A	-	B	A	A	A	-	A	A	-	A	A		
Aluminum Chloride	C	D	C	-	D	C	A	C	-	D	B	A	A	A	A	-	D	-	-	A	A	A	-	A	A	C	A	-	A		
Aluminum Fluoride	-	D	C	D	-	D	B	-	-	-	A	A	A	-	A	A	C	D	-	B	A	-	A	-	-	A	A	C	A	-	C
Aluminum Hydroxide ^b	-	A	A	A	A	-	-	A	-	D	A	-	A	-	A	A	B	A	-	-	A	-	A	A	A	A	-	A	-	A	
Alum Potassium Sulfate (Alum), (10%)	-	A	-	-	A	-	B	-	-	D	A	-	A	-	A	-	A	-	-	A	-	A	A	-	A	-	A	-	A		
Alum Potassium Sulfate (Alum), (100%)	-	D	A	B	B	-	B	C	-	-	A	-	A	B	A	A	C	D	-	B	A	-	A	A	-	A	A	-	A		
Aluminum Sulfate	-	C	C	A	A	A	A	C	C	D	A	A	A	B	A	A	C	A	-	B	A	A	A	-	A	A	-	A	A		
Amines	A	A	A	-	A	B	A	B	-	A	B	-	C	A	B	D	A	-	-	-	A	A	-	D	D	C	B	B	C		
Ammonia (10%)	-	-	A	-	-	A	A	-	-	-	D	A	-	A	A	-	A	-	-	A	A	-	A	-	A	D	-	A	-	B	
Ammonia, Anhydrous	A	B	A	A	B	B	A	D	-	D	B	D	A	B	A	A	D	A	-	B	A	B	C	A	-	D	B	A	A	D	
Ammonia, Liquids	-	A	A	A	D	-	B	D	-	A	A	-	A	B	A	A	D	-	-	D	A	-	A	A	-	D	B	B	A	A	
Ammonia, Nitrate	-	A	A	A	C	-	-	D	-	-	A	-	B	B	-	A	C	-	-	A	-	A	A	-	-	A	-	C	-	A	
Ammonium Bifluoride	-	C	A	-	D	-	B	-	-	-	A	-	-	A	D	-	-	A	-	-	A	-	A	A	-	A	-	A	-	A	
Ammonium Carbonate	B	A	A	A	C	A	B	B	-	C	B	-	A	B	A	D	A	-	-	A	-	A	A	-	B	D	C	A	A	-	A
Ammonium Casenite	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	A	D	-	-	-	-	-	-	-	-	A	-	-	A	-	A
Ammonium Chloride	C	A	C	A	C	D	A	D	C	D	D	A	A	B	A	A	B	A	-	B	A	A	A	-	A	A	C	A	A	A	
Ammonium Hydroxide	A	A	A	A	C	A	A	D	D	A	C	-	A	B	A	D	A	-	B	B	B	A	A	A	-	B	B	A	A	C	
Ammonium Nitrate	A	A	A	A	B	A	A	D	D	A	D	-	A	B	A	A	C	D	-	B	A	A	A	A	-	D	A	C	A	A	
Ammonium Oxalate	-	A	A	A	-	-	A	-	-	A	-	-	-	B	-	-	-	B	-	-	-	A	-	-	A	-	A	-	A	-	A
Ammonium Persulfate	-	A	A	A	C	C	A	A	-	D	A	D	A	-	A	A	D	D	-	A	-	A	A	-	C	A	-	A	A	A	
Ammonium Phosphate, Dibasic	B	A	A	A	B	A	A	C	-	-	D	-	A	-	A	A	B	A	-	B	A	-	A	A	-	A	A	B	A	A	
Ammonium Phosphate, Monobasic	-	A	A	A	B	A	A	D	-	-	A	-	A	A	A	B	A	-	B	A	-	A	A	-	A	A	B	A	A	A	
Ammonium Phosphate, Tribasic	B	A	A	A	B	A	A	C	-	C	D	-	A	-	A	A	B	A	-	B	A	-	A	A	-	A	A	B	A	A	
Ammonium Sulfate	C	D	B	A	B	A	A	B	C	C	C	A	A	D	A	A	B	D	-	B	A	A	A	-	D	A	B	A	A		
Ammonium Thio-Sulfate	-	-	A	-	-	A	-	-	D	A	-	-	-	-	B	-	-	-	B	-	-	-	A	A	-	-	A	-	A	-	A
Amyl-Acetate	B	A	A	C	B	A	A	C	-	-	C	C	D	D	A	D	A	B	-	D	D	A	A	A	-	D	D	D	A	D	
Amyl Alcohol	-	A	A	-	B	A	A	A	-	-	A	A	B	A	C	A	A	-	B	A	-	A	A	-	B	B	D	A	C		
Amyl Chloride	-	C	B	-	D	-	A	A	-	-	A	A	D	C	A	D	A	C	-	D	D	-	A	A	-	A	D	-	D	D	A
Aniline	B	A	A	A	C	A	B	C	-	-	C	C	D	D	A	D	D	C	D	C	B	A	A	A	-	C	D	C	D	B	D
Anti-Freeze	-	A	A	-	A	-	A	B	B	B	C	-	A	B	A	A	B	B	A	A	A	A	A	A	A	A	A	C	A	A	A
Antimony Trichloride	-	D	D	-	D	C	A	-	-	-	A	A	A	-	A	A	D	D	-	D	A	-	-	A	-	C	-	A	A	A	
Aqua Regia (80% HCl, 20% HNO)	-	D	D	-	D	A	D	D	-	-	C	D	D	A	D	D	D	D	-	D	C	-	-	D	-	C	D	C	D	D	D
Arochlor 1248	-	-	-	-	-	-	-	-	-	-	A	-	-	-	D	-	-	-	-	-	A	-	-	A	D	-	D	B	D	A	
Aromatic Hydrocarbons	-	-	A	-	A	-	A	-	A	A	-	D	-	-	D	A	-	C	-	-	A	-	-	A	D	-	D	D	D	A	
Arsenic Acid	B	A	A	-	D	-	D	B	D	D	A	A	B	A	A	D	A	-	B	A	-	A	A	-	A	A	-	A	-	C	A
Asphalt	-	B	A	-	C	-	A	-	C	-	A	-	-	-	A	A	-	-	A	A	-	A	A	-	A	A	B	C	B	D	A
Barium Carbonate	B	A	A	A	B	A	A	B	-	B	B	-	A	A	A	A	A	-	B	A	-	A	A	A	A	-	A	A	-	A	A
Barium Chloride	C	D	A	A	D	A	A	B	-	-	C	A	B	A	A	B	-	B	A	A	A	-	A	A	A	-	A	B	A	A	A
Barium Cyanide	-	-	A	-	-	-	C	-	-	A	-	-	-	-	B	-	-	B	-	B	-	A	-	-	A	C	-	A	A	-	A
Barium Hydroxide	B	C	A	A	D	B	B	B	-	C	C	A	A	-	A	A	D	A	-	B	A	A	A	A	A	A	C	A	A	A	
Barium Nitrate	-	A	A	-	-	A	-	D	-	A	A	-	B	-	A	A	-	-	-	A	A	-	A	A	-	A	A	-	A	-	B
Barium Sulfate	B	A	A	A	D	A	A	C	-	C	C	A	A	-	A	A	A	A	-	B	A	A	A	B	-	A	A	D	A	A	
Barium Sulfide	B	A	A	-	D	B	-	C	-	C	C	-	A	A	A	A	A	-	B	A	-	A	A	-	A	A	C	A	A	A	

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Titanium	Hastelloy C	Cast Bronze	Biass	Cast Iron	Carbon Steel	Kynar	PVC (Type I)	Tygon (E-3606)	Teflon	Nomex	Polyacetal	Nylon	Cycloac (ABS)	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Ceramagnesi A	Viton	Buna-N (Nitrile)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy		
Beer ²	A	A	A	-	A	A	A	B	D	D	A	A	-	A	A	B	D	B	B	D	-	A	A	-	A	D	C	A	A	A	A			
Beet Sugar Liquids	A	A	A	-	A	-	-	A	B	A	-	-	A	-	A	A	B	A	B	-	A	-	A	A	-	A	A	-	B	A	A	A		
Benzaldehyde ³	A	A	A	-	B	A	A	A	-	B	A	C	D	D	A	D	A	C	D	D	D	A	A	A	-	D	D	B	D	A	D	A		
Benzene ²	B	A	A	A	B	A	B	B	A	B	C	B	D	C	A	D	A	A	D	D	D	D	A	A	A	A	A	A	D	-	D	D	D	A
Benzoic Acid ²	B	A	A	A	B	A	B	A	B	-	D	-	A	A	B	A	A	B	D	-	B	D	-	A	B	-	A	D	-	D	D	D	A	
Benzol	-	A	A	-	B	A	A	B	A	-	-	-	D	-	A	D	A	A	A	-	A	-	A	A	A	A	D	D	-	D	-	A		
Borax (Sodium Borate)	-	A	A	A	C	B	A	A	B	A	C	A	A	A	A	A	A	A	-	B	A	A	A	A	A	A	B	C	A	A	C	A		
Boric Acid	B	A	A	A	B	A	B	A	B	C	D	-	A	A	B	A	A	A	-	B	A	-	A	A	A	A	-	A	A	A	A	A		
Brewery Slop	-	-	A	-	-	-	-	A	-	A	-	-	-	-	-	-	A	-	-	-	-	-	A	A	-	A	A	-	A	-	A	-	A	
Bromine ² (Wet)	D	D	D	D	D	A	A	C	-	D	D	A	B	B	A	D	D	D	D	D	D	D	D	A	D	D	D	D	C	D	D	D	C	
Butadiene	A	A	A	-	A	-	-	C	A	C	C	A	A	-	A	-	A	A	-	-	-	B	A	-	A	A	-	B	A	-	A	-	A	
Butane ² ¹	A	A	A	-	A	-	-	A	A	C	C	A	A	C	A	D	A	A	B	C	D	A	A	A	-	A	A	D	B	D	D	A		
Butanol	-	A	A	-	A	-	A	A	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Butter	-	B	A	-	A	-	-	D	-	D	-	-	-	B	-	B	A	-	B	-	-	-	A	A	-	A	A	-	B	A	D	A	A	
Buttermilk	A	A	A	A	A	-	-	D	-	D	-	-	B	A	A	A	B	-	-	A	A	-	A	A	-	A	A	-	A	-	A	-	D	A
Butylene	A	B	A	-	A	-	-	A	A	A	A	-	B	-	A	-	A	-	-	-	A	A	A	-	A	B	-	-	D	D	A			
Butyl Acetate ¹	-	-	C	-	A	-	A	A	-	A	C	D	D	A	D	A	-	C	D	A	A	A	-	D	B	D	D	B	D	A				
