

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

Chemical	Material																																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27									
Acetaldehyde	A	A	A	-	B	A	A	D	-	-	C	D	A	-	A	C	B	A	A	A	A	B	B	D	B	C	A									
Acetamide	-	B	A	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	A	A	A	-	A	D	A	A									
Acetate Solv.	A	B	A	B	B	-	-	A	C	B	A	B	A	-	A	B	D	-	A	A	D	D	-	D	-	-	A									
Acetic Acid, Glacial	-	B	A	A	B	A	A	C	C	D	A	C	A	C	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 Anhydride	-	B	A	B	B	A	A	C	C	D	C	A	A	A	D	B	A	A	A	A	C	C	-	C	B	C	A									
Acetic Anhydride	B	A	A	B	B	A	A	C	D	B	D	A	D	A	D	A	A	A	A	A	D	A	C	B	B	C	A									
Acetone	A	A	A	B	A	A	A	A	A	A	A	D	A	D	A	C	B	A	A	A	D	D	B	C	A	D	B									
Acetyl Chloride	-	C	A	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A									
Acetylene	A	A	A	A	A	-	-	B	-	A	A	B	-	-	-	-	-	-	-	D	A	A	A	C	B	A	C	A								
Acrylonitrile	A	A	C	-	B	-	B	A	-	C	-	-	-	-	-	-	-	-	-	B	A	A	A	C	D	-	-	A								
Aluminum Chloride 20%	-	D	C	D	B	A	A	D	-	D	A	A	-	A	A	B	A	A	A	A	A	A	-	A	A	A	A									
Aluminum Chloride	C	D	C	-	D	C	A	C	-	D	B	A	A	A	D	-	A	A	A	A	A	A	C	A	-	-	-	A								
Aluminum Fluoride	-	D	C	D	-	D	B	-	-	-	-	A	A	A	A	D	B	A	-	-	-	A	A	C	A	-	-	C	A							
Aluminum Hydroxide	-	A	A	A	A	-	-	A	-	-	D	A	A	A	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								
Alum Potassium Sulfate (ALUM) 100%	-	D	A	B	B	-	B	C	-	-	-	A	A	A	A	D	B	A	-	-	-	A	A	-	A	-	-	-	A							
Aluminum Sulfate	-	C	C	A	A	A	A	C	C	D	A	A	A	A	A	B	A	A	A	A	A	A	-	A	A	A	A	A								
Amines	A	A	A	-	A	B	A	B	-	A	B	C	A	B	A	-	-	-	-	A	A	D	D	C	B	B	C	A								
Ammonia 10%	-	-	A	-	-	A	A	-	-	-	-	-	A	A	A	A	-	-	-	A	A	-	-	A	-	-	-	-	B							
Ammonia Anhydrous	A	B	A	A	B	B	A	D	-	-	D	B	A	A	A	A	B	A	B	C	A	D	B	B	A	A	D	A								
Ammonia, Liquids	-	A	A	A	D	-	B	D	-	-	A	A	A	A	-	D	A	-	-	A	A	D	B	B	A	A	D	A								
Ammonia, Nitrate	-	A	A	A	C	-	-	D	-	-	-	A	B	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	A							
Ammonium Bifluoride	-	C	A	-	D	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A							
Ammonium Carbonate	B	A	A	A	C	A	B	B	-	-	C	B	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	A							
Ammonium Casenite	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A						
Ammonium Chloride	C	A	C	A	C	A	A	D	C	D	D	A	A	A	A	B	A	A	A	A	A	A	C	A	A	A	A	A								
Ammonium Hydroxide	A	A	A	A	C	A	A	D	D	A	C	A	A	A	A	B	A	A	A	A	A	B	B	B	A	A	C	A								
Ammonium Nitrate	A	A	A	A	B	A	A	D	D	A	D	A	A	A	A	D	B	A	A	A	A	A	C	A	A	A	A	A								
Ammonium Oxalate	-	A	A	A	-	-	A	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A							
Ammonium Persulfate	-	A	A	A	C	A	A	A	-	D	A	A	A	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	A							
Ammonium Phosphate, Dibasic	B	A	A	A	B	A	A	C	-	-	D	A	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	A							
Ammonium Phosphate, Monobasic	-	A	A	A	B	A	A	D	-	-	-	A	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	A							
Ammonium Phosphate, Tribasic	B	A	A	A	B	A	A	C	-	C	D	A	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	A							
Ammonium Sulfate	C	A	B	A	B	A	A	B	C	C	C	A	A	A	D	B	A	A	A	A	D	A	B	A	A	A	A	A								
Ammonium Thio-Sulfate	-	-	A	-	-	A	-	-	-	-	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A							
Amyl-Acetate	B	A	A	C	B	A	A	C	-	-	C	D	A	D	B	D	D	A	A	A	D	D	D	D	D	D	D	D	A							
Amyl Alcohol	-	A	A	-	B	A	A	A	-	-	-	A	A	C	A	B	A	-	-	-	-	-	-	-	-	-	-	-	A							
Amyl Chloride	-	C	B	-	D	-	-	A	A	-	-	A	D	A	D	C	D	D	-	-	-	-	-	-	-	-	-	-	A							
Aniline	B	A	A	A	C	C	B	C	-	-	C	D	A	D	C	C	B	A	A	A	D	D	C	D	B	D	A	A								
Anti-Freeze	-	A	A	-	A	-	A	B	B	B	B	C	A	A	A	A	B	A	A	A	A	A	C	A	A	A	A	A								
Antimony Plating 130° F	-	-	A	-	-	A	A	-	-	-	-	-	A	A	A	D	-	-	-	-	-	-	-	-	-	-	-	-	B							
Antimony Trichloride	-	D	D	-	D	-	A	-	-	-	-	-	A	A	-	D	A	-	-	-	-	-	-	-	-	-	-	-	A							
Aqua Regia (80%, HCl, 20%, HNO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A							
Arochlor 1248	-	-	-	-	-	-	-	-	-	-	-	A	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	A							
Aromatic Hydrocarbons	-	-	A	-	A	-	-	A	-	-	-	A	D	-	D	-	C	-	-	-	-	-	-	-	-	-	-	-	-	A						
