

FLUID COMPATIBILITY CHART

These recommendations are based upon 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 only, rather than an unqualified guarantee. Ultimately the customer must determine the suitability of the pump used in various solutions. IGE offers this data sheet as an aid and a guide only and takes no responsibility for customers' pump selection based upon the information contained herein.

All recommendations assume ambient temperatures unless otherwise noted.

RATINGS – CHEMICAL EFFECT

A – No effect – Acceptable

B – Minor effect – Acceptable

C – Moderate effect – Questionable

D – Severe effect – Not Recommended

1. P.V.C – 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.

The ratings for these materials are based upon the chemical resistance only. Added consideration must be given to pump selections when the chemical is abrasive, viscous in nature, or has a Specific Gravity greater than 1.1

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	TITANIUM	HASTELLOY C	Cast Bronze	Brass	Cast Iron	Carbon Steel	PVC (Type 1)	Tygon (E-3606)	Teflon	Noryl	Polyacetal	Nylon	Cyrolac (ABS)	Polyethylene	POLYPROPYLENE	RYTON	CARBON	CERAMIC	CERAMAGNET "A"	VITON	BUNA N (NITRILE)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy	
Acetalehyde ⁵	A	A	A	-	B	A	A	D	-	-	C	D	D	A	-	A	A	D	C	B	A	A	A	-	A	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, Glacial ¹	-	B	A	A	B	A	A	C	C	D	A	C	B	A	C	D	D	D	B	B	A	A	A	-	D	D	B	C	B	C	B	
Acetic Acid 20%	-	-	A	-	-	A	A	-	C	-	-	B	-	A	A	-	D	-	-	A	A	-	A	-	D	C	-	C	-	-	B	
Acetic Acid 80%	-	-	A	-	-	A	A	-	C	-	-	D	-	A	B	-	D	-	-	B	-	-	A	-	D	C	-	D	-	-	B	
Acetic Acid	-	B	A	B	B	A	A	C	C	D	C	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	A	D	D	D	D	A	A	A	A	A	-	D	A	C	B	B	C	A	
Acetone ³	A	A	A	B	A	A	A	A	A	A	A	D	D	A	D	B	A	D	C	B	A	A	A	A	D	D	B	C	A	D	B	
Acetyl Chloride	-	C	A	-	-	-	D	-	-	-	-	-	-	A	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	A	
Acetylene ²	A	A	A	A	-	-	B	-	A	A	B	-	-	-	-	A	A	-	-	D	A	A	-	A	A	C	B	A	A	C	A	
Acrylonitrile	A	A	C	-	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	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	B	A	A	A	A	-	B	B	A	A	-	A	A	D	A	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 (Ethanol)	-	A	A	A	B	A	A	A	C	A	A	A	C	-	A	B	A	B	B	A	-	A	A	A	A	A	B	A	B	A	A	
Hexyl	-	A	A	-	A	A	A	A	C	-	A	A	-	-	A	A	A	-	-	A	-	-	A	-	A	A	D	B	A	A	A	
Isobutyl	-	A	A	-	B	A	A	A	C	-	A	-	-	-	A	A	A	B	-	-	A	A	-	A	-	A	C	B	A	A	A	
Isopropyl	-	A	A	-	B	A	A	A	C	C	A	-	-	-	A	A	A	-	-	A	-	-	A	-	A	C	C	B	A	A	A	
Methyl ⁴ (Methanol)	-	A	A	A	B	A	A	A	C	A	A	B	-	A	A	C	A	D	B	A	-	A	A	A	C	B	-	A	A	A	A	
Octyl	-	A	A	-	A	A	A	A	C	-	A	-	-	-	A	A	A	-	-	-	-	-	A	-	A	B	-	B	A	C	A	
Propyl	-	A	A	-	A	A	A	A	-	-	A	A	-	-	A	A	A	-	-	A	-	-	A	-	A	A	B	A	A	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	-	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	-	-	-	-	
Aluminum Fluoride	-	D	C	D	-	D	B	-	-	-	A	A	-	-	A	A	C	D	-	B	A	-	A	-	A	A	C	A	-	C	-	
Aluminum Hydroxide ⁶	-	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	-	-	-	-	-	
Alum Potassium Sulfate (Alum), 100%	-	D	A	B	B	-	B	C	-	-	A	A	B	A	A	C	D	-	B	A	-	A	-	A	A	-	A	-	-	-	-	
Aluminum Sulfate	-	C	C	A	A	A	A	C	C	D	A	A	B	A	A	C	A	-	B	A	A	A	-	A	-	A	-	A	-	-	-	
Amines	A	A	A	-	A	B	A	B	-	A	B	C	A	A	B	D	A	-	-	-	-	-	A	-	D	D	C	B	B	C	-	
Ammonia 10%	-	-	A	-	-	A	A	-	-	-	-	A	-	-	A	-	A	-	-	A	A	-	A	-	A	D	-	A	-	-	-	
Ammonia, Anhydrous	A	B	A	A	B	B	A	D	-	D	B	A	B	A	A	D	A	-	B	A	B	C	A	-	D	B	B	A	A	D	-	
Ammonia, Liquids	-	A	A	A	D	-	B	D	-	-	A	A	A	B	A	A	D	-	-	D	A	-	A	-	D	B	B	A	A	D	-	
Ammonia, Nitrate	-	A	A	A	C	-	-	D	-	-	A	B	B	-	A	C	-	-	-	A	-	A	-	A	-	A	-	C	-	-	-	
Ammonium Bifluoride	-	C	A	-	D	-	B	-	-	-	-	A	-	-	A	D	-	-	-	A	-	-	A	-	A	-	A	-	-	-	-	
Ammonium Carbonate	B	A	A	A	C	A	B	B	-	C	B	A	B	A	A	D	A	-	-	A	-	A	-	B	D	C	A	A	-	-	-	
Ammonium Casenite	-	-	A	-	-	-	-	-	-	-	-	-	-	-	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ammonium Chloride	C	A	C	A	C	A	A	D	C	D	D	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	A	D	A	B	B	A	A	A	-	B	B	B	A	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	-	A	C	A	A	-	-	
Ammonium Oxalate	-	A	A	A	-	-	A	-	-	-	A	-	-	-	B	-	-	-	-	-	-	-	A	-	A	-	A	-	-	-	-	
Ammonium Persulfate	-	A	A	A	C	A	A	A	-	D	A	A	-	-	A	A	D	D	-	-	A	-	A	-	C	A	-	A	A	-	-	
Ammonium Phosphate, Dibasic	B	A	A	A	B	A	A	C	-	-	D	A	-	-	A	A	B	A	-	B	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	B	A	A	-	-	
Ammonium Phosphate, Tribasic	B	A	A	A	B	A	A	C	-	C	D	A	-	-	A	A	B	A	-	B	A	-	A	-	A	B	A	A	-	-	-	
Ammonium Sulfate	C	A	B	A	B	A	A	B	C	C	C	A	D	A	A	B	D	-	B	A	A	A	-	D	A	B	A	A	-	-	-	
Ammonium Thio-Sulfate	-	-	A	-	-	A	-	-	-	D	A	-	-	-	B	-	-	-	-	-	-	-	A	-	A	-	A	-	-	-	-	
Amyl-Acetate	B	A	A	C	B	A	A	C	-	-	C	D	D	A	D	A	B	-	D	D	A	A	-	D	D	D	D	A	D	-	-	
Amyl Alcohol	-	A	A	-	B	A	A	A	-	-	A	D	A	B	A	C	A	A	-	B	A	-	A	-	B	B	D	A	A	C	-	
Amyl Chloride	-	C	B	-	D	-	A	A	-	-	A	D	C	A	D	A	C	-	D	D	-	A	-	A	D	D	D	D	-	-	-	