Butyric Acid ¹	B	B	A	A	B	A	A	C	-	D	-	A	B	-	A	A	C	D	D	-	A	-	A	D	-	D	D	-	D	B	-	A		
Calcium Bisulfate	C	D	A	-	D	-	D	D	D	-	A	A	A	-	A	-	A	-	-	-	-	-	-	A	A	C	C	-	A	A				
Calcium Bisulfide	-	-	B	-	C	A	A	C	-	-	-	A	-	A	A	D	A	-	B	A	-	A	A	-	A	A	-	A	D	-	A	-	A	
Calcium Bisulfite	-	B	A	-	C	A	A	C	-	-	-	A	A	-	A	A	-	A	-	-	A	-	A	-	A	A	-	A	-	A	-	A		
Calcium Carbonate	B	A	A	A	C	A	A	C	-	D	-	-	A	A	A	A	A	A	-	B	A	-	A	A	-	A	A	-	A	-	A	-	A	
Calcium Chlorate	-	B	A	-	-	B	B	C	-	-	-	A	A	A	-	-	A	-	A	-	-	A	-	A	-	A	-	A	-	A	-	A		
Calcium Chloride	C	A	D	C	C	A	A	B	-	C	-	A	A	A	A	A	D	A	B	B	A	A	A	B	A	A	B	D	A	A				
Calcium Hydroxide	B	A	A	-	C	A	A	B	-	-	-	A	A	A	A	B	A	-	B	A	-	A	A	-	A	A	A	C	A	A	A	A		
Calcium Hypochlorite	D	D	C	C	C	A	B	D	-	D	-	A	D	-	A	A	D	D	-	B	A	-	A	A	-	A	B	C	D	A	C			
Calcium Sulfate	B	A	A	A	B	A	B	B	-	-	A	A	A	A	A	A	C	B	A	A	A	-	A	A	-	A	A	-	D	-	C	A		
Calgon	-	A	A	-	-	-	-	C	-	D	-	-	-	-	A	B	-	-	-	A	-	A	-	A	A	-	A	A	-	A	-	A		
Cane Juice ²	-	A	A	-	B	-	-	B	C	A	-	A	-	A	-	-	A	A	-	-	D	-	A	A	-	-	A	-	A	-	A	-	A	
Carbolic Acid (See Phenol)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Carbon Bisulfide ²	B	A	A	A	A	-	-	C	-	B	-	-	D	D	-	A	A	-	-	D	-	A	A	A	A	D	-	D	D	D	A			
Carbon Dioxide (Wet)	-	A	A	-	C	-	A	C	C	C	-	-	-	A	-	-	A	-	-	-	-	-	A	A	-	-	-	-	-	-	-	-	-	
Carbon Disulfide ²	-	B	A	-	C	-	-	C	C	B	C	-	D	C	A	D	A	A	-	D	D	A	A	B	-	A	D	-	D	D	D	A		
Carbon Monoxide	-	A	A	-	A	-	-	-	-	-	-	A	-	-	B	A	-	B	A	-	B	A	-	A	A	-	A	A	B	B	A	C		
Carbon Tetrachloride ² ¹	B	B	B	A	C	A	A	C	A	C	D	A	C	C	C	A	D	A	A	D	D	C	A	A	A	A	C	C	D	-	D	C		
Carbonated Water	B	A	A	A	A	-	-	B	-	D	-	-	A	-	-	A	A	A	-	-	A	-	A	A	-	A	A	-	A	A	-	A	-	A
Carbonic Acid	B	A	B	A	A	-	A	B	-	D	-	A	A	-	A	A	A	A	-	B	A	-	A	A	-	A	B	B	A	A	A	A		
Catsup	-	A	A	A	D	-	-	C	-	D	-	-	A	-	-	A	B	A	B	-	A	-	A	A	-	A	A	-	C	-	A	-	A	
Chloracetic Acid ²	D	D	D	D	C	A	A	D	-	D	-	D	A	D	A	-	D	D	-	D	D	-	A	A	-	D	D	-	D	B	D	B		
Chloric Acid	-	D	D	-	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	-	-	-	-	-	-	-	D	-	D	-	-	D		
Chlorinated Glue	-	A	A	-	D	-	-	C	-	D	-	-	-	C	-	C	D	-	-	-	-	-	A	-	A	C	-	D	B	D	A			
Chlorine, Anhydrous Liquid	-	D	D	D	D	D	A	D	-	C	-	-	D	B	A	D	D	-	D	D	C	A	D	-	A	D	-	D	B	D	B			
Chlorine (Dry)	B	A	A	-	D	D	A	A	B	A	-	-	A	-	-	A	-	-	-	-	C	A	A	-	D	-	D	-	D	-	D	D		
Chlorine Water	D	-	D	-	D	A	B	D	D	-	A	A	-	A	C	-	D	-	D	C	C	A	-	A	D	C	D	-	-	-	-	-		
Chlorobenzene (Mono)	A	A	A	-	B	-	A	B	-	B	C	A	D	D	A	D	A	A	D	D	D	A	A	A	-	A	D	-	D	D	A			
Chloroform	A	A	A	A	D	A	A	B	-	D	C	C	D	C	A	D	A	C	D	D	D	C	A	A	A	D	D	D	D	D	A			
Chlorosulfonic Acid ¹	D	D	-	D	D	A	B	D	-	-	D	D	C	C	A	D	D	D	-	D	D	D	-	C	-	D	D	D	D	D	C			
Chlorox (Bleach)	-	A	A	-	C	-	A	A	-	D	C	-	A	B	A	D	D	B	-	D	C	A	A	-	A	C	-	B	B	D	A			
Chocolate Syrup	-	A	A	-	A	-	-	-	D	-	-	-	A	A	A	-	-	A	-	A	-	A	-	A	-	A	A	-	A	-	A	-	A	

From the METTLER TOLEDO Weigh Module Systems Handbook

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Titanium	Hastelloy C	Cast Bronze	Bronze	Cast Iron	Carbon Steel	Knife	PVC (Type I)	Tygon (E-3606)	Teflon	Nylon	Polyacetal	Nylon	Cyclohex (ABS)	Polyethylene	Rifton	Carbon	Ceramic	Ceramagnet™ A	Viton	Buna-N (Nitrile)	Silicone	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy
Freon 11 ¹	A - A -	B - -	B - C	B -	B D	D A	D A	D C	- A	A A	A A	A A										D D	D D	D D	D A						
Freon 12 (Wet) ²	- - D -	B - -	B - -	B - -	B D A	D A A	B C A	A B C A	A B C A	A A A A	A A A A	A A A A										D B	B D	D A							
Freon 22	- - A -	B - -	B - -	B - -	D D -	B A A	- - A A	- - A A	- - A A	- - A A	- - A A	- - A A										D D	D D	A A A A							
Freon 113	- - A -	B - -	B - -	B - -	C D -	- A A	- - A A	- - A A	- - A A	- - A A	- - A A	- - A A										A C A D A	- D A	- D A							
Freon T.F. ⁴	- - A -	B - -	B - -	B - -	B D -	D A A	- - D A A	- - D A A	- - D A A	- - D A A	- - D A A	- - D A A										D A D A	D A D D	D A D D	D A						
Fruit Juice	A A A A	B - -	B - D D	B - D D	A - D A	B A -	B A B A	B A B A	B A B A	B A B A	B A B A	B A B A										A A A A A	A A A A A	A A A A A	A A A A A						
Fuel Oils	A A A -	A A A B	- C B A	- C B A	A A A C	A A A C	A A A C	A A A C	A A A C	A A A C	A A A C	A A A C										D B A A A	- A A C B D D	D D D D	D D D D	D D D D	D D D D	D D D D	D D D D		
Furan Resin	- A A -	A - -	A - -	A - -	A A A	A A A	A A A	A A A	A A A	A A A	A A A	A A A										A A D	- D D	D A A A A							
Furfural ¹	A A A -	A - B A	- A D D	- A D D	A D B A	D D D D	D D D D	D D D D	D D D D	D D D D	D D D D	D D D D										D D D D B D	D A	D D D D B D	D A						
Gallic Acid	B A A -	A - A A	- D D	- D D	A A A A	- A A A A	- A A A A	- A A A A	- A A A A	- A A A A	- A A A A	- A A A A										B A -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	
Gasoline ¹⁻⁴	A A A A	A A D A A	- A A A C	- A A A C	A D A A	D D D C	D D D C	D D D C	D D D C	D D D C	D D D C	D D D C										A A A A A	A A A A A	A A A A A	A D D C D A						
Gelatin	A A A A	A A A A	- A A C	- C D D	A D A	A A A A	A A A A	A A A A	A A A A	A A A A	A A A A	A A A A										A A A A A	- A A A A A	A A A A A							
Glucose	A - A -	A - A	- A A B B	- A A B B	A B B	A B A B	A B A B	A B A B	A B A B	A B A B	A B A B	A B A B										A A B A A A	A A B A A A	A A B A A A							
Glue P.V.A. ¹	B B A -	B A - B A	- A - A	- A - A	A B A	A B A	A B A	A B A	A B A	A B A	A B A	A B A										A A - A A	- A A - A A	- A A - A A	- A A - A A						