Arsenic Acid	B	A	A	-	D	-	-	D	B	D	D	A	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	A						
Arsenic Plating 110° F	-	-	A	-	-	A	A	-	-	-	-	-	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A						
Asphalt	-	B	A	-	C	-	-	A	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A						
Barium Carbonate	B	A	A	A	B	A	A	B	-	B	B	A	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	A						
Barium Chloride	C	A	A	A	D	A	A	B	-	N	C	A	A	A	A	B	B	A	A	A	A	A	A	B	A	A	A	A								
Barium Cyanide	-	-	A	-	-	-	-	C	-	-	-	A	-	-	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	A						
Barium Hydroxide	B	C	A	A	D	B	B	B	-	C	C	A	A	A	A	B	A	A	A	A	A	A	A	C	A	A	A	A	A							
Barium Nitrate	-	A	A	-	-	A	-	D	-	-	-	A	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A						
Barium Sulfate	B	A	A	A	D	A	A	C	-	C	C	A	A	A	A	B	A	A	A	B	A	A	A	D	A	A	-	-	-	A						
Barium Sulfide	B	A	A	-	D	-	-	C	-	C	C	A	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	A						
Beer	A	A	A	-	A	A	A	A	B	D	D	A	A	A	A	D	B	D	-	-	-	-	-	-	-	-	-	-	-	A						
Beet Sugar Liquids	A	A	A	-	A	-	-	A	B	A	-	-	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	A						
Benzaldehyde	A	A	A	-	B	A	A	A	-	B	A	D	A	D	A	C	D	D	A	A	A	D	D	B	D	A	D	A								
Benzene	B	A	A	A	B	A	B	A	B	A	B	C	D	A	D	A	D	A	A	A	A	A	D	-	D	D	D	A								
Benzoic Acid	B	A	A	A	B	A	A	B	-	D	-	-	A	A	A	D	B	D	-	-	-	-	-	-	-	-	-	-	-	A						
Benzol	-	A	A	-	B	A	A	B	A	-	-	D	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A						
Benzyl Alcohol	-	A	A	-	B	A	A	A	C	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A						
Borax (Sodium Borate)	-	A	A	A	C	-	-	A	A	B	A	C	A	A	A	A	B	A	A	A	A	A	B	C	A	A	C	A	A							
Boric Acid	B	A	A	A	B	A	A	B	C	D	-	-	A	A	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	A						
<b>BRASS PLATING</b>																																				
Regular Brass Bath 100° F	-	-	A	-	-	A	A	-	-	-	-	-	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	A						
High Speed Brass Bath 110° F	-	-	A	-	-	A	A	-	-	-	-	-	-	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	A					
Brewery Slop	-	-	A	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A					
Bromine (Wet)	D	D	D	D	D	A	A	C	-	D	D	B	A	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C					
<b>BRONZE PLATING</b>																																				
Copper-Cadmium Bronze Bath R.T.	-	-	A	-	-	A	A	-	-	-	-	-	-	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A				
Copper-Tin Bronze Bath 160° F	-	-	A	-	-	A	A	-	-	-	-	-	-	D	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A		
Copper-Zinc Bronze Bath 100° F	-	-	A	-	-	A	A	-	-	-	-	-	-	-	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
Butadiene	A	A	A	-	A	-	-	C	A	C	C	A	A	-	A	-	-	-	-	B	A	A	A	A	A	-	-	-	-	-	-	-	-	-	A	
Butanes	A	A	A	-	A	-	-																													

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

Chemical	Material																										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
<b>CADMIUM PLATING</b>																											
Cyanide Bath 90° F	-	-	A	-	-	A	A	-	-	-	-	A	A	A	A	-	-	-	-	C	A	A	-	A	-	-	B
Fluoroborate Bath 100° F	-	-	A	-	-	D	A	-	-	-	-	A	A	A	A	D	-	-	-	D	A	B	-	A	-	-	B
Calcium Bisulfate	C	D	A	-	D	-	-	D	D	-	-	A	A	-	A	-	-	-	-	-	A	A	C	C	-	A	A
Calcium Bisulfide	-	-	B	-	C	A	A	C	-	-	-	A	A	A	A	B	A	-	-	A	A	A	-	A	D	-	A
Calcium Bisulfite	-	D	A	-	C	A	A	C	-	-	-	A	A	A	A	-	-	-	-	A	A	A	-	A	-	-	-
Calcium Carbonate	B	A	A	A	C	A	A	C	-	D	-	A	A	A	A	B	A	-	-	A	A	A	-	A	-	-	A
Calcium Chlorate	-	C	A	-	-	-	B	C	-	-	-	A	A	-	A	A	-	-	-	A	-	A	-	-	A	-	A
Calcium Chloride	C	A	D	C	C	A	A	B	-	C	-	A	A	A	A	B	A	A	A	A	A	A	B	D	A	A	A
Calcium Hydroxide	B	A	A	-	C	A	A	B	-	-	-	A	A	A	A	B	A	-	-	A	A	A	C	A	A	A	A
Calcium Hypochlorite	D	A	C	C	C	A	B	D	-	D	-	D	A	A	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	B	A	A	A	A	A	A	-	D	-	-	C
Calgon	-	A	A	-	-	-	-	C	-	D	-	-	-	A	-	A	-	-	-	A	A	A	-	A	-	-	A
Cane Juice	-	A	A	-	B	-	-	B	C	A	-	-	-	-	A	-	D	-	-	A	A	-	A	-	-	-	A
Carbolic Acid (See Phenol)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Bisulfide	B	A	A	A	A	-	-	C	-	B	-	D	-	-	A	-	D	-	-	A	A	D	-	D	D	D	A
Carbon Dioxide (Wet)	-	A	A	-	C	-	-	A	C	C	C	-	-	-	-	-	-	-	-	-	A	A	-	-	-	-	-