GENERAL INFORMATION & DATA

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	TITANIUM	HASTELLOY C	Cast Bronze	Brass	Cast Iron	Carbon Steel	PVC (Type 1)	Tygon (E-3606)	Teflon	Noryl	Polyacetal	Nylon	Cycloc (ABS)	Polyethylene	POLYPROPYLENE	RYTON	CARBON	CERAMIC	CERAMAGNET "A"	VITON	BUNAN (NITRILE)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy		
Aniline	B	A	A	A	C	C	B	C	-	-	C	D	D	A	D	D	C	D	C	B	A	A	A	-	D	D	C	D	B	D	-		
Anti-Freeze	-	A	A	-	A	-	A	B	B	B	C	A	B	A	A	A	A	B	A	A	A	A	A	A	A	A	C	A	A	A	-		
Antimony Trichloride	-	D	D	-	D	-	A	-	-	-	-	A	A	A	-	D	-	A	-	-	-	-	A	-	-	-	-	C	-	A	-		
Aqua Regia (80% HCl, 20% HNO)	-	D	D	-	D	A	D	D	-	-	-	D	D	A	D	D	D	-	D	C	-	-	D	-	C	D	C	D	D	D	-		
Arochlor	-	-	-	-	-	-	-	-	-	-	A	-	-	-	D	-	-	-	-	-	-	-	A	-	-	A	D	-	D	B	D	-	
Aromatic Hydrocarbons	-	-	A	-	A	-	-	A	-	A	A	D	-	-	D	A	-	-	C	-	-	A	-	-	A	D	-	D	D	D	-		
Arsenic Acid	B	A	A	-	D	-	-	D	B	D	D	A	B	A	A	D	A	-	B	A	-	A	A	A	A	A	-	A	-	A	-	C	-
Asphalt	-	B	A	-	C	-	-	A	-	C	-	A	-	-	A	A	-	-	A	A	-	A	A	A	A	B	C	B	D	D	-		
Barium Carbonate	B	A	A	A	B	A	A	B	-	B	B	A	A	A	A	A	A	-	B	A	-	A	A	A	A	A	-	A	-	A	-	A	-
Barium Chloride	C	A	A	A	D	A	A	B	-	N	C	A	B	A	A	A	B	-	B	A	A	A	A	-	A	A	B	A	A	A	-	A	-
Barium Cyanide	-	-	A	-	-	-	-	C	-	-	A	-	-	-	B	-	-	-	B	-	-	A	-	A	C	-	A	-	A	-	A	-	
Barium Hydroxide	B	C	A	A	D	B	B	B	-	C	C	A	-	A	A	D	A	-	-	B	A	A	A	A	A	A	C	A	A	A	-	A	-
Barium Nitrate	-	A	A	-	-	A	-	D	-	A	A	B	-	-	A	A	-	-	-	-	-	-	A	A	-	A	A	-	A	-	A	-	
Barium Sulfate	B	A	A	A	D	A	A	C	-	C	C	A	-	A	A	A	A	-	B	A	A	A	B	-	A	A	D	A	A	-	-	-	
Barium Sulfide	B	A	A	-	D	-	-	C	-	C	C	A	A	A	A	A	-	B	A	-	A	A	-	A	A	C	A	A	A	-	-	-	
Beer ²	A	A	A	-	A	A	A	B	D	A	D	A	-	A	A	B	D	B	B	D	-	A	A	-	A	D	C	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	D	D	A	D	A	C	D	D	D	A	A	A	-	D	D	B	D	A	D	A	-	
Benzene ³	B	A	A	A	B	A	B	B	A	B	C	D	C	A	D	A	A	D	D	D	A	A	A	A	A	D	-	D	D	D	A	-	
Benzoic Acid ²	B	A	A	A	B	A	A	B	-	D	-	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	D	D	-	D	-	-	A	-
Borax (Sodium Borate)	-	A	A	A	C	-	A	A	B	A	C	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	A	B	C	D	-	A	B	A	A	A	A	-	B	A	-	A	A	A	A	A	-	A	A	A	A	-	
Brewery Stop	-	-	A	-	-	-	-	A	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bromine ² (wet)	D	D	D	D	D	A	A	C	-	D	D	B	B	A	D	D	D	D	D	D	D	D	D	A	D	A	D	D	D	D	D	C	-
Butadiene	A	A	A	-	A	-	-	C	A	C	C	A	-	A	-	A	A	-	-	-	B	A	A	-	A	A	-	B	A	-	A	-	
Butane ²¹	A	A	A	-	A	-	-	A	A	C	C	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	-	B	A	D	A	-	
Buttermilk	A	A	A	A	A	-	-	D	-	D	-	-	B	A	A	A	A	B	-	-	-	-	A	A	-	A	A	-	A	-	D	A	-
Butylene	A	-	A	-	A	-	-	A	A	A	A	B	-	A	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Butyl Acetate ¹	-	-	C	-	A	-	-	A	A	-	-	A	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	-	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	C	C	-	A	A	-
Calcium Bisulfide	-	-	B	-	C	A	A	C	-	-	-	A	-	A	A	C	A	-	B	A	-	A	A	-	A	A	-	A	D	-	A	-	
Calcium Bisulfite	-	D	A	-	C	A	A	C	-	-	-	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	-	C	A	-	-	B	C	-	-	-	-	A	A	A	-	-	A	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	
Calcium Chloride	C	A	D	C	C	A	A	B	-	C	-	A	A	A	A	D	A	B	B	A	A	A	B	A	A	B	D	A	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	-	-	
Calcium Hypochlorite	D	A	C	C	C	A	B	D	-	D	-	D	-	A	A	D	D	-	B	A	-	A	A	-	A	B	C	D	A	C	A	-	
Calcium Sulfate	B	A	A	A	B	A	B	B	-	-	-	A	A	A	A	A	C	B	A	A	A	A	-	A	A	-	D	-	C	A	-	-	
Calgon	-	A	A	-	-	-	-	C	-	D	-	-	-	A	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cane Juice ²	-	A	A	-	B	-	-	B	C	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	A	-	B	A	-	A	A	-	A	A	B	B	A	C	A	-	
Carbon Tetrachloride ²¹	B	C	B	A	C	A	A	C	A	C	D	C	C	A	D	A	A	D	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	-	-	
Carbonic Acid	B	A	B	A	A	-	-	A	B	-	D	-	A	-	A	A	A	-	B	A	-	A	A	-	A	B	B	A	A	A	-	-	
Catsup	-	A	A	A	D	-	-	C	-	D	-	A	-	-	A	B	A	B	-	A	-	A	A	-	A	A	-	C	-	-	-	-	
Chloroacetic Acid ²	D	D	D	D	C	A	A	D	-	D	-	A	D	A	-	D	D	-	D	D	-	A	A	-	A	D	-	D	B	D	B	-	
Chloric Acid	-	D	D	-	-	-	-	-	-	-	-	D	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chlorinated Glue	-	A	A	-	D	-	-	C	-	D	-	-	-	-	C	-	C	D	-	-	-	-	-	-	-	-	-	D	B	D	A	-	
Chlorine, Anhydrous Liquid	-	D	D	D	D	D	A	D	-	C	-	D	B	A	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	-	-	-	-	-	-	-	C	A	A	-	D	-	-	D	-	D	-	
Chlorine Water	D	-	D	-	D	A	B	D	D	D	-	A	-	A	C	-	D	-	D	C	A	-	-	-	-	-	-	-	-	-	-	-	
Chlorobenzene (Mono)	A	A	A	-	B	-	A	B	-	B	C	D	D	A	D	A	A	D	D	D	A	A	A	-	A	D	-	D	D	D	A	-	
Chloroform	A	A	A	A	D	A	A	B	-	D	C	D	C	A	D	A	C	D	D	D	C	A	A	A	A	D	D	D	D	D	A	-	
Chlorosulfonic Acid ¹	D	D	-	D	D	A	B	D	-	-	D	C	C	A	D	D	D	-	D	D	D	-	C	-	D	D	D	D	D	D	C	-	
Chlorox (Bleach)	-	A	A	-	C	-	-	A	A	-	D	C	A	B	A	A	D	D	B	-	D	C	A	A	-	A	C	-	B	B	D	A	-
Chocolate Syrup	-	A	A	-	A	-	-	-	-	D	-	-	-	-	A	A	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chromic Acid 5%	-	A	A	B	C	A	A	D	D	D	-	A	B	-	C	D	D	B	B	A	A	D	C	-	A	D	C	D	A	B	B	-	
Chromic Acid 10%	-	B	-	-	-	A	A	-	D	-	-	A	-	A	A	-	D	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	
Chromic Acid 30%	-	B	-	-	-	A	A	-	D	-	-	A	-	A	D	-	D	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	
Chromic Acid 50%	C	B	B	-	C	A	A	D	D	D	-	B	B	A	D	D	C	C	B	B	D	A	-	A	D	-	D	A	D	C	-	-	
Cider	-	A	A																														