Glycerine	A A A A	A A A A	A A A A	A B B B	B B B A	A B A A	A B A A	A B A A	A B A A	A B A A	A B A A	A B A A										A A B A A A	A A B A A A	A A B A A A							
Glycolic Acid	- - - -	- - - -	- A - -	- A - -	- A - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -									A A - A A	- A A - A A	- A A - A A	- A A - A A						
Gold Monocyanide	- - A -	- - A -	- - A -	- - A -	- - A -	- - D -	- - D -	- - D -	- - D -	- - D -	- - D -	- - D -									A A - A A	- A A - A A	- A A - A A	- A A - A A							
Grape Juice	- A A -	B - -	B - D	- D -	A - A	- A - A	- A - A	- A - A	- A - A	- A - A	- A - A	- A - A									A A - A A	- A A - A A	- A A - A A	- A A - A A							
Grease ⁴	A A A -	A - B	- A A	- A A	A A A	- A A A	- A A A	- A A A	- A A A	- A A A	- A A A	- A A A									A A - A A	- A A - A A	- A A - A A	- D - D							
Heptane ¹	A - A -	A - A A	- A A A	- A A A	B A A	A D A A	A A C D	A A C D	A A C D	A A C D	A A C D	A A C D									A A - A A	- B D - A	- B D - A	- B D - A							
Hexane ¹	A A A -	A - A	- A B	- A B	B A C	A D A A D	A A A D	A A A D	A A A D	A A A D	A A A D	A A A D									A A B B B D D	D D D D D D	D D D D D D	D D D D D D							
Honey	- A A -	A - A	- A A	- A A	A A A	- A A A	- A A A	- A A A	- A A A	- A A A	- A A A	- A A A									A A - A A	- A A - A A	- A A - A A	- A A - A A							
Hydraulic Oils (Petroleum) ¹	A A A -	A - A	- B	- A A	- A A	- A A	- A A	- A A	- A A	- A A	- A A	- A A									A A - A A	- B D D A	- B D D A	- B D D A							
Hydraulic Oils (Synthetic) ¹	- A A -	A - A	- A A	- A A	- A A	- A A	- A A	- A A	- A A	- A A	- A A	- A A									A A - A C D	- - - -	- - - -	- - - -							
Hydrazine	- A A -	- - - -	- - - -	- - - -	C - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -									A B D B A C	- - - -	- - - -	- - - -							
Hydrobromic Acid (20%)	- - D -	- - A A	- - A A	- - A A	- - A A	- - A A	- - A A	- - A A	- - A A	- - A A	- - A A	- - A A									B D - A D C -	- - C -	- - C -	- - C -							
Hydrobromic Acid ⁴	D D D D	D D A A D	- D D A A D	- D D A A D	D D A A B A C	D D D D	D B B	D B B	D B B	D B B	D B B	D B B									A D D D A A	C A C C C C D	C A C C C C D	C A C C C C D							
Hydrochloric Acid (Dry gas)	D C A -	D - A	- D -	- D -	D - A	- A - A	- A - A	- A - A	- A - A	- A - A	- A - A	- A - A									A A - A A	- A A - A A	- A A - A A	- A A - A A							
Hydrochloric Acid (20%) ⁴	- D D D D	D C B D	- D D D D	D C B D	D A A B A A	D D D B A A D A A D A A D A C	D A A D A C	D A A D A C	D A A D A C	D A A D A C	D A A D A C	D A A D A C									C A C A										
Hydrochloric Acid (37%) ⁴	- D D D D	D C B D	- D D D D	D C B D	D A A B A A	D D D C A A D A C D A C D A C D A C D A C D A C C C C D	D A A D A C	D A A D A C	D A A D A C	D A A D A C	D A A D A C	D A A D A C																			
Hydrochloric Acid (100%)	- D D -	D D C D	- D D -	D D C D	D A A A	- D - D	- A - A	- A - A	- A - A	- A - A	- A - A	- A - A									A C - C D - C - A A	- - - -	- - - -	- - - -							
Hydrocyanic Acid	A A A C	A A A D	D D C	D D C	C -	A B A A	B A B A	B A B A	B A B A	B A B A	B A B A	B A B A									A C - C D - C - A A	- - - -	- - - -	- - - -							
Hydrocyanic Acid (Gas 10%)	- D D -	- - - -	- - - -	- - - -	- C A -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -										C A C A									
Hydrofluoric Acid (20%) ¹	- D D D D	D D B D	- D D D D	D D B D	D B A A	D D D D C A C D D D	D C A C B C D D D	D C A C B C D D D	D C A C B C D D D	D C A C B C D D D	D C A C B C D D D	D C A C B C D D D										C A C B C D A D	- - - -	- - - -	- - - -						
Hydrofluoric Acid (75%) ^{1, 2}	- C D -	D D C D	- D D C D	- D D C D	D A C B A D D D	D D D D C A C D D D	D C B C D D D D	D C B C D D D D	D C B C D D D D	D C B C D D D D	D C B C D D D D	D C B C D D D D										D D D D C C C C									
Hydrofluoric Acid (100%)	D D D -	D D B D	- D D B D	- D D B D	D D D -	C D A -	D D D -	D D D -	D D D -	D D D -	D D D -	D D D -										C D D D D D D D D	- - - -	- - - -	- - - -						
Hydrofluosilicic Acid (20%)	- D D -	D D B A	- D D -	D D B A	D D D -	D A B D D	D D D -	D A B D D	D D D -	D A B D D	D D D -	D A B D D										A D - A B - B A A C	- - - -	- - - -	- - - -						
Hydrofluosilicic Acid	- D D -	C - C D	- D D -	C - C D	- - - -	- C A -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -										A D - A B - B A A C	- - - -	- - - -	- - - -						
Hydrogen Gas	A A A -	A - A	- A A	- A A	B B A A	A - A	A - A	A - A	A - A	A - A	A - A	A - A									A A - A A	- - - -	- - - -	- - - -							
Hydrogen Peroxide (10%)	- C C -	A C A D	D D D	D D D	- A A A A	- A A A A	- A A A A	- A A A A	- A A A A	- A A A A	- A A A A	- A A A A									B A A A A	- - - -	- - - -	- - - -							
Hydrogen Peroxide (30%)	- - B -	- B A	- D	- D	- A A	- A A	- A A	- A A	- A A	- A A	- A A	- A A									A C -	- - - -	- - - -	- - - -							
Hydrogen Peroxide	- A B A A	B A D	D D D	D D D	C A C A B D D	D D D C A C A B D D	D B A C D D D	D B A C D D D	D B A C D D D	D B A C D D D	D B A C D D D	D B A C D D D									A A A A D C D C C C A										
Hydrogen Sulfide, Aqueous Solution	- D A C C A A D	C D D	- A A B A A	- A A B A A	D A A B A A	D D D C A C A B D D	D B A A A D D	D B A A A D D	D B A A A D D	D B A A A D D	D B A A A D D	D B A A A D D																			