Carbon Disulfide	-	B	A	-	C	-	-	C	C	B	C	D	A	D	A	D	D	A	A	B	A	D	-	D	D	D	A
Carbon Monoxide	-	A	A	-	A	-	-	-	-	-	-	-	A	-	B	A	B	A	-	-	A	A	A	B	B	A	C
Carbon Tetrachloride	B	C	B	A	C	A	A	C	A	C	D	C	A	D	A	D	D	C	A	A	A	C	C	D	-	D	C
Carbonated Water	B	A	A	A	A	-	-	B	-	D	-	-	A	-	A	-	-	-	-	A	A	A	-	A	-	-	A
Carbonic	B	A	B	A	A	-	-	A	B	-	D	-	A	A	A	A	B	A	-	-	A	A	B	B	A	A	A
Catsup	-	A	A	A	D	-	-	C	-	D	-	-	A	-	A	A	-	-	-	A	A	A	-	C	-	-	A
Chloroacetic Acid	D	D	D	D	C	A	A	D	-	D	-	-	A	A	-	D	D	D	-	-	A	A	D	-	D	B	D
Chloric Acid	-	D	D	-	-	-	-	-	-	-	-	D	A	-	-	-	-	-	-	-	-	-	D	-	D	-	D
Chlorinated Glue	-	A	A	-	D	-	-	C	-	D	-	-	-	C	C	-	-	-	-	-	A	A	C	-	D	B	D
Chlorine, Anhydrous Liquid	-	D	D	D	D	D	A	D	-	C	-	D	A	A	D	D	D	C	A	D	A	D	-	D	B	D	B
Chlorine (Dry)	B	A	A	-	D	D	A	A	B	A	-	-	-	-	-	-	-	-	C	A	A	D	-	-	D	-	D
Chlorine Water	D	-	D	-	D	A	B	D	D	D	-	-	A	A	C	D	-	D	C	C	A	A	D	C	D	-	-
Chlorobenzene (Mono)	A	A	A	-	B	-	A	B	-	B	C	D	A	C	A	D	D	A	A	A	A	A	D	-	D	D	D
Chlorosulfonic Acid	D	D	-	D	D	A	B	D	-	-	D	C	A	D	D	D	D	D	-	C	D	D	D	D	D	D	C
Chlorox (Bleach)	-	A	A	-	C	-	-	A	A	-	D	C	A	A	A	D	-	D	C	A	A	A	C	-	B	B	D
Chocolate Syrup	-	A	A	-	A	-	-	-	-	D	-	-	-	-	A	A	-	-	-	-	A	A	A	-	A	-	D
Chromic Acid 5%	-	A	A	B	C	A	A	D	D	D	-	-	A	-	C	D	B	A	A	D	C	A	D	C	D	A	B
Chromic Acid 10%	-	B	-	-	-	A	A	-	D	-	-	-	A	A	A	D	-	-	-	-	A	A	D	-	D	-	-
Chromic Acid 30%	-	B	-	-	-	A	A	-	D	-	-	-	A	A	D	D	-	-	-	-	A	A	D	-	D	-	-
Chromic Acid 50%	C	B	B	-	C	A	A	D	D	D	-	B	A	D	D	C	B	B	D	A	A	D	-	D	A	D	C
<b>CHROMIUM PLATING</b>																											
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	-	-
Black Chrome Bath 115° F	-	-	C	-	-	A	A	-	-	-	-	-	A	A	D	D	-	-	-	-	A	C	D	-	D	-	-
Barrel Chrome Bath 95° F	-	-	D	-	-	C	A	-	-	-	-	-	A	A	D	D	-	-	-	-	A	C	D	-	D	-	-
Cider	-	A	A	A	B	-	-	A	D	-	D	-	-	A	A	-	B	-	-	-	A	A	A	-	A	-	A
Citric Acid	-	A	A	A	C	A	A	D	C	D	-	-	A	A	A	C	B	B	-	-	A	A	A	D	C	A	A
Citric Oils	-	A	A	-	C	-	-	B	-	-	-	-	-	-	A	-	-	-	-	-	A	A	A	C	D	-	-
Coffee	A	A	A	A	A	-	-	B	-	C	-	-	-	A	A	A	-	-	-	-	A	A	A	-	A	-	A
Copper Chloride	C	D	D	B	D	A	A	D	-	D	-	-	A	A	A	D	B	A	A	-	-	A	A	-	A	A	A
Copper Cyanide	-	A	A	A	D	A	A	C	-	D	-	-	A	A	A	A	B	A	A	A	A	B	B	-	A	A	A
Copper Fluoroborate	-	D	D	-	D	-	B	D	-	D	-	-	A	A	-	-	A	-	-	-	A	B	-	A	-	-	A
Copper Nitrate	B	A	A	B	D	A	A	D	-	-	-	-	A	A	-	D	B	A	-	-	A	A	-	A	-	-	A
<b>COPPER PLATING (Cyanide)</b>																											
Copper Strike Bath 120° F	-	-	-	-	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	-	-
High Speed Bath 180° F	-	-	A	-	-	A	A	-	-	-	-	D	A	A	A	-	A	-	-	-	D	A	A	-	B	-	-
<b>COPPER PLATING (Acid)</b>																											
Copper Sulfate Bath R.T.	-	-	D	-	-	A	A	-	-	-	-	-	A	A	A	D	-	-	-	-	D	A	A	-	A	-	-
Copper Fluoroborate Bath 120° F	-	-	D	-	-	D	A	-	-	-	-	-	A	A	A	D	-	-	-	-	D	A	B	-	C	-	-
<b>COPPER (Misc.)</b>																											
Copper Pyrophosphate 140° F	-	-	A	-	-	A	A	-	-	-	-	-	A	A	A	A	-	-	-	-	B	A	A	-	A	-	-
Copper (Electroless) 140° F	-	-	-	-	-	-	-	D	-	-	-	-	A	A	A	A	-	-	-	-	D	A	D	-	D	-	-
Copper Sulfate, (5% Solution)	-	A	A	A	D	A	A	D	D	D	-	-	A	A	A	D	B	A	A	A	A	A	C	A	-	C	A
Copper Sulfate	B	B	-	-	-	A	A	C	D	-	-	-	A	A	A	C	-	-	-	-	A	B	B	-	A	-	A
Cream	-	A	A	-	A	-	-	C	-	D	-	-	-	-	A	A	-	-	-	-	A	A	A	-	C	-	-
Cresols	-	A	A	-	B	-	-	D	C	-	-	-	-	-	-	D	C	A	A	A	A	D	D	D	D	D	A
Cresylic Acid	B	A	A	-	C	A	B	C	-	-	-	-	B	A	-	D	C	-	-	-	A	A	D	-	D	D	A
Cyclohexane	-	A	-	-	A	A	-	A	-	-	-	-	-	-	D	-	-	-	-	-	D	A	A	A	D	D	D
Cyanic Acid	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	D	-	-
Detergents	-	A	A	-	A	-	-	A	-	-	-	-	A	A	-	A	B	A	A	A	A	A	A	-	B	A	C
Diacetone Alcohol	-	A	A	-	A	A	A	C	-	-	-	-	A	D	-	A	A	-	-	-	-	A	D	D	-	D	A
Dichlorethane	-	A	A	-	-	-	-	A	-	-	-	-	D	A	-	A	D	-	-	-	-	C	-	-	D	-	D
Diesel Fuel	A	A	A	-	A	-	-	A	-	-	-	-	A	-	-	D	-	-	-	-	D	A	A	A	-	D	D
Diethylamine	A	A	-	-	A	-	-	A	-	-	-	-	D	A	B	-	-	-	-	-	C	-	A	A	D	B	C
Diethylene Glycol	-	A	-	-	-	-	-	A	-	-	-	-	-	A	A	B	-	-	-	-	-	A	A	C	A	A	A
Diphenyl Oxide	-	A	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	D	-	D	D
Dyes	-	A	A	-	B	-	-	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	-
Epsom Salts(Magnesium Sulfate)	B	A	A	A	A	A	B	B	-	-	-	-	A	A	-	-	-	-	-	-	A	A	A	-	A	-	-