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	TITANIUM	HASTELLOY C	Cast Bronze	Brass	Cast Iron	Carbon Steel	PVC (Type 1)	Tygon (E-3606)	Teflon	Noryl	Polyacetal	Nylon	Cycloc (ABS)	Polyethylene	POLYPROPYLENE	RYTON	CARBON	CERAMIC	CERAMAGNET "A"	VITON	BUNA N (NITRILE)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy		
Copper Nitrate	B	A	A	B	D	A	A	D	-	-	-	A	-	A	A	B	D	-	B	A	-	A	A	-	A	A	-	A	-	A			
Copper Sulfate (5% Solution)	-	A	A	A	D	A	A	D	D	D	-	A	-	A	A	B	D	-	B	A	A	A	-	A	A	-	A	C	A	-	C	A	
Copper Sulfate	B	B	-	-	-	A	A	C	D	-	-	A	-	A	A	-	C	-	-	A	-	-	A	-	A	B	-	A	-	A	-	A	
Cream	-	A	A	-	A	-	-	C	-	D	-	-	-	-	A	A	A	-	-	A	-	A	A	-	A	A	-	C	-	-	A		
Cresole ²	-	A	A	-	B	-	-	D	C	-	-	D	D	-	D	-	D	D	C	A	A	A	-	A	D	D	D	D	D	D	A		
Cresylic Acid	B	A	A	-	C	A	B	C	-	-	-	B	D	A	-	D	D	-	C	-	-	A	A	-	A	D	-	D	D	D	A		
Cyclohexane	-	A	-	-	A	A	-	A	-	-	-	A	-	D	-	D	A	-	-	D	A	A	-	A	A	D	D	D	D	D	A		
Cyanic Acid	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	C	-	D	-	-	A		
Detergents	-	A	A	-	A	-	-	A	-	-	-	A	A	-	-	A	B	A	B	B	A	A	A	-	A	A	-	B	A	C	A		
Dichlorethane	-	A	A	-	-	-	A	-	-	-	-	D	D	A	-	-	A	-	D	-	-	-	-	-	C	-	-	D	-	D	A		
Diesel Fuel	A	A	A	-	A	-	-	A	-	-	-	A	-	-	D	A	-	-	-	D	A	A	-	A	A	-	D	D	D	D	A		
Diethylamine	A	A	-	-	A	-	-	A	-	-	-	D	-	A	B	D	-	-	-	C	-	A	A	-	D	B	-	B	B	C	A		
Diethylamine Gycol	-	A	-	-	-	-	-	A	-	-	-	-	-	-	A	A	A	B	B	-	-	A	A	-	A	A	C	A	A	A	A		
Diphenyl Oxide	-	A	-	-	-	-	-	A	-	-	-	-	-	-	-	A	-	-	-	-	-	-	A	A	-	A	D	-	D	D	A		
Dyes	-	A	A	-	B	-	-	C	-	-	-	-	-	-	A	A	-	-	-	-	-	-	-	-	A	-	C	-	-	-	A		
Epsom Salts (Magnesium Sulfate)	B	A	A	A	A	A	B	B	-	-	-	A	-	-	A	A	-	-	-	A	-	-	A	A	-	A	-	A	-	C	A		
Ethane	A	A	-	-	A	-	-	A	-	-	-	-	-	-	D	A	-	-	-	-	-	-	A	A	-	A	A	-	B	D	D	A	
Ethanolamine	-	A	A	-	-	-	-	-	-	-	C	-	-	-	-	D	-	-	-	-	-	-	A	A	-	D	B	C	B	-	C	A	
Ether ³	A	A	A	A	A	-	B	B	A	-	B	D	C	-	D	A	C	-	-	-	-	A	A	A	A	C	D	-	D	C	D	A	
Ethyl Acetate ²	-	A	A	-	B	-	B	B	-	-	C	D	D	A	D	A	A	D	C	C	A	A	-	D	D	C	D	B	D	A	A		
Ethyl Chloride	-	A	A	A	B	A	B	B	-	C	D	D	A	D	A	A	A	-	D	D	A	A	-	A	A	-	D	D	C	A	A	A	
Ethyl Sulfate	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	B	-	-	-	-	-	-	-	-	A	A	-	-	-	-	A		
Ethylene Chloride ²	-	A	A	-	C	B	B	A	-	C	C	D	-	A	D	A	-	D	-	D	A	A	-	A	D	D	D	C	D	D	A		
Ethylene Dichloride	-	A	A	-	D	A	B	C	-	-	C	D	D	A	D	A	A	-	D	A	A	C	A	-	A	D	D	D	C	D	A		
Ethylene Glycol ⁴	-	A	A	-	A	-	A	B	B	B	C	A	B	A	A	A	A	B	B	A	A	A	-	A	A	A	C	A	A	A	A	A	
Ethylene Oxide	-	-	A	-	A	-	-	A	-	-	-	D	-	A	A	A	A	-	-	-	-	-	A	A	-	D	D	D	D	C	D	A	
Fatty Acids	-	A	A	-	B	A	A	C	-	D	-	A	B	A	B	A	A	-	B	A	-	-	A	A	-	A	C	C	B	C	C	A	
Ferric Chloride	-	D	D	D	D	A	B	D	D	D	-	A	B	A	A	B	D	-	B	A	A	A	-	A	D	C	B	A	A	A	A		
Ferric Nitrate	-	A	A	A	D	A	A	D	-	-	-	A	-	A	A	B	D	-	B	A	A	A	-	A	A	D	A	A	A	A	A	A	
Ferric Sulfate	-	A	C	A	D	A	A	D	D	D	-	A	B	A	A	B	A	C	-	A	A	C	A	-	A	B	C	A	-	A	A		
Ferrous Chloride	-	D	D	-	D	A	B	C	-	D	-	A	B	A	A	B	D	-	B	A	A	A	-	A	B	C	A	-	A	A	A		
Ferrous Sulfate	B	A	C	-	D	A	B	C	-	D	D	A	B	A	A	B	D	-	B	A	A	A	-	A	B	-	A	-	A	A	A		
Fluboric Acid	-	D	B	-	-	D	A	-	-	D	-	A	B	A	B	B	C	-	B	A	-	A	D	-	A	B	-	A	-	-	A		