Hydrogen Sulfide (Dry)	A C A -	D - A D	C B B	- A - A	- D	- D	- D	- D	- D	- D	- D	- D									A A - A A	- D - A A	- A A - A A	- A A - A A							
Hydroxyacetic Acid (70%)	- - - -	D B -	- - - -	- - - -	- A -	- - - -	- D	- - - -	- D	- - - -	- D	- - - -									A A - A A	- A A - A A	- A A - A A	- A A - A A							
Ink	A A A -	C - C	- D D	- D D	- - - -	B A A	- B A A	- B A A	- B A A	- B A A	- B A A	- B A A									A A A A A	- - - -	- - - -	- - - -							
Iodine	- D D D	D A B D	- D D D	- D D D	D B A A	- D B A A C	D C D D D	D C D D D	D C D D D	D C D D D	D C D D D	D C D D D									A B - D B D A	- - - -	- - - -	- - - -							
Iodine (In Alcohol)	- - B -	- D A	- - - -	- D A	- D A	- D A C	- D A C	- D A C	- D A C	- D A C	- D A C	- D A C									A D - A D	- D - D	- D - D	- D - D							
Iodoform	B C A -	A - C	- C	- C	C B	- C B	- C B	- C B	- C B	- C B	- C B	- C B									A - A	- - - -	- - - -	- - - -							

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Titanium	Hastelloy C	Cast Bronze	Bronze	Cast Iron	Cast Steel	Kynar	PC (Type I) Tygon (F-3606)	Teflon	Nomex	Polyacetal	Nylon	Cycloac (ABS)	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Ceramagnet™ A	Viton	Buna-N (Nitrile)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy	
Isotane ²	-	-	-	-	A	-	-	-	-	-	-	-	-	-	D	A	-	-	-	-	-	A	-	A	-	-	D	A				
Isopropyl Acetate	-	-	B	-	C	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	A	A	-	D	D	-	D	B	A		
Isopropyl Ether ²	A	-	A	-	A	-	-	A	-	-	A	-	-	A	D	A	-	-	-	-	D	A	A	-	D	B	-	D	D	-		
Jet Fuel (JP#, JP4, JP5)	A	A	A	-	A	-	-	A	-	A	A	A	-	A	D	A	A	-	-	D	A	A	-	A	A	D	D	D	D	A		
Kerosene ²	A	A	A	A	A	A	A	A	A	B	A	A	D	A	D	A	A	B	D	D	A	A	A	A	A	D	D	A	A			
Ketones	A	A	A	-	B	A	A	-	A	A	D	D	D	A	D	B	A	-	D	D	A	C	A	-	D	D	C	C				
Lacquers	A	A	A	-	A	-	-	A	C	C	C	-	D	-	C	A	A	-	-	A	-	A	A	-	D	D	-	D	A			
Lacquer Thinners	-	-	A	-	-	A	A	-	C	-	-	C	-	A	D	-	A	-	-	B	-	-	A	-	-	D	D	A	-			
Lactic Acid	A	A	B	C	C	A	A	D	-	D	D	C	A	B	A	B	C	-	B	A	A	A	-	B	B	-	A	B	A			
Lard	B	A	A	A	A	-	-	A	-	A	C	-	A	-	-	A	A	C	-	A	-	A	A	-	A	A	C	B	-	D	A	
Latex	-	A	A	-	A	-	-	A	-	-	-	-	-	-	A	A	A	-	B	-	-	A	-	A	A	-	C	A	-	A		
Lead Acetate	B	A	A	-	D	A	A	C	-	-	D	-	A	B	A	A	A	-	B	A	-	A	A	-	D	B	-	D	A	A		
Lead Sulfamate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A	-	-	A	-	-	A	B	C	A	D	C	A	
Ligroin ³	-	-	A	-	-	-	A	-	-	-	-	-	-	-	D	A	-	-	D	-	-	A	-	A	A	-	B	A	D	A		
Lime	-	A	A	-	C	A	-	A	-	A	-	A	-	A	D	-	C	-	-	A	A	-	A	A	C	B	D	-	A			
Lubricants	-	A	A	-	A	A	A	B	-	-	-	A	-	A	A	B	-	A	A	A	-	A	A	A	-	A	A	C	D	-	D	A
Magnesium Carbonate	-	A	A	A	-	-	B	-	-	-	-	A	-	-	A	A	-	B	A	-	-	A	-	-	A	-	A	A	-	A	A	
Magnesium Chloride	B	B	B	A	D	A	A	B	C	D	C	-	A	B	A	A	A	-	B	A	A	-	A	-	A	A	-	A	A	A		
Magnesium Hydroxide	A	A	A	-	D	A	A	C	B	B	B	A	-	A	A	A	-	B	A	A	A	-	A	B	-	B	-	C	A			
Magnesium Nitrate	-	A	A	A	-	A	A	-	-	-	-	A	-	A	A	A	A	-	B	A	-	-	A	-	A	A	-	A	-	A		
Magnesium Oxide	-	A	A	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	A	-	-	A	-	A	A	-	A	-	A
Magnesium Sulfate	B	B	A	-	B	A	B	B	B	C	B	-	A	B	A	A	A	-	B	A	A	A	-	A	A	-	A	D	C	A		
Maleic Acid	C	A	A	A	B	A	A	C	-	-	B	-	A	B	A	C	A	-	C	-	A	A	-	A	D	-	A	D	D	A		
Maleic Anhydride	-	-	-	-	-	A	-	-	-	-	-	-	-	-	C	-	-	-	-	A	A	-	A	D	-	D	-	D	A			
Malic Acid	B	A	A	-	C	-	A	D	-	-	D	-	A	-	A	-	A	-	-	A	-	-	A	B	-	A	-	A	-	A		
Mash	-	A	A	-	-	-	A	-	-	-	-	-	-	-	A	A	-	-	-	A	A	-	-	A	A	-	A	-	A	-	A	
Mayonnaise	A	A	A	-	D	-	-	D	-	D	D	-	-	A	A	A	B	-	A	-	A	A	-	A	A	-	-	-	A			
Melamine	-	D	D	-	-	-	D	-	-	-	-	-	-	-	D	-	-	-	-	A	A	-	-	C	-	-	A					
Mercuric Chloride (Dilute Solution)	D	D	D	D	D	A	B	D	D	D	D	-	A	A	A	A	A	-	B	A	-	A	A	-	A	A	A	A	A			
Mercuric Cyanide	A	A	A	-	D	A	-	D	-	D	-	A	-	A	A	A	-	B	A	-	A	A	-	A	-	-	-	A				
Mercury	A	A	A	A	C	C	A	D	D	A	A	-	A	-	A	A	A	-	B	A	-	A	A	-	A	A	A	A	A			
Methanol (See Alcohols, Methyl)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl Acetate	A	-	A	-	A	-	A	A	-	B	-	-	A	-	A	A	-	D	-	-	A	A	-	D	D	B	B	D	-			
Methyl Acrylate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	A	A	-	D	D	-	B	D	A				
Methyl Acetone	A	-	A	-	A	-	A	-	A	A	-	-	A	D	A	-	D	A	-	-	-	A	-	D	D	-	D	-	C			
Methyl Alcohol (10%)	A	-	A	-	C	-	A	C	-	B	-	A	-	A	A	-	A	-	-	-	-	B	-	-	A	A	-	A	A			
Methyl Bromide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	D	-	-	A	A	-	A	B	-	D	D	B	B			
Methyl Butyl Ketone	-	-	A	-	A	-	-	-	-	-	-	-	-	-	D	B	-	-	-	-	A	A	-	D	D	C	D	A	B			
Methyl Cellosolve	-	-	-	-	A	-	-	A	-	-	-	-	-	-	C	B	-	-	-	A	A	-	D	D	-	D	B	D	C			
Methyl Chloride	-	A	A	-	D	A	A	A	-	-	A	D	-	A	D	A	A	-	D	D	-	A	A	-	A	D	D	C	D	A		
Methyl Dichloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D	A	-	-	-	-	A	A	-	A	D	-	D	D	A			
Methyl Ethyl Ketone	-	A	A	-	A	A	A	A	-	-	D	D	-	A	D	B	A	D	D	A	A	A	-	D	D	C	D	A	B			
Methyl Isobutyl Ketone ²	-	-	A	-	-	A	A	-	-	-	D	D	-	A	D	B	A	D	-	C	A	A	-	D	D	C	D	B				
Methyl Isopropyl Ketone	-	-	A	-	-	-	-	-	-	-	-	-	-	-	D	B	A	-	-	A	A	-	D	D	B	D	B	D	B			
Methyl Methacrylate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	A	A	-	D	D	-	D	D	A				
Methylamine	A	-	A	-	A	-	-	D	-	B	B	-	-	-	B	D	-	-	-	A	A	-	B	-	-	A						
Methylene Chloride	A	A	A	-	A	A	A	A	C	-	B	D	D	-	A	D	A	D	-	D	D	-	A	A	-	D	D	-	D	D	A	
Milk	A	A	A	A	A	-	-	C	C	D	D	-	A	-	A	A	B	B	A	-	B	A	-	A	A	A	A	B	A	A	A	
Molasses	A	A	A	A	A	-	-	A	B	A	A	-	A	-	B	A	A	-	B	A	-	A	A	A	A	-	A	-	A	-	A	

