

Please Note:

This chart has been compiled from a multiple of sources and whilst all are believed to be reliable, the information contained within cannot be guaranteed.

This publication is only intended to be used a general guide and Pump Application Engineers Pty Ltd assumes no liability for the accuracy or completeness of the information contained within.

The table includes a liquid list most commonly found in the chemical, food processing, general industrial and paint industries.

Due to the complex nature of Chemical Compatibility, this is not an comprehensive listing.

Other factors that effect chemical compatibility are temperature, concentration of the liquid and the impurities present.

Another factor to be considered is the operation of the pumping system as this may have a long term effect on the liquid being pumped and the rate of corrosion present.

These notes are to be read for all subsequent pages listed in this chart.

Ratings	
1	No Effect (Excellent)
2	Minor Effect (Good)
3	Some Effect (Poor)
4	Strong Effect (Not Recommended)
-	No Available Data

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Chemical	Metals										Plastics										Elastomers				Other								
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Acetaldehyde	1	1	1	-	2	1	1	4	-	-	3	-	4	4	1	-	1	1	4	3	2	1	4	2	2	4	2	3	1	1	1	1	-
Acetamide	-	2	1	-	-	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	1	1	-	1	1	4	1	-	1	-	-
Acetate Sol.	1	2	1	2	2	-	-	1	3	2	1	-	2	4	1	-	1	-	2	4	4	-	4	4	-	4	-	-	1	1	1	-	-
Acetic Acid, Glacial	-	2	1	1	2	1	1	3	3	4	1	-	3	2	1	3	4	4	4	2	2	1	4	4	2	3	2	3	2	1	1	-	-
Acetic Acid 20%	-	2	1	-	-	1	1	-	3	-	-	1	2	-	1	1	-	4	-	-	1	1	1	1	3	-	3	-	-	-	-	-	-
Acetic Acid 80%	-	2	1	-	-	1	1	-	3	-	-	1	4	-	1	2	-	4	-	2	-	-	1	3	-	4	-	-	2	-	1	-	-
Acetic Acid	-	2	1	2	2	1	1	3	3	4	3	2	1	2	1	1	4	4	3	2	1	1	3	3	-	3	2	3	1	1	1	1	-
Acetic Anhydride	2	1	1	2	2	1	1	3	4	2	4	4	4	4	1	4	4	4	4	1	1	1	4	1	3	2	2	3	1	1	1	-	-
Acetone	1	1	1	2	1	1	1	1	1	1	1	4	4	4	1	4	2	1	4	3	2	1	4	4	2	3	1	4	2	1	1	1	1
Acetyl Chloride	-	3	1	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	-	-	-	-	1	1	-	-	-	-
Acetylene	1	1	1	1	1	2	-	2	-	1	1	-	2	-	-	1	1	-	-	4	1	1	1	1	3	2	1	3	1	1	1	1	-

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Acrylonitrile	1	1	3	-	2	2	2	1	-	3	-	-	-	-	-	2	-	4	-	2	1	3	4	-	4	4	-	1	1	1	-	
Amyl	1	1	1	-	3	1	1	1	2	3	3	1	1	2	1	3	1	1	2	2	2	1	1	1	4	1	1	3	1	1	1	-
Benzyl Alcohol	-	1	1	-	2	1	1	1	3	-	-	-	4	2	-	1	1	1	4	4	1	-	1	4	-	2	2	4	1	1	1	-
Butyl Alcohol	1	1	1	-	2	2	1	2	3	3	3	1	1	2	1	1	1	1	-	2	2	1	1	1	1	4	1	1	1	1	1	-
Diacetone Alcohol	-	1	1	-	1	1	1	1	3	-	1	-	4	-	-	1	1	1	-	-	4	-	4	4	-	4	1	4	1	1	1	-
Ethyl Alcohol	-	1	1	1	2	1	1	1	3	1	1	-	1	3	-	1	2	1	2	2	1	-	1	1	2	1	2	1	1	1	1	1
Hexyl Alcohol	-	1	1	-	1	1	1	1	3	-	1	-	-	-	-	1	1	1	-	-	1	-	1	1	4	2	1	1	1	1	1	-
Isobutyl Alcohol	-	1	1	-	2	1	1	1	3	-	1	-	-	-	-	1	1	1	2	-	1	-	1	3	2	1	1	1	1	1	1	-
Isopropyl Alcohol	-	1	1	-	2	1	1	1	3	3	1	-	-	-	-	1	1	1	-	-	1	-	1	3	3	2	1	1	1	1	1	-
Methyl Alcohol	-	1	1	1	2	1	1	1	3	1	1	-	2	-	1	1	3	1	4	2	1	-	3	2	-	1	1	1	1	1	1	1
Octyl Alcohol	-	1	1	-	1	1	1	1	3	-	1	-	-	-	-	1	1	1	-	-	-	-	1	2	-	2	1	3	1	1	1	-
Propyl Alcohol	-	1	1	-	1	1	1	1	-	-	1	2	1	-	1	1	1	1	-	-	1	-	1	1	2	1	1	1	1	1	1	-
Aluminium Chloride 20%	-	4	3	4	2	1	1	4	-	4	1	-	1	2	-	1	3	1	-	2	1	1	1	1	-	1	1	1	1	1	1	-
Aluminium Chloride	3	4	3	-	4	3	1	3	-	4	2	1	1	1	1	-	4	-	-	1	1	1	1	1	3	1	-	-	1	1	1	-
Aluminium Fluoride	-	4	3	4	-	4	2	-	-	-	1	1	1	-	1	1	3	4	-	2	1	-	1	1	3	1	-	3	1	1	-	
Aluminium Hydroxide	-	1	1	1	1	-	-	1	-	4	1	-	1	-	1	1	2	1	-	-	1	-	1	1	-	1	-	1	-	1	1	1
Alum Potassium Sulphate (ALUM),10%	-	1	-	-	1	-	2	-	-	4	1	-	1	-	1	-	1	-	-	1	-	-	1	-	-	1	-	-	1	1	1	-
Alum Potassium Sulphate (ALUM) 100%	-	4	1	2	2	-	2	3	-	-	1	-	1	2	1	1	3	4	-	2	1	-	1	1	-	1	-	1	-	1	1	-
Aluminium Sulphate	-	3	3	1	1	1	1	3	3	4	1	1	1	2	1	1	3	1	-	2	1	1	1	1	-	1	1	1	1	1	1	-
Amines	1	1	1	-	1	2	1	2	-	1	2	-	3	1	1	2	4	1	-	-	-	-	4	4	3	2	2	3	1	1	1	-