Fluorine	D	D	D	-	D	D	A	D	-	D	D	C	-	C	-	-	D	-	C	-	-	D	-	-	-	-	-	-	-	-	D		
Fluosilicic Acid	-	-	B	-	D	D	B	-	-	D	-	A	B	A	A	B	D	-	B	A	-	A	D	-	B	A	-	A	-	-	-	C	
Formaldehyde 40%	-	-	A	-	-	A	A	-	-	-	-	B	-	A	A	-	D	-	-	-	A	A	-	A	-	D	B	B	A	-	-	A	
Formaldehyde	A	A	A	-	A	A	B	A	B	D	A	A	B	A	D	A	A	-	B	A	A	A	-	A	C	B	D	B	C	A	A		
Formic Acid ⁴	C	A	B	B	D	C	A	C	C	D	D	D	B	A	A	D	D	-	B	A	A	A	-	B	C	D	C	D	A	C	B		
Freon 11 ¹	A	-	A	-	B	-	-	B	-	C	B	B	D	A	D	A	A	D	C	-	A	A	A	-	A	C	D	D	D	D	A		
Freon 12 (wet) ²	-	-	D	-	B	-	-	B	-	-	-	B	D	A	D	A	A	B	C	A	A	A	-	A	A	D	B	B	D	A	A		
Freon 22	-	-	A	-	B	-	-	B	-	-	-	D	D	-	B	A	A	-	-	-	-	-	A	A	A	D	D	D	A	A	A		
Freon 113	-	-	A	-	B	-	-	B	-	-	-	C	D	-	-	A	A	-	-	-	-	-	A	A	A	C	A	D	A	-	D	A	
Freon T.F. ⁴	-	-	A	-	B	-	-	B	-	-	-	B	D	-	D	A	A	-	-	D	A	A	-	A	B	A	D	A	D	D	A		
Fruit Juice	A	A	A	A	B	-	-	B	-	D	D	A	-	D	A	B	A	-	B	A	-	-	A	A	A	A	-	A	-	-	-	A	
Fuel Oils	A	A	A	-	A	A	A	B	-	C	B	A	-	A	A	A	A	-	D	B	A	A	-	A	A	C	B	D	D	D	A		
Furan Resin	-	A	A	-	A	-	-	A	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	A	D	-	D	-	D	A		
Furtural ¹	A	A	A	-	A	-	B	A	-	-	A	D	-	A	D	B	A	D	D	D	A	A	-	D	D	D	D	D	B	D	A	A	
Gallic Acid	B	A	A	-	A	-	A	A	-	D	D	A	A	A	-	-	-	-	-	-	-	-	-	-	B	A	-	-	-	-	-		
Gasoline ^{1 4}	A	A	A	A	A	D	A	A	-	A	A	C	-	A	D	A	A	D	D	C	A	A	A	-	A	A	D	D	C	D	A	A	
Gelatin	A	A	A	A	A	-	A	A	C	D	D	A	-	A	A	A	A	-	-	-	-	-	-	-	A	A	-	A	A	A	A	A	
Glucose	A	-	A	-	A	-	-	A	A	B	B	A	B	A	A	B	B	A	-	A	-	-	-	-	A	A	B	A	A	A	A	A	
Glue P.V.A. ¹	B	B	A	-	B	A	-	A	-	-	A	A	B	A	-	A	A	-	-	-	-	-	-	-	A	A	-	A	-	-	-	A	
Glycerine	A	A	A	A	A	A	A	A	B	B	B	A	B	A	A	A	A	C	-	A	-	-	-	-	A	A	B	A	A	A	A	A	
Cyclic Acid	-	-	-	-	-	-	A	-	-	-	-	-	A	-	A	C	-	-	B	A	A	A	-	-	A	A	-	A	-	-	-	A	
Gold Monocyanide	-	-	A	-	-	-	-	A	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	A	
Grape Juice	-	A	A	-	B	-	-	B	-	D	-	A	-	-	A	B	-	B	B	-	-	-	-	A	A	-	A	-	A	-	-	-	A
Grease ⁴	A	A	A	-	A	-	-	B	-	A	A	-	-	-	-	A	A	-	-	-	-	-	-	-	A	A	-	D	-	-	-	A	
Heptane ¹	A	-	A	-	A	-	-	A	A	-	-	B	A	-	A	D	A	A	C	D	D	A	A	-	A	A	-	B	D	-	-	A	
Hexane ¹	A	A	A	-	A	B	-	-	B	C	-	-	A	D	A	A	D	-	C	A	A	-	-	-	A	B	D	D	D	A	A		
Honey	-	A	A	-	A	-	-	A	-	-	-	-	-	-	-	A	A	B	-	A	-	-	-	-	A	A	-	A	-	-	-	A	
Hydraulic Oils (Petroleum) ¹	A	A	A	-	A	-	-	B	-	A	A	-	-	-	-	A	A	-	-	D	-	-	-	-	A	A	-	B	D	D	A		
Hydraulic Oils (Synthetic) ¹	-	A	A	-	A	-	-	A	-	-	-	-	-	-	-	A	A	-	-	D	-	-	-	-	A	C	D	-	-	-	-	A	
Hydrazine	-	A	A	-	-	-	-	-	-	C	-	-	-	-	-	D	-	-	-	-	-	-	-	-	-	A	B	D	B	A	C	A	
Hydrobromic Acid 20%	-	-	D	-	-	A	A	-	-	-	-	-	-	-	-	A	A	-	D	-	-	-	-	-	B	-	-	-	-	-	-	B	
Hydrobromic Acid ⁴	D	D	D	D	D	A	A	D	-	D	D	A	B	A	C	D	D	-	B	B	-	A	A	-	A	D	D	D	A	A	A	A	
Hydrochloric Acid (Dry Gas)	D	C	A	-	D	-	-	-	-	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	
Hydrochloric Acid (20%) ⁴	-	D	D	D	D	C	B	D	-	D	-	A	B	A	A	D	D	B	A	A	D	A	A	-	A	C	-	C	A	C	A	A	
Hydrochloric Acid (37%) ⁴	-	D	D	D	D	C	B	D	-	D	-	A	B	A	A	D	D	C	A	A	D	A	C	-	A	C	C	C	C	D	A	A	
Hydrochloric Acid 100%	-	D	D	-	D	D	C	D	-	D	-	A	A	A	-	-	D	-	-	-	-	-	-	-	A	C	D	-	-	-	-	A	
Hydrocyanic Acid	A	A	A	C	A																												