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Titanium	Hastelloy C	Cast Bronze	Bronze	Cast Iron	Carbon Steel	Knur	PVC (Type I) Tylon (E-3606)	Nomex	Polyacetal	Nylon	Cycloloc (ABS)	Polyethylene	Polypolypropylene	Rifton	Carbon	Ceramic	Ceramagnet™ A	Viton	Buna-N (Nitrile)	Silicone	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy			
Mustard	A	A	A	A	B	-	-	B	-	C	B	-	A	-	-	B	B	A	B	-	A	-	A	A	-	A	-	A					
Naptha	A	A	A	A	A	A	A	B	-	B	B	A	A	C	A	D	A	A	C	D	A	A	A	A	B	D	D	D	A				
Naphthalene	B	A	B	-	B	A	A	C	-	B	A	A	D	-	A	D	A	-	-	D	B	A	A	A	-	B	D	-	D	D	A		
Nickel Chloride	-	A	B	-	D	A	A	D	-	D	-	A	A	B	A	-	B	A	-	B	A	-	A	A	-	A	A	A	A	A			
Nickel Sulfate	B	A	B	-	D	A	B	C	C	D	D	A	A	A	A	A	A	B	A	-	B	A	-	A	A	-	A	A	C	A			
Nitric Acid (10% Solution)	A	A	A	A	D	A	A	D	-	D	D	A	B	A	A	D	D	C	B	A	D	C	B	D	A	D	-	D	B	A			
Nitric Acid (20% Solution)	-	A	A	A	D	A	A	D	-	D	-	B	A	B	A	A	D	D	D	B	A	C	D	C	D	A	D	-	D	D	B		
Nitric Acid (50% Solution)	-	A	A	A	D	A	A	D	-	D	-	B	A	B	A	A	D	D	D	C	D	C	D	A	-	A	D	-	D	D	D		
Nitric Acid (Concentrated Solution)	-	D	B	A	B	A	B	D	D	D	-	D	C	A	D	D	D	D	D	D	C	D	C	D	A	C	B	D	-	D	D	D	
Nitrobenzene ²	B	A	B	-	C	A	B	D	-	B	B	D	D	D	A	D	B	C	D	D	C	B	A	A	-	D	D	D	D	D	B		
Oils																																	
Aniline	-	A	A	-	C	A	D	A	-	A	-	D	-	A	D	D	C	D	-	A	-	A	A	-	A	D	-	D	B	D	A		
Anise	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	A	A	-	-	D	-	A					
Bay	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	A	A	-	A	-	D	-	A				
Bone	-	A	A	-	-	-	-	A	-	-	-	-	-	-	-	-	A	-	-	-	-	A	A	-	A	A	-	D	-	A			
Castor	-	A	A	-	A	-	-	A	-	A	-	A	-	-	A	-	-	-	-	-	A	A	A	A	-	A	B	A	A				
Cinnamon	-	A	A	-	-	-	-	-	-	-	-	-	-	A	-	A	-	-	A	-	A	A	-	D	-	D	-	A					
Citric	-	A	A	-	-	-	-	D	-	D	-	-	-	-	-	A	A	-	-	A	-	A	A	-	A	A	-	D	-	A			
Clove	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	B	-	A	A	-	A	-	-	A					
Coconut	-	A	A	-	B	-	-	A	-	A	-	-	-	-	-	A	A	-	-	A	-	A	A	-	A	A	-	A	A	D			
Cod Liver	-	A	A	-	B	-	-	-	-	B	-	A	-	-	-	A	A	C	-	A	-	A	A	-	A	A	-	B	A	A			
Corn	-	A	A	A	B	-	-	B	-	A	-	-	-	-	-	A	A	C	-	A	-	A	A	-	A	A	-	D	C	A			
Cotton Seed	B	A	A	A	B	-	-	B	-	A	C	-	A	-	A	A	C	-	A	A	A	-	A	A	-	A	A	-	D	C	A		
Creosote ²	-	A	A	-	A	-	-	-	-	-	-	-	-	-	-	D	-	-	D	-	A	A	-	A	A	-	B	D	D	A			
Diesel Fuel (2D, 3D, 4D, 5D)	-	A	A	-	A	-	-	A	-	-	-	-	-	-	-	D	A	A	-	-	A	A	A	A	-	A	A	-	D	D	A		
Fuel (1, 2, 3, 5A, 5B, 6)	-	A	A	-	A	A	A	A	-	-	-	A	-	A	D	A	-	-	B	-	A	A	-	A	B	-	D	D	D	A			
Ginger	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	A	A	-	A	A	-	A	-	A	-	A		
Hydraulic (See Hydraulic)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Lemon	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	D	-	A	A	-	A	-	D	-	A					
Linseed	-	A	A	A	A	-	-	A	-	A	-	A	B	-	-	A	A	C	-	A	-	A	A	A	A	-	D	D	D	A			
Mineral	A	A	A	A	A	-	-	A	-	A	B	-	A	-	B	A	A	-	B	A	A	A	A	A	-	B	D	D	A				
Olive	A	A	A	-	A	-	-	B	-	A	B	-	A	-	A	A	-	A	-	A	A	-	A	A	C	B	-	D	A				
Orange	-	A	A	-	-	-	-	-	-	-	-	-	-	-	A	-	A	A	-	A	-	A	A	-	D	-	A						
Palm	-	A	A	-	A	-	-	B	-	-	-	A	-	-	A	A	-	-	-	A	A	-	A	A	-	A	-	D	-	A			
Peanut ³	-	A	A	-	A	-	-	A	-	A	-	A	-	-	A	-	-	D	-	A	A	-	A	A	-	D	-	D	A				
Peppermint ²	-	A	A	-	-	-	-	A	-	-	-	-	-	-	A	-	-	D	-	A	A	-	A	D	-	D	-	A					
Pine	A	A	A	-	A	-	-	D	-	C	B	-	A	-	A	A	-	A	-	-	A	A	-	A	A	-	D	-	A				
Rape Seed	-	A	A	-	-	-	-	A	-	-	-	A	-	-	A	-	-	A	-	-	A	A	-	A	B	-	D	-	A				
Rosin	-	A	A	-	A	-	-	-	-	-	-	-	-	-	A	A	-	A	-	A	A	-	A	A	-	-	-	A					
Sesame Seed	-	A	A	-	A	-	-	A	-	A	-	A	-	-	A	A	-	A	-	-	A	A	-	A	A	-	D	-	A				
Silicone	-	A	A	-	-	-	-	A	-	A	-	-	-	-	A	A	A	-	A	-	A	A	A	A	-	A	A	-	A				
Soybean	-	A	A	-	A	-	-	B	-	A	-	A	-	-	A	A	-	A	-	A	A	-	A	A	-	D	-	D	A				
Sperm	-	A	A	-	-	-	-	A	-	-	-	A	-	-	A	-	-	A	-	-	A	A	-	A	A	-	D	-	A				
Tanning	-	A	A	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	A	A	-	A	A	-	D	-	A					
Turbine	-	A	A	-	A	-	-	A	-	A	-	A	-	-	A	-	C	-	-	A	A	-	A	A	-	D	-	D	A				
Oleic Acid	B	A	A	B	B	-	B	B	C	C	C	-	A	C	A	C	B	A	B	D	C	-	A	A	-	D	B	D	D	D	A		
Oleum (25%)	-	-	-	-	-	A	-	-	-	B	D	-	A	D	-	-	-	-	-	-	A	-	A	D	D	D	D	-	D				
Oleum	B	-	A	-	B	-	-	C	C	-	B	D	D	-	A	B	A	C	C	D	-	A	A	-	A	C	D	D	D	D	A		
Oxalic Acid (Cold)	C	A	B	A	C	C	B	B	C	D	D	-	A	B	A	C	C	D	-	A	A	-	A	A	-	A	B	C	B	A	C		

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Titanium	Hastelloy C	Cast Bronze	Bronze	Cast Iron	Carbon Steel	Kynar	PC (Type I) Tygon (-3606)	Teflon	Nylon	Polyacetal	Nylon	Cycloac (ABS)	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Ceramagnet™ A*	Viton	Buna-N (Nitrile)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy				
Paraffin	A	A	A	A	A	-	-	A	-	B	B	A	A	-	A	B	A	A	B	-	-	A	A	-	A	A	-	-	-	A					
Pentane	A	C	C	-	A	-	B	A	-	B	B	-	-	-	A	D	A	A	D	-	-	A	A	-	A	A	-	B	D	A					
Perchloroethylene ²	B	A	A	-	A	-	-	C	-	B	B	A	-	-	A	D	A	-	D	-	D	A	A	-	A	C	D	D	D	A					
Petrolatum	A	-	A	-	B	-	-	B	-	C	C	-	-	-	A	D	A	A	B	-	-	A	A	-	A	A	-	B	A	D	A				
Phenol (10%)	B	A	A	-	A	-	B	C	-	B	D	-	A	C	A	-	-	D	-	-	A	-	-	B	D	-	C	D	C	C					
Phenol (Carbolic Acid)	B	A	A	A	B	C	A	B	D	D	D	A	A	C	A	C	D	D	-	D	B	A	A	D	A	A	D	-	D	D	B				
Phosphoric Acid (to 40% Solution)	-	B	A	A	D	A	A	D	D	D	-	-	A	B	A	A	D	D	C	B	A	A	B	C	D	A	D	-	D	B	C				
Phosphoric Acid (40%-100% Solution)	-	C	B	B	D	B	A	D	D	D	-	-	A	B	A	A	D	D	D	C	A	A	B	D	D	A	D	-	D	B	C				