Ethane	A	A	-	-	A	-	-	A	-	-	-	-	-	D	-	-	-	-	-	-	-	A	A	A	-	B	D
Ethanolamine	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	D	B	C	B
Ether	A	A	A	A	A	-	B	B	A	-	-	D	D	-	D	C	-	-	-	-	-	A	A	C	D	-	D
Ethyl Acetate	-	A	A	-	B	-	B	B	-	-	-	-	C	D	A	D	A	C	C	A	A	D	D	C	D	B	D
Ethyl Alcohol	-	A	A	A	B	A	A	A	C	A	-	-	A	A	-	-	A	B	A	-</							

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

Chemical	Material																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Ethylene Chloride	-	A	A	-	C	B	B	A	-	C	C	D	A	D	-	-	D	A	A	A	A	D	D	D	C	D	A	
Ethylene Dichloride	-	A	A	-	D	A	B	C	-	C	D	A	D	A	D	A	A	C	A	A	A	D	D	D	C	D	A	
Ethylene Glycol	-	A	A	-	A	-	A	B	B	B	C	A	A	A	A	B	A	A	A	A	A	A	C	A	A	A	A	
Ethylene Oxide	-	-	A	-	A	-	-	A	-	-	-	D	A	A	A	-	-	-	A	A	D	D	D	D	C	D	A	
Fatty Acids	-	A	A	-	B	A	A	C	-	D	-	A	A	B	A	B	A	-	A	A	A	C	C	B	C	C	A	
Ferric Chloride	-	D	D	D	D	A	B	D	D	D	-	A	A	A	D	B	A	A	A	A	D	C	C	B	A	A	A	
Ferric Nitrate	-	A	A	A	D	A	A	D	-	-	-	A	A	A	D	B	A	A	A	A	A	D	A	A	A	A	A	
Ferric Sulfate	-	A	C	A	D	A	A	D	D	D	-	A	A	A	A	-	A	A	C	A	A	B	C	A	-	A	A	
Ferrous Chloride	-	D	D	-	D	A	B	C	-	D	-	A	A	A	D	B	A	A	A	A	A	B	C	A	-	A	A	
Ferrous Sulfate	B	A	C	-	D	A	B	C	-	D	D	A	A	A	D	B	A	A	A	A	B	-	A	-	A	-	A	
Fluoric Acid	-	D	B	-	D	A	D	-	D	-	-	A	A	A	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	A	A	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	A	D	A	B	A	A	A	A	A	C	B	D	B	C	A	
Formic Acid	C	A	B	B	D	C	A	C	C	D	D	D	A	A	D	B	A	A	A	B	D	C	D	A	C	B		
Freon 11	A	-	A	-	B	-	-	B	-	C	B	B	A	D	A	C	-	A	A	A	C	C	D	D	D	A	A	
Freon 12 (wet)	-	-	D	-	B	-	-	B	-	-	-	B	A	D	A	C	A	A	A	A	A	D	B	B	D	A		
Freon 22	-	-	A	-	B	-	-	B	-	-	D	-	B	A	-	-	A	A	A	D	D	A	A	A	A	A		
Freon 113	-	-	A	-	B	-	-	B	-	-	-	C	-	-	A	-	-	A	A	C	A	D	A	-	D	A		
Freon T.F.	-	-	A	-	B	-	-	B	-	-	-	B	-	D	A	-	D	A	A	B	A	D	A	D	A	A		
Fruit Juice	A	A	A	A	B	-	-	B	-	D	D	A	D	A	A	B	A	-	A	A	A	A	A	-	A	-	A	
Fuel Oils	A	A	A	-	A	A	A	B	-	C	B	A	A	A	A	D	B	A	A	A	A	C	B	D	D	A		
Furan Resin	-	A	A	-	A	-	-	A	-	A	A	-	A	-	-	-	-	A	-	A	A	D	-	D	-	D	A	
Furfural	A	A	A	-	A	-	B	A	-	-	A	D	A	D	A	D	D	A	A	A	D	D	D	D	B	D	A	
Gallic Acid	B	A	A	-	A	-	A	A	-	D	D	A	A	-	A	-	-	-	-	-	B	A	-	-	-	-	-	
Gasoline	A	A	A	A	A	D	A	A	-	A	A	C	A	D	A	D	C	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	D	-	D	-	D	A	
Glucose	A	-	A	-	A	-	-	A	A	B	B	A	A	B	A	B	A	-	A	A	A	B	A	A	A	A	A	
Glue P.V.A.	B	B	A	-	B	A	-	A	-	-	A	A	A	-	A	-	-	-	A	A	A	A	-	A	-	A	A	
Glycerine	A	A	A	A	A	A	A	B	B	B	A	A	A	A	A	-	A	-	A	A	A	B	A	A	A	A	A	
Cycolic Acid	-	-	-	-	-	-	A	-	-	-	-	-	A	-	B	A	A	A	-	A	A	-	A	-	-	-	A	
Gold Monocyanide	-	-	A	-	-	-	-	A	-	D	-	-	-	-	-	-	-	-	A	A	A	A	-	A	-	-	A	
<b>GOLD PLATING</b>																												
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	
Grape Juice	-	A	A	-	B	-	-	B	-	D	-	A	-	A	-	B	-	-	A	A	A	A	-	A	-	-	A	
Grease	A	A	A	-	A	-	-	B	-	A	-	A	-	A	-	A	-	-	A	A	A	A	-	D	-	-	A	
Heptane	A	-	A	-	A	-	-	A	A	-	-	B	A	A	D	A	D	D	A	A	A	A	-	B	D	-	A	
Hexane	A	A	A	-	A	-	-	A	B	-	-	B	C	A	D	A	-	C	A	A	A	A	B	B	D	D	A	
Hexyl Alcohol	-	A	A	-	A	A	A	C	-	A	A	-	A	A	-	A	-	A	A	A	A	D	B	A	A	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	-	-	B	-	A	A	-	A	-	A	-	D	-	A	A	A	A	-	B	D	D	A	
Hydraulic Oils (Synthetic)	-	A	A	-	A	-	-	A	-	A	-	-	-	-	A	-	D	-	A	A	A	C	D	-	-	-	A	
Hydrazine	-	A	A	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	A	-	A	B	D	B	A	C	A	
Hydrobromic Acid 20%	-	-	D	-	-	A	A	-	-	-	-	A	A	A	D	-	A	-	-	B	A	D	-	C	-	-	B	
Hydrobromic Acid	D	D	D	D	D	A	A	D	-	D	D	A	A	C	D	B	B	-	A	A	D	D	D	A	A	A	A	
Hydrochloric Acid, (Dry Gas)	D	C	A	-	D	-	-	-	-	-	D	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	A	
Hydrochloric Acid (20%)	-	D	D	D	D	C	B	D	-	D	-	A	A	A	D	A	A	D	A	A	C	-	C	A	C	A	A	
Hydrochloric Acid (37%)	-	D	D	D	D	C	B	D	-	D	-	-	A	A	D	A	A	D	A	C	A	C	C	C	C	D	A	
Hydrochloric Acid 100%	-	D	D	-	D	D	C	D	-	D	-	-	A	A	-	D	A	-	-	A	C	C	D	-	C	-	A	A
Hydrocyanic Acid	A	A	A	C	A	A	A	D	D	-	C	A	A	A	B	A	-	A	A	A	C	-	B	-	A	A	A	
Hydrocyanic Acid (Gas 10%)	-	D	D	-	-	-	-	-	-	-	-	A	A	-	-	-	-	-	-	-	-	-	C	A	C	A		
Hydrofluoric Acid (20%) 1	-	D	D	D	D	D	B	D	-	D	-	D	A	A	D	C	A	C	B	C	A	D	-	C	A	C	B	
Hydrofluoric Acid (75%)	-	C	D	-	D	D	C	D	-	D	-	-	C	A	D	D	C	B	C	D	D	A	D	D	C	C	C	