GENERAL INFORMATION & DATA

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	TITANIUM	HASTELLOY C	Cast Bronze	Brass	Cast Iron	Carbon Steel	PVC (Type 1)	Tygon (E-3606)	Teflon	Noryl	Polyacetal	Nylon	Cyclac (ABS)	Polyethylene	POLYPROPYLENE	RYTON	CARBON	CERAMIC	CERAMAGNET "A"	VITON	BUNAN (NITRILE)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy	
Hydrofluosilicic Acid	-	D	D	-	C	-	C	D	-	-	-	-	C	A	-	-	-	-	-	-	-	A	-	-	-	-	D	A	-	-	-	
Hydrogen Gas	A	A	A	-	A	-	A	-	B	B	A	-	A	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-
Hydrogen Peroxide 10%	-	C	C	-	A	C	A	D	D	D	-	A	A	-	-	D	-	A	-	B	A	A	-	-	-	A	-	-	D	-	C	D
Hydrogen Peroxide 30%	-	-	B	-	-	B	A	-	D	-	-	A	-	A	-	D	-	-	A	C	-	-	-	A	D	-	C	-	-	-	B	
Hydrogen Peroxide	-	A	B	A	A	B	A	D	D	D	D	A	C	A	B	D	D	-	B	A	C	-	A	A	A	D	C	D	C	C	A	
Hydrogen Sulfide, Aqueous Solution	-	A	A	C	C	A	A	D	C	D	-	A	B	A	A	D	D	-	B	A	A	A	A	A	B	C	-	B	A	D	A	
Hydrogen Sulfide (Dry)	A	C	A	-	D	-	A	D	C	B	B	A	-	A	-	-	D	-	-	-	-	A	-	A	-	-	-	-	-	-	A	A
Hydroxyacetic acid (70%)	-	-	-	-	D	B	-	-	-	-	-	A	-	-	-	D	-	-	-	-	-	A	A	-	A	-	A	-	A	-	A	-
Ink	A	A	A	-	C	-	-	C	-	D	D	-	-	-	B	A	A	-	B	-	-	A	A	A	A	A	-	A	-	-	-	A
Iodine	-	D	D	D	D	A	B	D	-	D	-	D	B	A	A	C	D	D	D	D	-	D	A	-	A	B	-	D	B	D	A	
Iodine (In Alcohol)	-	-	B	-	-	D	A	-	-	-	-	D	-	A	C	-	D	-	B	-	-	A	-	A	D	-	D	-	-	-	-	
Iodoform	B	D	A	-	A	-	-	C	-	C	B	-	-	A	-	-	A	-	-	-	-	-	-	-	C	-	-	-	-	-	-	
Isotane ²	-	-	-	-	A	-	-	-	-	-	-	-	-	D	A	-	-	-	-	D	-	-	A	-	A	A	-	-	-	D	A	
Isopropyl Acetate	-	-	B	-	C	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	A	A	-	D	D	-	D	B	D	A	
Isopropyl Ether ²	A	-	A	-	A	-	-	A	-	-	A	-	-	A	D	A	-	-	-	D	-	A	A	-	D	B	-	D	D	D	-	
Jet Fuel (JP3, JP4, JP5)	A	A	A	-	A	-	-	A	-	A	A	-	A	D	A	A	-	-	D	A	A	-	A	-	A	D	D	D	D	D	A	
Kerosene ²	A	A	A	A	A	A	A	A	A	A	B	A	D	A	D	A	A	B	D	D	A	A	A	A	A	D	D	D	D	D	A	
Ketones	A	A	A	-	B	A	A	A	-	A	A	D	D	A	D	B	A	-	D	D	A	C	A	-	D	D	-	D	D	C	C	
Lacquers	A	A	A	-	A	-	-	A	C	C	C	-	D	-	C	A	A	-	-	A	-	A	A	-	D	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	A	B	A	A	B	C	-	B	A	A	A	-	B	B	-	A	B	A	A	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	A	-	B	A	-	A	-	D	B	-	D	A	A	A	A	
Lead Sulfamate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	A	B	-	A	A	A	-	A	A	C	D	-	D	A	-	
Magnesium Carbonate	-	A	A	A	-	B	-	-	-	-	-	A	-	-	A	-	-	-	B	A	-	-	A	-	A	-	A	A	-	A	-	
Magnesium Chloride	B	B	B	A	D	A	A	B	C	D	C	A	B	A	A	A	A	-	B	A	A	-	A	-	A	-	A	A	A	A	A	
Magnesium Hydroxide	A	A	A	-	D	A	A	C	B	B	B	A	-	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	-	
Magnesium Sulfate	B	B	A	-	B	A	B	B	C	B	A	B	A	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	A	C	A	-	-	C	-	-	A	-	A	D	-	A	D	C	A	