Phosphoric Acid (Crude)	-	D	C	C	D	C	A	D	D	D	D	A	-	-	A	-	D	D	D	C	-	A	C	D	-	A	D	-	D	B	-	A			
Phosphoric Anhydride (Dry or Moist)	-	A	A	-	-	-	-	D	-	-	D	D	A	-	-	-	-	-	-	-	-	A	-	-	D	D	-	D	-	A	-	-			
Phosphoric Anhydride (Molten)	-	A	A	-	D	-	-	D	D	-	-	D	-	A	-	-	A	-	D	-	-	-	D	C	-	D	-	D	A	-	D	-	A		
Photographic Developer	-	C	A	C	C	A	A	-	D	-	A	-	A	C	-	-	B	A	-	A	A	-	A	A	-	A	A	-	A	-	A	-	A		
Phthalic Anhydride	B	A	B	-	B	-	A	B	-	C	C	-	-	A	-	-	A	-	-	A	-	-	-	-	A	C	-	-	-	-	-	-			
Picric Acid	B	A	A	-	C	-	A	D	D	D	D	-	A	A	A	-	-	A	-	A	-	-	-	-	A	A	D	A	-	A	A				
Plating Solutions																																			
Antimony Plating 130°F	-	-	A	-	-	A	A	-	-	-	-	A	-	A	A	-	D	-	-	A	-	-	A	-	A	A	D	A	-	-	B				
Arsenic Plating 110°F	-	-	A	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	C	-	A	A	D	A	-	-	B				
Brass Plating																																			
Regular Brass Bath 100°F	-	-	A	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	C	-	A	A	D	A	-	-	B				
High Speed Brass Bath 110°F	-	-	A	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	D	-	A	A	D	A	-	-	B				
Bronze Plating																																			
Copper-Cadmium Bronze Bath R.T.	-	-	A	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	C	-	A	A	D	A	-	-	B				
Copper-Tin Bronze Bath 160°F	-	-	A	-	-	A	A	-	-	-	-	D	-	A	A	-	A	-	-	A	-	-	D	-	A	A	D	B	-	-	C				
Copper-Zinc Bronze Bath 100°F	-	-	A	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	C	-	A	A	-	A	-	-	B				
Cadmium Plating																																			
Cyanide Bath 90°F	-	-	A	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	C	-	A	A	-	A	-	-	B				
Fluoroborate Bath 100°F	-	-	A	-	-	D	A	-	-	-	-	A	-	A	A	-	D	-	-	A	-	-	D	-	A	B	-	C	-	-	B				
Chromium Plating																																			
Chromic-Sulfuric Bath 130°F	-	-	C	-	-	A	A	-	-	-	-	A	-	A	D	-	D	-	-	A	-	-	A	-	C	D	-	D	-	-	D				
Fluosilicate Bath 95°F	-	-	C	-	-	C	A	-	-	-	-	A	-	A	D	-	D	-	-	A	-	-	B	-	C	D	-	D	D	-	D				
Fluoride Bath 130°F	-	-	D	-	-	C	A	-	-	-	-	A	-	A	D	-	D	-	-	A	-	-	B	-	C	D	-	D	-	-	D				
Black Chrome Bath 115°F	-	-	C	-	-	A	A	-	-	-	-	A	-	A	D	-	D	-	-	A	-	-	A	-	C	D	-	D	-	-	D				
Barrel Chrome Bath 95°F	-	-	D	-	-	C	A	-	-	-	-	A	-	A	D	-	D	-	-	A	-	-	A	-	C	D	-	D	-	-	D				
Copper Plating (Cyanide)																																			
Copper Strike Bath 120°F	-	-	-	-	A	A	A	-	-	-	-	-	A	A	A	-	-	-	-	-	-	-	C	-	B	-	A	-	-	-	-	-			
Rochelle Salt Bath 150°F	-	-	A	-	-	A	A	-	-	-	-	D	-	A	A	-	A	-	-	A	-	-	D	-	A	A	-	B	-	-	C				
High Speed Bath 180°F	-	-	A	-	-	A	A	-	-	-	-	D	-	A	A	-	A	-	-	A	-	-	D	-	A	A	-	B	-	-	C				
Copper Plating (Acid)																																			
Copper Sulfate Bath R.T.	-	-	D	-	-	A	A	-	-	-	-	A	-	A	A	-	D	-	-	A	-	-	D	-	A	A	-	A	-	-	D				
Copper Fluoroborate Bath 120°F	-	-	D	-	-	D	A	-	-	-	-	A	-	A	A	-	D	-	-	A	-	-	D	-	A	B	-	C	-	-	D				
Copper (Misc.)																																			
Copper Pyrophosphate 140°F	-	-	A	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	B	-	A	A	-	A	-	-	B				
Copper (Electroless) 140°F	-	-	-	-	-	-	D	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	D	-	A	D	-	D	-	-	B				
Gold Plating																																			
Cyanide 150°F	-	-	A	-	-	A	A	C	-	-	-	D	-	A	A	-	A	-	-	A	-	-	B	-	A	A	-	A	-	-	D				
Neutral 75°F	-	-	C	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	A	-	A	A	-	A	-	-	A				
Acid 75°F	-	-	C	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	A	-	A	A	-	A	-	-	A				
Indium Sulfamate Plating R.T.	-	-	C	-	-	A	A	-	-	-	-	A	-	A	A	-	D	-	-	A	-	-	A	-	A	A	-	A	-	-	A				
Iron Plating																																			

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Titanium	Hastelloy C	Cast Bronze	Bronze	Cast Iron	Carbon Steel	Knur	PVC (Type I) Tylon (E-3606)	Teflon	Nomex	Polyacetal	Nylon	Cyclohex (ABS)	Polyethylene	Polypropylene	Rifton	Carbon	Ceramic	Ceramagnet™ A	Viton	Buna-N (Nitrile)	Silicon	Norprene	Ethylene Propylene	Rubber (Natural)	Epoxy
Ferrous Chloride Bath 190°F	-	-	D	-	-	A	D	-	-	-	-	D	-	A	A	-	D	-	-	C	-	-	A	-	A	B	-	D	-	D	
Ferrous Sulfate Bath 150°F	-	-	C	-	-	A	A	-	-	-	-	D	-	A	A	-	D	-	-	A	-	-	A	-	A	A	-	B	-	D	
Ferrous Am. Sulfate Bath 150°F	-	-	C	-	-	A	A	-	-	-	-	D	-	A	A	-	D	-	-	A	-	-	A	-	A	A	-	B	-	D	
Sulfate-Chloride Bath 160°F	-	-	D	-	-	A	D	-	-	-	-	D	-	A	A	-	D	-	-	A	-	-	A	-	A	B	-	C	-	D	
Fluoborate Bath 145°F	-	-	D	-	-	D	B	-	-	-	-	D	-	A	A	-	D	-	-	A	-	-	D	-	A	B	-	C	-	D	
Sulfamate 140°F	-	-	D	-	-	A	B	-	-	-	-	A	-	A	A	-	D	-	-	A	-	-	A	-	A	A	-	A	-	A	
Lead Fluoborate Plating	-	-	C	-	-	D	A	-	-	-	-	A	-	A	A	-	D	-	-	A	-	-	D	-	A	B	-	C	-	A	
Nickel Plating																															
Watts Type 115-160°F	-	-	C	-	-	A	A	-	-	-	-	D	-	A	A	-	A	-	-	A	-	-	A	-	A	A	-	A	-	D	
High Chloride 130-160°F	-	-	C	-	-	A	A	-	-	-	-	D	-	A	A	-	D	-	-	A	-	-	A	-	A	A	-	B	-	D	
Fluoborate 100-170°F	-	-	C	-	-	D	A	D	-	-	-	D	-	A	A	-	D	-	-	A	-	-	D	-	A	B	-	C	-	D	
Sulfamate 100-140°F	-	-	C	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	A	-	A	A	-	A	-	A	
Electroless 200°F	-	-	I	-	-	-	-	-	-	-	-	D	-	A	D	-	D	-	-	D	-	-	A	-	A	D	-	D	-	B	
Rhodium Plating 120°F	-	-	D	-	-	D	D	-	-	-	-	A	-	A	A	-	D	D	-	A	-	-	A	-	A	A	-	B	-	A	
Silver Plating 80-120°F	-	-	A	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	B	-	A	A	-	A	-	A	
Tin-Fluoborate Plating 100°F	-	-	C	-	-	D	A	-	-	-	-	A	-	A	A	-	D	-	-	A	-	-	D	-	A	B	-	C	-	A	