Hydrofluoric Acid 100%	D	D	D	-	D	D	B	D	-	D	D	C	A	-	-	D	-	C	D	D	-	D	-	D	-	D	A	
Hydrofluosilicic Acid (20%)	-	D	D	-	D	D	B	A	-	D	-	D	A	B	D	-	A	-	A	D	A	B	-	B	A	A	C	
Hydrofluosilicic Acid	-	D	D	-	C	-	C	D	-	-	-	-	-	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	-	B	A	-	B	A	A	-	A	-	D	-	-	C	D
Hydrogen Peroxide 30%	-	-	B	-	-	B	A	-	D	-	-	-	A	A	-	B	-	A	C	-	-	A	D	-	C	-	-	B
Hydrogen Peroxide	-	A	B	A	A	B	A	A	D	D	D	D	A	A	B	B	B	A	C	-	A	A	D	C	D	C	C	A
Hydrogen Sulfide, Aqueous Solution	-	A	A	C	C	A	A	D	C	D	-	A	A	A	B	B	A	A	A	A	B	C	-	B	A	D	A	
Hydrogen Sulfide (Dry)	A	C	A	-	D	-	A	D	C	B	B	A	A	-	B	-	-	-	A	-	A	-	-	-	-	-	A	
Hydroxyacetic Acid (70%)	-	-	-	-	D	B	-	-	-	-	-	-	A	-	-	-	-	-	-	A	A	A	-	A	A	-	A	
Ink	A	A	A	-	C	-	-	C	-	D	D	-	-	B	A	B	-	-	-	A	A	A	A	-	A	-	-	A
Iodine	-	D	D	D	D	A	B	D	-	D	-	D	A	A	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	-	-	-	-	-	-	-	-	-	-	-	-	
<b>IRON PLATING</b>																												
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
Isobutyl Alcohol	-	A	A	-	B	A	A	A	C	-	A	-	-	A	A	-	-	-	A	A	A	C	B	A	A	A	A	
Isopropyl Alcohol	-	A	A	-	B	A	A	A	C	C	A	-	-	A	A	-	-											

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

Chemical	Material																											
	303 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminum	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	PVC	Teflon	Noryl	Nylon	Polyethylene	Polypropylene	Ryton	Carbon	Ceramic	Viton(R)*	Buna N	Silicon	Neoprene	Ethylene Propylene	Natural Rubber	Epoxy	
Lacquers	A	A	A	-	A	-	-	A	C	C	C	-	-	C	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	A	A	C	B	A	A	A	B	B	-	D	A	B	A	A	
Lard	B	A	A	A	A	-	-	A	-	A	C	A	-	-	A	-	A	-	A	A	A	A	C	B	-	D	A	
Latex	-	A	A	-	A	-	-	A	-	-	-	-	-	A	A	B	-	-	-	A	A	A	C	A	-	A	A	
Lead Acetate	B	A	A	-	D	A	A	C	-	D	A	A	A	A	B	A	-	A	A	D	B	-	D	A	A	A	A	
Lead Fluoborate Plating	-	-	C	-	-	D	A	-	-	-	-	A	A	A	D	-	A	-	-	D	A	B	-	C	-	-	A	
Lead Sulfamate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	B	C	A	D	C	A	A	
Ligroin	-	-	A	-	-	-	-	A	-	-	-	-	-	D	-	-	D	-	-	A	A	A	-	B	A	D	A	
Lime	-	A	A	-	C	A	-	A	-	A	-	A	-	A	-	-	-	-	A	A	A	C	B	D	-	A	A	
Lubricants	-	A	A	-	A	A	B	-	-	-	-	A	A	-	A	-	A	A	A	A	A	C	D	-	D	A	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	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	B	A	A	A	A	A	B	-	B	-	C	A	
Magnesium Nitrate	-	A	A	A	-	A	A	-	-	-	-	A	A	A	A	B	A	-	-	A	A	A	-	A	-	-	A	
Magnesium Oxide	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	-	A	-	A	-	-	A	
Magnesium Sulfate	B	B	A	-	B	A	B	B	B	C	B	A	A	A	A	B	A	A	A	A	A	A	-	A	D	C	A	
Maleic Acid	C	A	A	A	B	A	A	C	-	-	B	A	A	A	A	-	C	-	A	A	A	D	-	A	D	D	A	
Maleic Anhydride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	D	-	D	-	D	A	
Malic Acid	B	A	A	-	C	-	A	D	-	-	D	A	A	-	A	-	-	-	-	A	C	-	-	A	-	-	-	
Mash	-	A	A	-	-	-	-	A	-	-	-	-	-	A	-	-	-	-	-	A	A	-	A	-	-	-	A	
Mayonnaise	A	A	A	-	D	-	-	D	-	D	D	-	A	A	A	-	A	-	A	A	A	A	-	-	-	-	A	
Melamine	-	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	B	A	-	A	A	A	-	A	A	A	A	A	
Mercuric Cyanide	A	A	A	-	D	A	-	D	-	-	D	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	A	
Methanol (See Alcohol Methyl)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl Acetate	A	-	A	-	A	-	A	A	-	B	-	A	-	-	-	-	-	-	A	A	D	D	B	B	D	-	-	
Methyl Acetone	A	-	A	-	A	-	-	A	-	A	A	-	A	D	-	-	-	-	-	A	D	D	-	D	-	-	C	
Methyl Alcohol 10%	A	-	A	-	C	-	A	C	-	B	A	A	-	A	-	A	-	-	-	-	-	-	-	-	-	-	A	
Methyl Alcohol	-	A	A	A	B	A	A	A	C	A	A	B	A	A	A	B	A	-	A	A	C	B	-	A	A	A	A	
Methyl Bromide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	B	-	D	D	D	B	
Methyl Butyl Ketone	-	-	A	-	A	-	-	-	-	-	-	-	-	D	-	-	-	-	-	A	A	D	C	D	A	D	B	
Methyl Cellosolve	-	-	-	-	A	-	-	A	-	-	-	-	-	C	-	-	-	-	A	-	A	D	D	-	D	B	D	C
Methyl Chloride	-	C	A	-	D	A	A	A	-	-	-	D	A	D	A	D	D	-	A	A	A	D	D	D	D	C	D	A
Methyl Dichloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	D	-	D	D	D	A
Methyl Ethyl Ketone	-	A	A	-	A	A	A	A	-	-	-	D	A	D	A	D	A	A	A	A	A	D	D	C	D	A	D	B
Methyl Isobutyl Ketone	-	-	A	-	-	A	A	-	-	-	-	D	A	D	A	-	C	A	A	A	D	D	C	D	C	D	B	
Methyl Isopropyl Ketone	-	-	A	-	-	-	-	-	-	-	-	-	-	D	A	-	-	-	-	A	A	D	B	D	B	C	D	B
Methyl Methacrylate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	D	D	-	D	D	A	