Maleic Anhydride	-	-	-	-	-	-	A	-	-	-	-	-	-	-	C	-	-	-	-	-	-	A	-	A	-	A	D	-	D	-	D	
Malic Acid	B	A	A	-	C	-	A	D	-	-	D	A	-	A	-	-	-	-	-	-	-	-	A	-	C	-	-	A	-	A	-	
Mash	-	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	-	-	-	-	-	
Melamine	-	D	D	-	-	-	-	D	-	-	-	-	-	-	D	-	-	-	-	-	-	-	A	-	C	-	-	-	-	-	A	
Mercuric Chloride (Dilute Solution)	D	D	D	D	D	A	B	D	D	D	D	A	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	-	-	-	-	-	
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 Alcohol Methyl)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl Acetate	A	-	A	-	A	-	A	A	-	-	B	-	-	A	-	A	-	D	-	-	-	A	A	-	D	D	D	B	B	D	-	
Methyl Acrylate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	A	A	-	D	D	-	B	B	D	A
Methyl Acetone	A	-	A	-	A	-	-	A	-	A	A	-	-	A	D	A	-	-	-	-	-	-	A	-	D	D	-	D	-	-	C	
Methyl Alcohol 10%	A	-	A	-	C	-	A	C	-	-	B	A	-	A	-	-	-	-	-	-	-	-	-	-	-	B	-	-	-	A	A	
Methyl Bromide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	D	-	-	-	-	A	A	-	A	B	-	D	D	D	B
Methyl Butyl Ketone	-	-	A	-	A	-	-	-	-	-	-	-	-	-	D	B	-	-	-	-	-	-	A	A	-	D	D	C	D	A	D	B
Methyl Cellosolve	-	-	-	-	A	-	-	A	-	-	-	-	-	-	C	B	-	-	-	-	-	-	A	-	D	D	-	D	B	D	C	
Methyl Chloride	-	C	A	-	D	A	A	A	-	-	-	D	-	A	D	A	A	-	D	D	-	-	A	-	A	D	D	D	C	D	A	A
Methyl Dichloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D	A	-	-	-	-	-	-	A	A	-	A	D	-	D	D	D	A
Methyl Ethyl Ketone	-	A	A	-	A	A	A	A	-	-	-	D	-	A	D	B	A	D	D	A	A	A	-	D	D	C	D	A	D	B	-	
Methyl Isobutyl Ketone ²	-	-	A	-	-	A	A	-	-	-	-	D	-	A	D	B	A	D	-	C	A	A	-	D	D	C	D	C	D	B	-	
Methyl Isopropyl Ketone	-	-	A	-	-	-	-	-	-	-	-	-	-	-	D	B	A	-	-	-	-	-	A	-	D	D	B	D	B	D	B	
Methyl Methacrylate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	A	A	-	D	D	-	D	D	A	A
Methylamine	A	-	A	-	A	-	-	D	-	B	B	-	-	-	B	D	-	-	-	-	-	-	A	A	-	B	-	-	-	-	-	A
Methylene Chloride	A	A	A	-	A	A	A	C	-	B	D	-	-	A	D	A	D	-	D	D	-	-	A	-	B	D	-	D	D	D	A	A
Milk	A	A	A	A	A	-	-	C	C	D	D	A	-	-	A	A	A	B	B	A	-	-	A	A	A	A	B	A	A	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
Mustard	A	A	A	A	B	-	-	B	-	C	B	A	-	-	B	B	A	B	-	A	-	-	A	-	A	B	C	C	-	-	-	A
Naphtha	A	A	A	A	A	A	A	B	-	B	B	A	C	A	D	A	A	C	D	A	A	A	-	A	B	D	D	D	D	D	A	A
Naphthalene	B	A	B	-	B	A	A	C	-	B	A	D	-	-	A	D	A	-	-	D	B	A	A	-	C	D	-	D	D	D	A	A
Nickel Chloride	-	A	B	-	D	A	A	D	-	D	-	A	B	A	A	B	A	-	B	A	-	-	A	-	A	-	A	A	-	-	-	A
Nickel Sulfate	B	A	B	-	D	A	B	C	D	D	A	A	A	A	B	A	-	-	B	A	-	-	A	-	A	-	A	A	-	-	-	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	D	A	A
Nitric Acid (20% Solution)	-	A	A	A	D	A	A	D	-	D	-	A	B	A	A	D	D	D	B	A	C	D	C	D	A	D	-	D	D	D	B	-
Nitric Acid (50% Solution)	-	A	A	A	D	A	A	D	-	D	-	A	B	A	A	D	D	D	C	D	C	D	A	-	A	D	-	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	A	C	B	D	-	D	D			