Tin-Lead Plating 100°F	-	-	C	-	-	D	A	-	-	-	-	A	-	A	A	-	D	-	-	A	-	-	D	-	A	B	-	C	-	A	
Zinc Plating																															
Acid Chloride 140°F	-	-	D	-	-	A	D	-	-	-	-	A	-	A	A	-	D	-	-	A	-	-	A	-	A	A	-	A	-	A	
Acid Sulfate Bath 150°F	-	-	C	-	-	A	A	-	-	-	-	D	-	A	A	-	D	-	-	A	-	-	A	-	A	A	-	B	-	D	
Acid Fluoborate Bath R.T.	-	-	C	-	-	D	-	-	-	-	-	A	-	A	A	-	D	-	-	A	-	-	D	-	A	B	-	C	-	A	
Alkaline Cyanide Bath R.T.	-	-	A	-	A	A	-	-	-	-	-	A	-	A	A	-	A	-	-	A	-	-	D	-	A	A	-	A	-	A	
Potash	-	A	-	A	C	-	A	C	-	B	-	A	B	-	A	B	A	-	B	A	-	A	A	A	A	-	B	-	B	A	
Potassium Bicarbonate	-	A	-	B	C	A	B	B	-	D	-	A	A	-	A	A	C	A	C	B	A	A	A	-	A	A	-	A	-	B	A
Potassium Bromide	A	A	-	B	C	A	B	C	-	D	D	A	A	-	A	A	A	C	-	B	A	C	A	A	-	A	A	A	B	A	
Potassium Carbonate	B	A	-	A	C	A	A	C	-	B	B	A	B	A	B	A	B	-	B	A	A	A	A	A	B	-	A	-	B	A	
Potassium Chlorate	B	A	A	A	B	A	B	B	-	B	B	A	B	A	B	A	B	D	-	B	A	A	A	-	A	A	-	A	-	B	A
Potassium Chloride	C	A	A	B	B	A	A	C	C	B	B	A	A	A	A	A	B	C	B	A	A	A	-	A	A	-	A	A	A	A	
Potassium Chromate	-	-	B	B	A	-	B	A	-	A	-	A	-	A	-	A	C	-	B	-	A	A	D	-	A	A	-	A	B	C	
Potassium Cyanide Solutions	B	A	B	A	D	A	A	D	-	B	B	A	A	-	A	A	C	A	-	B	A	A	C	A	-	B	A	-	A	A	A
Potassium Dichromate	B	A	A	A	A	A	B	C	-	B	C	A	A	-	A	A	C	D	-	B	A	A	A	-	B	A	-	A	A	A	
Potassium Ferrocyanide	B	A	-	A	C	-	B	A	-	C	-	A	-	A	-	A	-	A	-	-	-	-	-	D	-	-	A	A	-	A	
Potassium Hydroxide (50%)	A	B	B	B	D	C	A	D	D	C	A	D	A	B	A	A	D	A	C	B	A	A	-	D	A	D	B	C	A	A	
Potassium Nitrate	B	A	B	A	B	A	B	B	-	B	A	A	C	A	A	B	C	-	B	A	C	A	A	-	B	A	-	A	A	A	
Potassium Permanganate	B	A	B	B	B	B	B	B	-	B	B	A	A	-	A	A	C	D	C	B	B	A	A	-	B	A	-	A	B	B	
Potassium Sulfate	B	A	B	B	A	A	B	B	B	B	A	A	A	A	B	C	-	B	A	A	A	-	A	A	C	A	A	C	A		
Potassium Sulfide	A	A	-	A	B	-	B	B	-	B	B	-	A	-	A	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	
Propane (Liquified) ^{1,2}	A	A	-	A	A	-	A	A	-	B	-	D	-	A	D	A	A	-	D	-	A	A	-	A	A	D	B	D	D	A	
Propylene Glycol	B	B	-	A	A	-	B	-	B	B	-	-	A	-	B	B	B	B	-	A	A	-	A	A	-	C	-	A	-	A	
Pyridine	-	C	-	B	B	-	-	-	B	A	D	-	D	A	D	D	-	C	B	A	A	-	D	D	-	D	B	D	A		
Pyrogallic Acid	B	A	A	A	B	-	A	B	-	B	B	-	A	-	A	-	D	A	-	-	-	A	A	-	A	A	-	-	A	-	A
Rosins	A	A	A	A	A	-	B	A	C	-	C	-	-	A	-	B	A	-	-	A	-	A	A	-	A	A	-	-	-	A	
Rum	-	A	-	A	-	-	-	-	-	-	A	-	-	A	A	A	-	A	-	-	A	-	A	A	-	A	A	-	A	-	A
Rust Inhibitors	-	A	-	A	-	-	-	A	-	A	-	-	-	-	A	-	-	A	-	-	A	-	A	A	-	A	A	-	C	-	A
Salad Dressing	-	A	-	A	B	-	B	-	B	-	D	-	-	A	-	A	A	A	-	A	-	A	-	A	A	-	A	A	-	-	A
Sea Water	A	A	C	A	C	A	-	C	-	D	-	A	-	A	A	A	-	B	A	-	A	A	A	A	B	B	A	A	A	A	
Shellac (Bleached)	A	A	-	A	A	-	-	A	B	B	A	-	-	A	-	A	A	-	A	-	A	-	A	-	-	A	-	-	-	A	
Shellac (Orange)	A	A	-	A	A	-	-	A	C	C	A	-	-	A	-	A	A	-	A	-	A	-	A	-	-	A	-	-	-	A	
Silicone	-	B	-	A	B	-	-	A	-	-	-	-	-	-	A	A	A	-	-	A	-	A	A	-	A	A	B	A	A	A	

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Titanium	Hastelloy C	Cast Bronze	Bronze	Cast Iron	Carbon Steel	Kynar	PC (Type I) Tygon (F-3606)	Teflon	Nylon	Polyacetal	Nylon	Cyclocac (ABS)	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Ceramagnel™ A	Viton	Buna-N (Nitrile)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy
Silver Bromide	-	C	C	B	D	-	-	-	-	-	-	-	-	-	A	C	-	-	-	-	-	A	-	-	-	-	-	-	-	A	
Silver Nitrate	B	A	B	A	D	A	A	D	-	D	D	A	A	B	A	A	C	A	-	B	A	-	A	A	A	C	A	A			
Soap Solutions ¹	A	A	A	A	C	A	B	B	-	B	A	-	B	B	A	A	A	A	-	B	A	A	A	A	A	A	B	B	-	C	
Soda Ash (See Sodium Carbonate)	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sodium Acetate	B	A	A	B	B	A	-	B	-	C	C	A	-	A	A	B	A	-	B	A	-	A	A	-	D	D	-	C	-	A	
Sodium Aluminate	B	-	-	A	C	B	B	B	-	C	-	-	A	A	B	A	-	-	A	A	-	A	A	-	A	A	B	A	-	A	
Sodium Bicarbonate	B	A	A	A	A	A	-	B	A	C	C	A	A	B	A	A	B	A	B	B	A	A	A	A	A	C	A	A	A	A	
Sodium Bisulfate	A	A	-	A	D	B	B	C	C	D	D	A	A	B	A	A	B	C	C	B	A	A	A	-	B	A	C	A	-	A	
Sodium Bisulfite	-	A	-	A	A	A	B	C	-	D	-	A	A	B	A	A	B	D	B	B	A	A	A	-	A	A	C	A	-	A	
Sodium Borate	B	A	-	A	C	-	A	A	-	C	C	-	C	-	A	-	A	-	A	-	-	-	-	-	A	-	B	A	-	-	
Sodium Carbonate	B	A	B	B	C	A	A	B	B	B	B	A	A	B	A	A	A	C	B	A	A	B	A	-	A	A	-	A	A	A	
Sodium Chlorate	B	A	-	A	B	A	B	B	-	C	A	B	A	A	B	A	D	A	-	B	A	A	A	-	A	D	-	A	-	A	
Sodium Chloride	B	A	C	B	C	A	A	B	C	B	C	A	A	B	A	A	A	B	B	A	A	A	A	A	A	C	A	B	A	B	
Sodium Chromate	A	A	A	-	D	-	B	B	-	B	B	-	-	A	A	D	A	-	-	A	A	B	-	B	A	-	A	-	C		
Sodium Cyanide	B	A	-	A	D	A	-	D	D	B	B	A	-	A	A	D	C	-	B	A	A	A	-	A	A	D	A	A	A		
Sodium Fluoride	B	C	-	C	C	A	A	C	-	D	D	-	D	D	A	-	A	-	C	-	-	-	-	B	D	-	D	-	D		
Sodium Hydrosulfite	-	-	-	A	-	A	C	-	-	-	C	A	A	-	-	A	-	-	-	-	-	A	-	A	-	A	-	A	-	A	
Sodium Hydroxide (20%)	-	A	A	A	D	A	A	C	D	A	-	A	A	B	A	A	D	C	C	B	A	A	C	D	A	A	A	D	B	A	
Sodium Hydroxide (50% Solution)	-	A	B	-	D	A	A	C	D	B	-	D	A	B	A	A	D	C	C	C	A	B	C	D	A	D	D	D	C	-	A
Sodium Hydroxide (80% Solution)	-	A	D	-	D	A	B	C	D	C	-	A	B	A	A	D	C	C	C	A	B	C	D	A	B	D	D	C	-	B	
Sodium Hypochlorite ³ (to 20%)	-	C	C	C	C	A	A	D	D	D	-	A	B	A	A	D	A	-	B	C	C	D	A	B	A	C	D	B	C	B	
Sodium Hypochlorite	D	-	D	-	D	A	A	D	-	D	D	A	A	-	A	A	-	A	-	C	C	-	D	-	B	B	C	A	-	A	
Sodium Hyposulfite	-	A	A	-	D	-	D	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	C	-	C	C	-	C	
Sodium Metaphosphate ²	A	-	A	-	A	-	-	C	C	B	B	-	-	A	-	B	A	-	-	D	-	A	A	-	A	A	-	B	A	A	
Sodium Metasilicate	A	-	A	-	B	-	-	B	-	C	C	-	-	A	-	D	-	-	-	A	-	-	A	A	D	A	-	A			
Sodium Nitrate	B	A	A	A	A	A	A	B	B	C	A	B	A	A	B	A	B	A	-	B	A	-	A	A	D	C	D	B	A	C	