Methylamine	A	-	A	-	A	-	-	D	-	B	B	-	-	B	-	-	-	-	-	A	A	-	B	-	-	-	-	A
Methylene Chloride	A	A	A	-	A	A	A	C	-	B	D	A	D	D	D	D	D	-	A	A	B	D	-	D	D	D	A	
Milk	A	A	A	A	A	-	-	C	C	D	D	A	-	A	A	B	A	-	A	A	A	B	A	A	A	A	A	A
Molasses	A	A	A	A	A	-	-	A	B	A	A	A	-	B	A	B	A	-	A	A	A	A	-	A	-	-	-	A
Mustard	A	A	A	A	B	-	-	B	-	C	B	A	-	B	A	-	A	-	A	A	A	B	C	C	-	-	-	A
Naptha	A	A	A	A	A	A	A	B	-	B	B	A	A	D	A	D	A	A	A	A	A	B	D	D	D	D	A	A
Napthalene	B	A	B	-	B	A	A	C	-	B	A	D	A	D	-	D	B	A	A	A	C	D	-	D	D	D	A	A
Nickel Chloride	-	A	B	-	D	A	A	D	-	D	-	A	A	A	A	B	A	-	A	A	A	A	-	A	A	A	A	A
<b>NICKEL PLATING</b>																												
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
Electroless 200 ° F	-	-	-	-	-	-	-	-	-	-	-	D	A	D	D	-	D	-	-	A	A	D	-	D	-	-	B	
Nickel Sulfate	B	A	B	-	D	A	B	C	C	D	D	A	A	A	A	B	A	-	A	A	A	A	-	A	A	C	A	
Nitric Acid (10% Solution)	A	A	A	A	D	A	A	D	-	D	D	A	A	A	D	B	A	D	C	B	A	D	-	D	B	D	A	
Nitric Acid (20% Solution)	-	A	A	A	D	A	A	D	-	D	-	A	A	A	D	B	A	C	D	C	A	D	-	D	D	D	B	
Nitric Acid (50% Solution)	-	A	A	A	D	A	A	D	-	D	-	A	A	A	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	A	D	D	D	D	C	D	A	B	D	-	D	D	D	D	
Nitrobenzene	B	A	B	-	C	A	B	D	-	B	B	D	A	D	C	D	C	B	A	A	A	D	D	D	D	D	B	
<b>OILS</b>																												
Aniline	-	A	A	-	C	A	D	A	-	A	-	D	A	D	C	-	A	-	A	A	A	D	-	D	B	D	A	
Anise	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	-	-	D	-	-	-	A
Bay	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	-	D	-	-	-	A
Bone	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	-	D	-	-	-	A
Castor	-	A	A	-	A	-	-	A	-	A	-	A	-	-	-	-	-	-	-	A	A	A	-	A	B	A	A	
Cinnamon	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	D	-	D	-	-	-	A
Citric	-	A	A	-	-	-	-	D	-	D	-	-	-	-	-	-	-	-	-	A	A	A	-	D	-	-	-	A
Clove	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	B	-	A	-	-	-	-	A
Coconut	-	A	A	-	B	-	-	A	-	A	-	-	-	-	-	-	-	-	-	A	A	A	-	A	A	D	A	
Cod Liver	-	A	A	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	-	B	A	D	A	
Corn	-	A	A	A	B	-	-	B	-	A	-	-	-	-	-	-	-	-	-	A	A	A	-	D	C	D	A	
Cotton Seed	B	A	A	A	B	-	-	B	-	A	C	A	A	-	A	-	A	-	A	A	A	A	-	D	C	D	A	
Cresote	-	A	A	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D	-	A	A	A	-	B	D	A
Diesel Fuel (2D,3D,4D,5D)	-	A	A	-	A	-	-	A	-	-	-	-	-	D	A	-	A	A	A	A	A	A	-	D	D	D	A	
Fuel (1,2,3,5A,5B,6)	-	A	A	-	A	A	A	-	-	-	-	A	A	D	-	-	B	-	-	A	A	A	B	-	D	D	A	
Ginger	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	-	A	-	-	-	A
Hydraulic (See Hydraulic)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lemon	-	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D	-	A	A	-	D	-	-	A
Linseed	-	A	A	A	A	-	-	A	-	A	-	A	-	-	-	-	-	-	-	A	A	A	-	D	D	D	A	
Mineral	A	A	A	A	A	-	-	A	-	A	B	A	-	B	A	-	B	A	A	A	A	A	-	B	D	D	A	

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

Chemical	Material																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Rape Seed	-	A	A	-	-	-	-	A	-	-	-	-	A	-	-	-	-	-	A	A	A	B	-	D	-	D	A	
Rosin	-	A	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	A	A
Soybean	-	A	A	-	A	-	-	B	-	A	-	A	-	-	A	-	A	-	A	A	A	A	-	D	-	D	A	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	A	A	A	-	D	-	-	-	A
Octyl Alcohol	-	A	A	-	A	A	A	C	-	A	-	-	A	A	A	-	-	-	A	A	A	B	-	B	A	C	A	A
Oleic Acid	B	A	A	B	B	-	B	B	C	C	-	C	A	A	C	A	D	C	-	A	A	B	D	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	D	A
Oxalic Acid (cold)	C	A	B	A	C	C	B	B	C	D	D	A	A	C	D	A	A	-	A	A	A	B	C	D	B	A	C	A
Paraffin	A	A	A	A	A	-	-	A	-	B	B	A	A	B	A	-	A	-	A	A	A	A	-	-	-	-	-	A
Pentane	A	C	C	-	A	-	B	A	-	B	B	-	A	D	A	-	-	-	A	A	A	A	-	B	D	D	A	A
Perchloroethylen	B	A	A	-	A	-	-	C	-	B	B	-	A	D	-	-	D	A	A	A	A	C	D	D	D	D	D	A
Petrolatum	A	-	A	-	B	-	-	B	-	C	C	-	A	D	A	-	-	-	A	A	A	A	-	B	A	D	A	A
Phenol 10%	B	A	A	-	A	-	B	C	-	B	D	A	A	-	D	-	-	A	-	-	B	D	-	C	D	C	C	C
Phenol (Carbolic Acid)	B	A	A	A	B	C	A	B	D	D	D	A	A	C	D	D	B	A	A	D	A	D	-	D	D	D	D	B
Phosphoric Acid (to 40% Solution)	-	B	A	A	D	A	A	D	D	D	-	A	A	A	D	B	A	A	B	C	A	D	-	D	B	B	C	A
Phosphoric Acid (40%-100% Solution)	-	C	B	B	D	B	A	D	D	D	-	A	A	A	D	C	A	A	B	D	A	D	-	D	B	C	C	C
Phosphoric Acid (Crude)	-	D	C	C	D	C	A	D	D	D	D	-	A	-	D	C	-	A	C	D	A	D	-	D	B	-	A	
Phosphoric Anhydride (Dry or Moist)	-	A	A	-	-	-	-	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