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	TITANIUM	HASTELLOY C	Cast Bronze	Brass	Cast Iron	Carbon Steel	PVC (Type 1)	Tygon (E-3606)	Teflon	Noryl	Polyacetal	Nylon	Cyclac (ABS)	Polyethylene	POLYPROPYLENE	RYTON	CARBON	CERAMIC	CERAMAGNET "A"	VTON	BUNAN (NITRILE)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy							
Bone	-	A	A	-	-	-	-	A	-	-	-	-	-	-	A	-	-	-	-	-	-	A	A	-	A	A	-	D	-	-	A							
Castor	-	A	A	-	A	-	-	A	-	A	-	A	-	-	A	-	-	-	-	-	-	-	A	A	A	A	A	-	D	-	-	A						
Cinnamon	-	A	A	-	-	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	-	-	A	A	-	D	-	-	-	-	A							
Citric	-	A	A	-	-	-	-	D	-	D	-	-	-	-	A	A	-	-	-	-	-	-	A	A	-	A	-	D	-	-	A							
Clove	-	A	A	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	-	-	-	-	A	A	-	A	-	-	-	-	A							
Coconut	-	A	A	-	B	-	-	A	-	A	-	-	-	-	A	A	-	-	-	-	-	-	A	A	-	A	-	A	A	D	A							
Cod Liver	-	A	A	-	B	-	-	-	-	-	-	-	-	-	A	A	C	-	-	-	-	-	A	A	-	A	-	B	A	D	A							
Corn	-	A	A	A	B	-	-	B	-	A	-	-	-	-	A	A	C	-	-	-	-	-	A	A	-	A	-	D	C	D	A							
Cotton Seed	B	A	A	A	B	-	-	B	-	A	C	A	-	A	-	A	A	C	-	-	-	A	A	-	A	-	D	C	D	A								
Cresote2	-	A	A	-	A	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-	-	-	A	A	-	A	-	B	D	D	A							
Diesel Fuel (2d, 3D, 4D, 5D)	-	A	A	-	A	-	-	A	-	-	-	-	-	-	D	A	A	-	-	-	-	-	A	A	-	A	-	D	D	D	A							
Fuel (1, 2, 3, 5A, 5B, 6)	-	A	A	-	A	A	A	-	-	-	-	A	-	A	D	A	-	-	-	-	-	-	A	A	-	A	B	-	D	D	A							
Ginger	-	A	A	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	A	A	-	A	-	A	-	-	A							
Hydraulic (See Hydraulic)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Lemon	-	A	A	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	A	-	-	-	-	D	-	-	A							
Linseed	-	A	A	A	A	-	-	A	-	A	-	A	B	-	A	A	C	-	-	-	-	-	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	-	B	D	D	A						
Olive	A	A	A	-	A	-	-	B	-	A	B	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	-	D	-	-	-	A						
Peanut ³	-	A	A	-	A	-	-	A	-	A	-	A	-	-	A	-	-	-	-	-	-	-	A	A	-	A	-	D	-	D	A							
Peppermint ²	-	A	A	-	-	-	-	A	-	-	-	-	-	-	A	-	-	-	-	-	-	-	A	-	A	D	-	D	-	-	-	A						
Pine	A	A	A	-	A	-	-	D	-	C	B	A	-	A	-	A	-	-	-	-	-	-	A	A	-	A	-	D	-	D	A							
Rape Seed	-	A	A	-	-	-	-	A	-	-	-	A	-	-	A	-	-	-	-	-	-	-	A	A	-	A	B	-	D	-	D	A						
Rosin	-	A	A	-	A	-	-	-	-	-	-	-	-	-	A	A	-	-	-	-	-	-	A	A	-	A	-	-	-	-	-	-	A					
Sesame Seed	-	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					
Soybean	-	A	A	-	A	-	-	B	-	A	-	A	-	-	A	A	-	-	-	-	-	-	A	A	-	A	-	D	-	D	A							
Sperm	-	A	A	-	-	-	-	A	-	-	-	A	-	-	A	-	-	-	-	-	-	-	A	A	-	A	-	D	-	-	-	-	A					
Tanning	-	A	A	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	A	-	A	-	A	-	D	-	-	-	-	A				
Turbine	-	A	A	-	A	-	-	A	-	A	-	A	-	-	A	-	C	-	-	-	-	-	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	-	B	B	D	D	D	D	A						
Oleum 25%	-	-	-	-	-	-	A	-	-	-	-	-	D	-	A	D	-	-	-	-	-	-	-	A	-	A	D	D	D	D	-	-	D					
Oleum	B	-	A	-	B	-	-	C	C	-	B	D	-	A	-	D	-	-	-	-	-	-	-	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	-	B	C	B	A	C	A					
Paraffin	A	A	A	A	A	-	-	A	-	B	B	A	-	A	B	A	A	B	-	-	-	-	A	A	-	A	-	-	-	-	-	-	-	A				
Pentane	A	C	C	-	A	-	B	A	-	B	B	-	-	A	D	A	A	D	-	-	-	-	A	A	-	A	-	B	D	D	D	A						
Perchloroethylene ²	B	A	A	-	A	-	-	C	-	B	B	-	-	A	D	A	-	D	-	-	-	-	A	A	-	A	C	D	D	D	D	A						
Petrolatum	A	-	A	-	B	-	-	B	-	C	C	-	-	A	D	A	A	B	-	-	-	-	A	A	-	A	-	B	A	D	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	C	A	C	D	D	-	-	-	-	-	A	A	D	A	D	-	D	D	D	B						
Phosphoric Acid (to 40% Solution)	-	B	A	A	D	A	D	D	D	-	A	B	A	A	D	D	C	B	A	A	B	C	D	A	D	-	D	B	C	A	-	-						
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	C	D	A	D	-	D	B	C	C	-	-					
Phosphoric Acid (Crude)	-	D	C	C	D	C	A	D	D	D	D	-	-	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	-	-	-	-	-	-	-	-	-	-	-	D	C	-	D	-	-	-	A				
Photographic (Developer)	-	C	A	C	C	A	A	-	-	D	-	A	-	-	A	C	-	-	-	-	-	-	-	A	A	-	A	-	A	-	-	-	-	-	A			
Phthalic Anhydride	B	A	B	-	B	-	A	B	-	C	C	-	-	A	-	-	A	-	-	-	-	-	-	-	-	A	C	-	-	-	-	-	-	-	A			
Picric Acid	B	A	A	-	C	-	A	D	D	D	D	A	A	A	-	-	A	-	-	-	-	-	-	-	-	A	A	D	A	-	-	-	-	-	A			
Plating Solutions																																						
Antimony Plating 130° F	-	-	A	-	-	A	A	-	-	-	-	A	-	A	A	-	D	-	-	-	-	-	A	-	A	A	D	A	-	-	-	-	-	-	B			
Arsenic Plating 110° F	-	-	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	-	-	-	-	-	-	C	-	A	A	D	A	-	-	-	-	-	-	B		
High Speed Brass Bath 110° F	-	-	A	-	-	A	A	-	-	-	-	A	-	A	A	-	A	-	-	-	-	-	-	D	-	A	A	D	A	-	-	-	-	-	-	B		
Bronze Plating																																						
Copper-Cadmium Bronze Bath	-	-	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	-	-	-	-	-	-	D	-	A	A	D	B	-	-	-	-	-	-	-	C	
Copper-Zinc Bronze Bath 100° F	-	-	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	-	-	-	-	-	-	C	-	A	A	-	A	-	-	-	-	-	-	-	B	
Fluoborate Bath 100° F	-	-	A	-	-	D	A	-	-	-	-	A	-	A	A	-	D	-	-	-	-	-	-	D	-	A	B	-	C	-	-	-	-	-	-	-	B	
Chromium Plating																																						
Chromic-Sulfuric Bath 130° F	-	-	C	-	-	A	A	-	-	-	-	-	A	-	A	D	-	D	-	-	-	-	-	A	-	-	C	D	-	D	-	-	-	-	-	-	D	
Fluosilicate Bath 95° F	-	-	C	-	-	C	A	-	-	-	-	-	A	-	A	D	-	D	-	-	-	-	-	B	-	C	D	-	D	-	-	-	-	-	-	-	D	
Fluoride Bath 130° F	-	-	D	-	-	C	A	-	-	-	-	-	A	-	A	D	-	D	-	-	-	-	-	B	-	C	D	-	D	-	-	-	-	-	-	-	-	D
Black Chrome Bath 115° F	-	-	C	-	-	A	A	-	-	-	-	-	A	-	A	D	-	D	-	-	-	-	-	A	-	A	C	D	-	D	-	-	-	-	-			