Sodium Perborate	B	-	C	-	B	-	-	C	C	B	B	-	-	A	A	B	A	-	-	A	-	A	A	-	A	B	D	B	A	C	
Sodium Peroxide	B	A	A	-	C	-	B	C	C	D	C	-	A	-	A	-	D	D	-	-	-	A	A	-	A	C	D	B	A	C	
Sodium Polyphosphate (Mono, Di, Tribasic)	-	A	A	-	D	A	A	C	-	-	-	-	-	A	A	B	-	-	-	A	A	-	A	A	-	D	A	A	A		
Sodium Silicate	B	A	B	A	C	A	B	C	C	-	B	-	A	B	A	A	C	A	-	A	-	A	A	-	A	A	-	A	A	A	
Sodium Sulfate	B	A	A	C	B	A	B	B	B	B	B	-	A	-	A	A	B	A	-	B	A	A	A	-	A	A	-	A	A	C	
Sodium Sulfide	B	A	B	-	D	A	B	D	D	A	B	-	A	B	A	B	A	-	B	A	A	A	-	A	C	-	A	A	C		
Sodium Sulfite	-	C	C	-	C	A	A	C	-	A	-	-	A	A	A	-	D	-	A	-	-	A	A	-	A	A	-	A	-	A	
Sodium Tetraborate	-	A	-	-	-	-	-	-	-	-	-	-	A	-	A	B	-	-	-	-	-	A	A	-	A	A	-	-	A		
Sodium Thiosulfate ("Hypo")	A	A	A	-	B	A	-	D	D	C	B	-	A	-	A	A	C	A	-	A	A	A	-	A	B	-	A	A	C		
Sorghum	-	A	A	-	-	-	-	-	-	A	-	-	-	-	-	-	A	A	-	-	-	A	A	-	A	A	-	A	-	A	
Soy Sauce	-	A	A	-	A	-	-	A	-	D	-	-	-	-	-	A	A	A	-	-	-	A	A	-	A	A	-	A	-	D	
Stannic Chloride	D	D	D	-	D	A	B	D	-	D	D	A	-	A	A	C	A	-	B	A	-	-	A	-	A	A	D	A	A	A	
Stannic Fluoborate	-	-	A	-	-	-	-	-	-	D	-	-	-	-	-	A	C	-	-	-	-	A	-	A	A	-	A	-	A		
Stannous Chloride	D	D	C	-	D	A	A	D	-	D	D	-	A	A	A	-	D	-	A	-	-	-	-	B	C	D	D	-	A		
Starch	B	A	A	-	A	-	-	B	-	C	C	-	A	-	A	A	A	A	-	B	-	-	A	A	-	A	A	-	A		
Stearic Acid ²	B	A	A	A	B	A	A	C	C	C	A	B	A	A	A	A	B	D	-	A	A	A	B	D	B	B	C	A			
Stoddard Solvent	A	A	A	A	A	A	A	A	A	B	B	A	A	D	A	D	A	A	B	D	D	A	A	A	-	A	B	D	D	D	
Styrene	A	A	A	-	A	-	-	A	-	-	A	-	-	A	A	A	A	-	-	-	-	A	A	-	B	D	D	D	D	A	
Sugar (Liquids)	A	A	A	A	A	-	A	A	-	B	B	-	-	A	A	A	B	-	A	-	A	A	A	A	-	B	-	A	A		
Sulfate Liquors	-	C	C	-	B	-	A	C	-	-	-	-	-	D	-	-	A	-	A	A	-	-	-	C	-	A					
Sulfur Chloride	-	D	D	D	D	-	-	C	D	-	-	A	C	A	A	D	A	-	A	D	-	A	C	-	A	D	-	D	D	C	
Sulfur Dioxide ²	-	A	A	C	A	A	B	B	-	-	B	D	B	A	D	B	D	D	C	D	A	A	A	-	D	D	C	B	A	D	
Sulfur Dioxide (Dry)	A	A	A	-	A	-	A	A	C	A	B	-	D	-	A	-	D	-	D	-	-	A	A	-	D	-	D	-	D	D	

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Titanium	Hastelloy C	Cast Bronze	Bronze	Cast Iron	Carbon Steel	Kinvar	PVC (Type I) Tylon (E-3606)	Nylon	Polyacetal	Nylon	Cycloloc (ABS)	Polyethylene	Rifton	Carbon	Ceramic	Ceramagnet™ A	Viton	Buna-N (Nitrile)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy			
Sulfur Trioxide (Dry)	A	A	C	-	A	-	-	B	-	B	B	-	A	B	A	D	D	D	-	-	-	B	A	-	A	D	B	C	A			
Sulfuric Acid (to 10%)	-	D	C	C	C	A	A	D	D	D	D	-	A	A	B	A	B	D	D	B	B	A	A	A	A	C	-	D	C	A		
Sulfuric Acid (10%-75%) ²	-	D	D	D	D	C	B	D	D	D	D	-	A	A	B	A	B	D	D	B	C	A	B	A	D	C	A	D	D	B		
Sulfuric Acid (75%-100%)	-	-	D	-	-	D	B	-	D	-	A	B	-	A	A	-	D	-	-	B	C	-	A	-	A	D	-	D	-	D		
Sulfurous Acid	C	C	B	C	C	A	B	D	-	D	D	-	A	B	A	A	D	D	-	B	A	-	B	A	-	A	C	D	B	B	C	A
Sulfuryl Chloride	-	-	-	-	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	A	
Syrup	-	A	A	A	A	-	-	D	-	-	-	-	A	-	-	A	A	B	-	A	-	A	A	A	A	-	B	-	A	A		
Tallow	-	A	A	-	A	-	-	-	-	-	-	-	-	-	-	-	A	A	A	-	C	-	A	A	-	A	A	-	-	-	A	
Tannic Acid	B	A	A	A	C	A	B	B	-	C	C	A	A	B	A	A	B	D	-	B	A	-	A	A	A	A	D	C	A	A	A	
Tanning Liquors	-	A	A	-	C	A	A	A	-	-	-	-	A	B	A	-	B	-	-	A	-	A	A	-	A	C	-	-	-	A		
Tartaric Acid	B	A	B	B	C	A	B	A	C	D	D	A	A	B	A	A	B	A	-	B	A	-	A	A	-	A	D	C	A	-	A	
Tetrachlorethane	-	-	A	-	-	A	A	-	-	-	-	D	-	A	D	A	A	-	-	A	-	A	A	-	A	D	-	-	D	A		
Tetrahydrofuran	-	A	A	-	D	-	-	D	-	D	A	D	D	-	A	D	A	A	-	D	C	A	A	-	D	D	-	D	B	A		
Toluene, Toluol ³	A	A	A	-	A	A	A	A	A	A	A	A	A	D	D	D	A	D	D	D	A	A	A	A	C	D	D	D	D	A		
Tomato Juice	A	A	A	-	A	-	-	C	-	C	C	-	-	A	A	B	A	B	-	A	A	A	A	-	A	A	-	A	-	A		
Trichlorethane	-	C	A	-	C	A	A	C	-	C	-	-	-	A	D	A	-	-	-	-	A	A	-	A	D	D	D	D	A			
Trichlorethylene ²	B	A	A	-	B	A	A	B	A	C	B	A	D	-	A	D	A	C	D	D	C	A	A	C	A	D	D	D	D	A		
Trichloropropane	-	-	A	-	-	-	A	-	-	-	-	-	-	-	D	A	-	D	-	-	A	A	-	A	A	-	A	-	A	-	A	
Tricresylphosphate	-	-	A	-	-	B	A	A	-	-	-	D	-	A	A	C	-	-	-	A	A	-	B	D	-	D	A	-	A			
Triethylamine	-	-	-	-	-	-	A	-	-	-	A	-	-	A	-	B	D	-	-	-	A	A	-	A	A	D	B	-	A			
Turpentine ³	B	A	A	-	C	-	A	B	C	B	B	A	A	B	A	D	A	A	-	D	B	A	A	-	A	D	-	D	D	A		
Urine	-	A	A	-	B	-	-	C	-	B	-	-	A	-	-	A	A	A	-	B	A	-	A	A	-	A	A	-	D	A	-	A
Vegetable Juice	-	A	A	-	A	-	-	C	-	D	-	-	-	-	A	D	A	-	-	-	A	A	-	A	A	B	D	-	D	A		
Vinegar	A	A	A	A	D	A	A	B	B	C	D	A	A	-	A	A	B	A	B	B	A	A	A	A	A	C	-	B	A	C		
Varnish (Use Viton for Aromatic)	A	A	A	A	A	-	-	A	B	-	C	-	-	-	A	D	A	A	-	-	A	-	A	A	A	B	C	D	-	D	A	
Water, Acid, Mine	-	A	A	-	C	-	-	C	D	C	-	-	A	B	-	A	D	A	B	-	A	B	A	A	-	A	A	-	B	-	B	A
Water, Distilled, Lab Grade 7	-	A	A	-	B	-	-	A	-	D	-	-	A	B	A	A	A	A	-	A	A	A	A	A	A	A	A	A	A	A	A	
Water, Fresh	A	A	A	-	A	-	-	A	C	B	D	-	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Water, Salt	-	A	A	-	B	-	-	B	C	D	-	-	A	B	-	A	A	A	-	-	A	A	A	A	A	A	A	-	B	A	A	
Weed Killers	-	A	A	-	C	-	-	C	-	-	-	-	-	-	-	A	A	-	-	-	A	A	-	A	A	-	A	B	C	-	A	
Whey	-	A	A	-	B	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	A	A	-	A	A	-	-	-	A			
Whiskey and Wines	A	A	A	A	D	-	-	B	B	D	D	-	A	-	A	A	A	A	-	B	A	-	A	A	-	A	A	B	A	A	A	
White Liquor (Pulp Mill)	-	A	A	-	-	-	A	D	-	C	-	-	A	-	A	A	D	A	-	-	A	-	A	A	-	A	A	-	A	-	A	
White Water (Paper Mill)	-	A	A	-	-	-	-	A	-	-	-	-	-	-	-	B	A	-	-	A	-	A	A	-	A	A	-	A	-	A	-	A
Xylene ²	A	A	A	-	A	-	A	A	A	A	B	A	D	-	A	D	A	A	D	D	D	A	A	A	A	A	D	D	D	D	A	
Zinc Chloride	D	D	B	B	D	A	B	D	D	D	D	A	A	-	A	A	C	A	-	B	A	A	A	-	A	A	-	A	A	A	A	
Zinc Hydrosulfite	-	-	A	-	D	-	-	D	-	D	-	-	-	-	-	A	C	-	-	-	A	A	A	-	A	A	-	A	A	-	A	
Zinc Sulfate	B	A	A	A	D	A	B	B	C	C	D	A	C	B	A	A	C	A	-	B	A	A	A	-	A	A	-	A	A	C	A	