Photographic (Developer)	-	C	A	C	C	A	A	-	-	D	-	A	-	A	-	B	A	-	A	A	A	A	-	A	-	-	-	A
Phthalic Anhydride	B	A	B	-	B	-	A	B	-	C	C	-	A	-	A	-	-	-	-	-	A	C	-	-	-	-	-	-
Picric Acid	B	A	A	-	C	-	A	D	D	D	D	A	A	-	A	A	-	-	-	-	A	A	D	A	-	-	-	A
Potash	-	A	-	A	C	-	A	C	-	B	-	A	-	A	A	B	A	-	A	A	A	A	-	B	-	B	A	A
Potassium Bicarbonate	-	A	-	B	C	A	B	B	-	D	-	A	A	A	A	B	A	A	A	A	A	A	-	A	-	B	A	A
Potassium Bromide	A	A	-	B	C	A	B	C	-	D	D	A	A	A	C	B	A	C	A	A	A	A	-	A	A	B	A	A
Potassium Carbonate	B	A	-	A	C	A	A	C	-	B	B	A	A	A	A	B	A	A	A	A	A	B	-	A	-	B	A	A
Potassium Chlorate	B	A	A	A	B	A	B	B	-	B	B	A	A	A	D	B	A	A	A	A	A	A	-	A	-	B	A	A
Potassium Chloride	C	A	A	B	B	A	A	C	C	B	B	A	A	A	B	B	A	A	A	A	A	A	-	A	A	A	A	A
Potassium Chromate	-	-	B	B	A	-	B	A	-	A	-	A	-	A	-	B	-	A	A	D	A	A	-	A	-	B	C	C
Potassium Cyanide Solutions	B	A	B	A	D	A	A	D	-	B	B	A	A	A	A	B	A	A	C	A	B	A	-	A	A	A	A	A
Potassium Dichromate	B	A	A	A	A	A	B	C	-	B	C	A	A	A	D	B	A	A	A	A	B	A	-	A	A	A	A	A
Potassium Ferrocyanide	B	A	-	A	C	-	B	A	-	C	A	A	-	A	A	-	-	-	-	-	D	B	-	-	-	-	-	A
Potassium Hydroxide (50%)	A	B	B	B	D	C	A	A	D	D	C	A	A	A	A	B	A	A	-	D	B	B	C	A	A	C	A	A
Potassium Nitrate	B	A	B	A	B	A	B	B	-	B	A	A	A	A	C	B	A	C	A	A	B	A	-	A	A	A	A	A
Potassium Permanganate	B	A	B	B	B	B	B	B	-	B	B	A	A	A	D	B	B	A	A	A	B	A	-	A	-	B	B	B
Potassium Sulfate	B	A	B	B	A	A	A	B	B	B	B	A	A	A	C	B	A	A	A	A	A	A	C	A	A	C	A	A
Potassium Sulfide	A	A	-	A	B	-	B	B	-	B	B	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propane (Liquified)	A	A	-	A	A	-	-	A	A	-	B	D	A	D	A	-	D	-	A	A	A	A	D	B	D	D	A	A
Propyl Alcohol	-	A	A	-	A	A	A	A	-	-	A	A	A	A	A	-	A	-	A	A	A	A	B	A	A	A	A	A
Propylene Glycol	B	B	-	A	A	-	-	B	-	B	B	-	A	-	B	B	-	-	A	A	A	A	-	C	-	-	-	A
Pyridine	-	C	-	B	B	-	-	-	-	B	A	-	A	D	-	C	B	A	A	A	D	D	-	D	B	D	A	A
Pyrogallol Acid	B	A	A	A	B	-	A	B	-	B	B	A	A	-	A	-	-	-	-	A	A	A	A	-	-	-	-	A
Rhodium Plating 120° F	-	-	D	-	-	D	D	-	-	-	-	A	A	D	-	A	-	-	-	A	A	A	-	B	-	-	-	A
Rosins	A	A	A	A	A	-	B	A	C	-	C	-	A	-	A	-	A	-	A	A	-	A	-	-	-	-	-	A
Rum	-	A	-	A	-	-	-	-	-	-	-	-	A	-	A	A	-	A	-	A	A	A	-	A	-	-	-	A
Rust Inhibitors	-	A	-	A	-	-	-	A	-	A	-	-	-	-	-	-	-	-	-	A	A	A	-	C	-	-	-	A
Salad Dressing	-	A	-	A	B	-	-	B	-	D	-	-	A	-	A	-	A	-	A	A	A	A	-	-	-	-	-	A
Sea Water	A	A	A	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	-	-	-	-	-	-	-
Shellac (Orange)	A	A	-	A	A	-	-	A	C	C	A	-	A	-	A	-	A	-	-	-	A	-	-	-	-	-	-	-
Silicone	-	B	-	A	B	-	-	A	-	-	-	-	-	A	A	-	A	-	A	A	A	B	A	A	A	A	A	A
Silver Bromide	-	C	C	B	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver Nitrate	B	A	B	A	D	A	A	D	-	D	D	A	A	A	A	B	A	-	A	A	A	C	-	A	C	A	A	A
Silver Plating 80-120° F	-	-	A	-	-	-	A	A	-	-	-	-	A	A	A	A	-	-	-	B	A	A	-	A	-	-	-	A
Soap Solutions	A	A	A	A	C	A	B	B	-	B	A	A	A	A	A	B	A	A	A	A	A	A	B	B	-	C	A	A
Soda Ash ( See Sodium Carbonate)																												
Sodium Acetate	B	A	A	B	B	A	A	B	-	C	C	A	A	A	A	B	A	-	A	A	D	D	-	C	-	A	A	A
Sodium Aluminate	B	-	-	A	C	B	B	B	-	-	C	-	A	A	A	A	-	-	A	A	A	A	-	A	A	B	A	A
Sodium Bicarbonate	B	A	A	A	A	A	-	B	A	C	C	A	A	A	A	B	A	A	A	A	A	A	C	A	A	A	A	A
Sodium Bisulfate	A	A	-	A	D	B	B	C	C	D	D	A	A	A	C	B	A	A	A	A	B	A	C	A	-	A	A	A
Sodium Bisulfite	-	A	-	A	A	A	B	C	-	D	-	A	A	A	D	B	A	A	A	A	A	A	C	A	-	A	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	C	B	A	A	A	B	A	A	B	A	A	A	-	A	A	A	A	A
Sodium Chlorate	B	A	-	A	B	A	B	B	-	-	C	A	A	A	A	B	A	A	A	A	A	A	D	-	A	-	A	A
Sodium Chloride	B	A	C	B	C	A	A	B	C	B	C	A	A	A	A	B	A	A	A	A	A	A	C	A	A	B	A	A
Sodium Chromate	A	A	A	-	D	-	B	B	-	B	B	-	A	A	A	-	A	A	A	B	B	A	-	A	-	-	-	C
Sodium Cyanide	B	A	-	A	D	A	-	D	D	B	B	A	A	A	C	B	A	A	A	A	A	A	D	A	A	A	A	A
Sodium Fluoride	B	C	-	C	C	A	A	C	-	D	D	D	A	-	A	C	-	-	-	-	C	D	-	D	-	-	-	A
Sodium Hydrosulfite	-	-	-	-	A	-	A	C	-	-	-	-	C	A	-	A	-	-	-	-	A	A	-	-	-	-	-	-
Sodium Hydroxide (20%)	-	A	A	A	D	A	A	C	D	A	-	A	A	A	C	B	A	A	C	D	A	A	D	B	A	A	A	A
Sodium Hydroxide (50% Solution)	-	A	B	-	D	A	A	C	D	B	-	A	A	A	C	C	A	B	C	D	A	D	D	C	-	-	-	A
Sodium Hydroxide (80% Solution)	-	A	D	-	D	A	B	C	D	C	-	A	A	A	C	C	A	B	C	D	B	D	D	C	-	-	-	A
Sodium Hypochlorite (to 20%)	-	C	C	C	C	A	A	D	D	D	-	A	A	A	A	B	D	C	D	A	A	C	D	D	B	C		

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