	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	TITANIUM	HASTELLOY C	Cast Bronze	Brass	Cast Iron	Carbon Steel	PVC (Type 1)	Tygon (E-3606)	Teflon	Noryl	Polyacetal	Nylon	Cyclac (ABS)	Polyethylene	POLYPROPYLENE	RYTON	CARBON	CERAMIC	CERAMAGNET "A"	VITON	BUNAN (NITRILE)	Silicon	Neoprene	Ethylene Propylene	Rubber (Natural)	Epoxy	
Sodium Hypochlorite ³ (to 20%)	-	C	C	C	C	A	A	D	D	D	-	A	B	A	A	D	A	-	B	D	C	D	A	B	A	C	D	D	B	C	B	
Sodium Hyposulfate	-	A	A	-	D	-	-	D	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	C	C	
Sodium Metaphosphate ²	A	-	A	-	A	-	-	C	C	B	B	-	-	A	-	B	A	-	-	D	-	A	A	-	A	A	-	B	A	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	B	B	C	A	B	A	B	A	B	A	B	A	-	B	A	-	A	A	B	C	D	B	A	C	A	A	
Sodium Perborate	B	-	C	-	B	-	-	C	C	B	B	-	-	A	A	B	A	-	-	A	-	A	A	-	A	B	D	B	A	C	A	
Sodium Peroxide	B	A	A	-	C	-	B	C	C	D	C	A	-	A	-	D	D	-	-	-	-	A	A	-	A	C	D	B	A	C	A	
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	B	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	A	B	A	-	A	A	C	B	A	-	B	A	A	A	-	A	A	-	A	A	C	A	
Sodium Sulfide	B	A	B	-	D	A	B	D	D	A	B	A	B	A	A	B	A	-	B	A	A	A	A	-	A	C	-	A	A	C	A	
Sodium Sulfite	-	C	C	-	C	A	A	C	-	A	-	A	A	A	-	-	D	-	A	-	-	A	A	-	A	A	-	A	-	A	A	
Sodium Tetraborate	-	-	A	-	-	-	-	-	-	-	-	-	-	A	B	-	-	-	-	-	-	-	A	-	A	-	-	-	-	-	A	
Sodium Thiosulphate ("Hypo")	A	A	A	-	B	A	-	D	D	C	B	A	-	A	A	C	A	-	-	A	A	A	-	A	B	-	A	A	C	A		
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	A
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	A	
Stannic Fluoborate	-	-	A	-	-	-	-	-	-	D	-	-	-	-	A	C	-	-	-	-	-	-	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	A	
Starch	B	A	A	-	A	-	-	B	-	C	C	A	-	A	A	A	A	-	B	-	-	-	A	A	-	A	A	-	A	-	-	A
Stearic Acid ²	B	A	A	A	B	A	A	C	C	C	C	A	B	A	A	A	A	-	B	D	-	A	A	A	A	B	D	B	B	C	A	
Stoddard Solvent	A	A	A	A	A	A	A	A	B	B	A	D	A	D	A	A	B	D	D	A	A	-	A	B	D	D	D	D	D	D	A	
Styrene	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	A	B	-	A	-	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	D	C	
Sulfur Dioxide ²	-	A	A	C	A	A	B	B	-	-	-	D	B	A	D	B	D	D	C	D	A	A	-	D	D	C	B	A	D	A		
Sulfur Dioxide (Dry)	A	A	A	-	A	-	A	A	C	A	B	D	-	A	-	-	A	-	D	-	-	-	A	A	-	A	-	-	D	-	D	
Sulfur Trioxide (Dry)	A	A	C	-	A	-	-	B	-	B	B	A	B	A	D	D	D	-	-	-	-	-	B	A	-	A	D	-	D	B	C	A
Sulfuric Acid (to 10%)	-	D	C	C	C	A	A	D	D	D	-	A	B	A	A	D	D	B	B	A	A	A	-	A	C	-	D	D	C	A		
Sulfuric Acid (10%-75%) ²	-	D	D	D	D	C	B	D	D	D	-	A	B	A	B	D	D	B	C	A	B	A	D	C	A	D	-	D	D	D	B	
Sulfuric Acid 75%-100%	-	-	D	-	-	D	B	-	D	-	-	-	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	
Syrup	-	A	A	A	A	-	-	D	-	-	-	A	-	-	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	B	A	A	B	D	-	B	A	-	A	A	A	A	D	C	A	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	B	A	A	B	A	-	B	A	-	A	A	-	A	D	C	A	-	A	A	
Tetrachlorethane	-	-	A	-	-	A	A	-	-	-	-	D	-	A	D	A	A	-	-	-	-	-	A	-	A	D	-	-	D	D	A	
Tetrahydrofuran	-	A	A	-	D	-	-	D	-	D	A	D	-	A	D	A	A	-	D	C	A	A	-	B	D	-	D	B	D	A	A	
Toluene, Toluol ³	A	A	A	-	A	A	A	A	A	A	A	D	D	A	D	A	A	D	D	D	A	A	A	A	C	D	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	D	D	D	D	D	A	
Trichlorethylene ²	B	A	A	-	B	A	A	B	A	C	B	D	-	A	D	A	C	D	D	D	C	A	A	C	A	D	D	D	D	D	A	
Trichloropropane	-	-	A	-	-	-	-	A	-	-	-	-	-	-	D	A	-	D	-	-	-	-	A	A	-	A	A	-	-	-	A	
Tricresylphosphate	-	-	A	-	-	B	A	A	-	-	-	D	-	A	A	C	-	-	-	-	-	-	A	A	-	B	D	-	D	A	-	A
Triethylamine	-	-	-	-	-	-	-	A	-	-	-	-	-	-	B	D	-	-	-	-	-	-	A	-	A	A	D	B	-	-	A	
Turpentine ³	B	A	A	-	C	-	A	B	C	B	B	A	B	A	D	A	A	-	D	B	A	A	-	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	A	A	-	-	-	-	-	A	A	-	A	A	B	D	-	D	A
Vinegar	A	A	A	A	D	A	A	B	B	C	D	A	-	A	A	B	A	B	B	A	A	A	A	A	A	C	-	B	A	C	A	
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	-	B	A	A	A	A	
Water, Fresh	A	A	A	-	A	-	-	A	C	B	D	A	B	A	A	A	A	A	D	A	A	A	A	A	A	A	-	B	A	A	A	
Water, Salt	-	A	A	-	B	-	-	B	C	D	-	A	B	-	A	A	A	-	-	-	-	A	A	A	A	-	B	A	A	A	A	
Weed Killers	-	A	A	-	C	-	-	C	-	-	-	-	-	-	-	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	A	
White Liquors (Pulp Mill)	-	A	A	-	-	-	A	D	-	C	-	A	-	-	A	D	A	-	-	-	-	-	A	-	A	-	A	-	-	-	A	
White Water (Paper Mill)	-	A	A	-	-	-	-	A	-	-	-	-	-	-	B	A	-	-	-	-	-	-	A	-	A	-	A	-	-	-	A	
Xylene ²	A	A	A	-	A	-	A	A	A	A	B	D	-	A	D	A	A	D	D	D	A	A	A	A	A	D	D	D	D	D	A	
Zinc Chloride	D	A	B	B	D	A	B	D	D	D	D	A	-	A	A	C	A	-	B	A	A	A	A	-	A	A	-	A	A	A	A	
Zinc Hydrosulphite	-	-	A	-	D	-	-	D	-	D	-	-	-	-	A	C	-	-	-	-	-	-	A	A	-	-	A	-	A	-	A	
Zinc Sulfate	B	A	A	A	D	A	B	B	C	C	D	C	B	A	A	C	A	-	B	A	A	A	A	-	A	A	-	A	A	C	A	