Chemical	Material																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Sodium Silicate	B	A	B	A	C	A	B	C	C	-	B	A	A	A	A	-	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	A	B	A	A	A	A	A	A	-	A	A	C	A	
Sodium Sulfide	B	A	B	-	D	A	B	D	D	A	B	A	A	A	A	B	A	A	A	A	A	C	-	A	A	C	A	
Sodium Sulfite	-	C	C	-	C	A	A	C	-	A	-	A	A	-	D	A	-	-	A	A	A	A	-	A	-	A	A	
Sodium Tetraborate	-	-	A	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	A	A	A	A	-	A	-	-	A	
Sodium Thiosulphate ("Hypo")	A	A	A	-	B	A	-	D	D	C	B	A	A	A	A	-	A	A	A	A	A	B	-	A	A	C	A	
Sorghum	-	A	A	-	-	-	-	-	-	A	-	-	-	-	A	-	-	-	A	A	A	A	-	A	-	-	A	
Soy Sauce	-	A	A	-	A	-	-	A	-	D	-	-	-	A	A	-	-	-	A	A	A	A	-	A	-	-	D	
Stannic Chloride	D	D	D	-	D	A	B	D	-	D	D	A	A	A	A	B	A	-	-	A	A	A	D	A	A	A	A	
Stannic Fluoborate	-	-	A	-	-	-	-	-	-	D	-	-	-	A	-	A	-	-	-	A	A	A	-	A	-	-	A	
Stannous Chloride	D	D	C	-	D	A	A	D	-	D	D	A	A	-	D	A	-	-	-	-	B	C	D	D	D	-	A	
Starch	B	A	A	-	A	-	-	B	-	C	C	A	A	A	A	B	-	-	A	A	A	A	-	A	-	-	A	
Stearic Acid	B	A	A	A	B	A	A	C	C	C	C	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	A	B	A	A	A	D	A	D	A	A	A	A	B	D	D	D	D	A	
Styrene	A	A	A	-	A	-	-	A	-	-	A	-	A	A	-	-	-	-	A	A	B	D	D	D	D	D	A	
Sugar (Liquids)	A	A	A	A	A	-	A	A	-	B	B	-	A	A	A	-	A	-	A	A	A	A	-	B	-	-	A	
Sulfate Liquors	-	C	C	-	B	-	A	C	-	-	-	-	-	-	-	-	-	-	A	A	-	-	C	-	-	A		
Sulfur Chloride	-	D	D	D	D	-	-	C	D	-	-	A	A	A	A	A	D	-	A	C	A	D	-	D	D	C	A	
Sulfur Dioxide	-	A	A	C	A	A	B	B	-	-	D	A	D	D	C	D	A	A	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	A	D	D	-	-	B	A	A	D	-	D	B	C	A	A	
Sulfuric Acid (to 10%)	-	D	C	C	C	A	A	D	D	D	-	A	A	A	D	B	A	A	A	A	C	-	D	D	C	A	A	
Sulfuric Acid (10%-75%)	-	D	D	D	D	C	B	D	D	D	-	A	A	B	D	C	A	B	A	D	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	A	A	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	-	A	-	A	A	A	A	-	B	-	-	A	
Tallow	-	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	A	D	B	A	-	A	A	A	D	C	A	A	A	A	
Tanning Liquors	-	A	A	-	C	A	A	A	-	-	A	A	-	-	-	A	-	-	A	A	A	C	-	-	-	-	A	
Tartaric Acid	B	A	B	B	C	A	B	A	C	D	D	A	A	A	B	A	-	A	A	A	A	D	C	A	-	-	A	
Tetrachlorethane	-	-	A	-	-	A	A	-	-	-	-	D	A	D	A	-	-	-	-	A	A	D	-	-	D	D	A	
Tetrahydrofuran	-	A	A	-	D	-	-	D	-	D	A	D	A	D	A	D	C	A	A	A	B	D	-	D	B	D	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	
Toluene, Toluol	A	A	A	-	A	A	A	A	A	A	A	D	A	D	A	D	D	A	A	A	C	D	D	D	D	D	A	
Tomato Juice	A	A	A	-	A	-	-	C	-	C	C	-	A	A	A	-	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	B	A	A	-	B	A	A	B	A	C	B	D	A	D	C	D	D	C	A	A	A	D	D	D	D	D	A	
Trichloropropane	-	-	A	-	-	-	-	A	-	-	-	-	-	D	-	-	-	-	-	A	A	A	A	-	A	-	A	
Tricresylphosphate	-	-	A	-	-	B	A	A	-	-	-	D	A	A	-	-	-	-	-	A	A	B	D	-	D	A	-	A
Triethylamine	-	-	-	-	-	-	-	A	-	-	-	-	A	-	B	-	-	-	-	A	A	A	A	D	B	-	-	A
Turpentine	B	A	A	-	C	-	A	B	C	B	B	A	A	D	A	D	B	A	A	A	A	D	-	D	D	D	A	
Urine	-	A	A	-	B	-	-	C	-	B	-	-	A	-	A	A	B	A	-	A	A	A	-	D	A	-	-	A
Varnish (Use Viton® for Aromatic)	A	A	A	A	A	-	-	A	B	-	C	-	A	D	A	-	A	-	A	A	A	B	C	D	-	-	D	A
Vegetable Juice	-	A	A	-	A	-	-	C	-	D	-	-	-	A	A	-	-	-	-	A	A	A	B	D	-	-	A	
Vinegar	A	A	A	A	D	A	A	B	B	C	D	A	A	A	A	B	A	A	A	A	A	C	-	B	A	C	A	
Water, Fresh	A	A	A	-	A	-	-	A	C	B	D	A	A	A	A	D	A	A	A	A	A	A	-	B	A	A	A	
Water, Salt	-	A	A	-	B	-	-	B	C	D	-	A	-	A	A	-	A	A	A	A	A	A	-	B	A	A	A	
Water, Acid , Mine	-	A	A	-	C	-	-	C	D	C	-	A	-	A	A	-	A	B	A	A	A	A	-	B	-	-	B	A
Water, Distilled , Lab Grade 7	-	A	A	-	B	-	-	A	-	D	-	A	A	A	A	-	A	A	A	A	A	A	-	B	A	A	A	
Weed Killers	-	A	A	-	C	-	-	C	-	-	-	-	-	-	A	-	-	-	-	A	A	B	-	C	-	-	A	
Whey	-	A	A	-	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	A	-	-	-	-	-	A
Whiskey and Wines	A	A	A	A	D	-	-	B	B	D	D	A	A	A	A	B	A	-	A	A	A	A	B	A	A	A	A	
White Liquor (Pulp Mill)	-	A	A	-	-	-	A	D	-	C	-	-	A	A	A	-	A	-	-	A	A	A	-	A	-	-	-	A
White Water (Paper Mill)	-	A	A	-	-	-	-	A	-	-	-	-	-	-	A	-	-	-	-	A	A	A	-	A	-	-	-	A
Xylene	A	A	A	-	A	-	A	A	A	A	B	D	A	D	A	D	D	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	B	A	A	A	A	A	A	A	-	A	A	A	A	
Zinc Hydrosulfate	B	A	A	A	D	A	B	B	C	C	D	C	A	A	A	B	A	A	A	A	A	A	-	A	A	C	A	
Zinc Hydrosulphite	-	-	A	-	D	-	-	D	-	D	-	-	-	-	A	-	-	-	-	A	A	-	A	-	-	-	A	
<b>ZINC PLATING</b>																												
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	
Zinc Sulfate	B	A	A	A	D	A	B	B	C	C	D	C	A	A	A	B	A	A	A	A	A	A	-	A	A	C	A	