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Ammonia 10%	-	-	1	-	-	1	1	-	-	-	-	4	1	-	1	1	-	1	-	-	1	1	1	4	-	1	-	-	2	-	1	-	
Ammonia Anhydrous	1	2	1	1	2	2	1	4	-	4	2	4	1	2	1	1	4	1	-	2	1	2	4	2	2	1	1	4	1	3	1	-	
Ammonia, Liquids	-	1	1	1	4	-	2	4	-	1	1	-	1	2	1	1	4	-	-	4	1	-	4	2	2	1	1	4	1	1	1	-	
Ammonia, Nitrate	-	1	1	1	3	-	-	4	-	-	1	-	2	2	-	1	3	-	-	-	1	-	-	1	-	3	-	-	1	1	1	-	
Ammonium Bifluoride	-	3	1	-	4	-	2	-	-	-	-	-	1	-	-	1	4	-	-	-	1	-	1	1	-	1	-	-	1	-	1	-	
Ammonium Carbonate	2	1	1	1	3	1	2	2	-	3	2	-	1	2	1	1	4	1	-	-	1	-	2	4	3	1	1	-	1	1	1	-	
Ammonium Casenite	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	
Ammonium Chloride	3	1	3	1	3	4	1	4	3	4	4	1	1	2	1	1	2	1	-	2	1	1	1	1	3	1	1	1	1	1	1	-	
Ammonium Hydroxide	1	1	1	1	3	1	1	4	4	1	3	-	1	2	1	1	4	1	2	2	1	1	2	2	2	1	1	3	1	1	1	-	
Ammonium Nitrate	1	1	1	1	2	1	1	4	4	1	4	-	1	2	1	1	3	4	-	2	1	1	4	1	3	1	1	1	1	1	1	-	
Ammonium Oxalate	-	1	1	1	-	-	1	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	-	1	-	1	-	-	1	1	-	-	
Ammonium Persulphate	-	1	1	1	3	3	1	1	-	4	1	4	1	-	1	1	4	4	-	-	1	-	3	1	-	1	1	1	1	1	1	1	-
Ammonium Phosphate, Dibasic	2	1	1	1	2	1	1	3	-	-	4	-	1	-	1	1	2	1	-	2	1	-	1	1	2	1	1	1	1	1	1	-	
Ammonium Phosphate, Monobasic	-	1	1	1	2	1	1	4	-	-	1	-	1	1	1	1	2	1	-	2	1	-	1	1	2	1	1	1	1	1	1	-	
Ammonium Phosphate, Tribasic	2	1	1	1	2	1	1	3	-	3	4	-	1	-	1	1	2	1	-	2	1	-	1	1	2	1	1	1	1	1	1	-	
Ammonium Sulphate	3	4	2	1	2	1	1	2	3	3	3	1	1	4	1	1	2	4	-	2	1	1	4	1	2	1	1	1	1	1	1	-	
Ammonium Thiosulphate	-	-	1	-	-	1	-	-	-	4	1	-	-	-	-	-	2	-	-	-	-	-	-	1	-	1	-	-	1	1	1	-	
Amyl Acetate	2	1	1	3	2	1	1	3	-	-	3	3	4	4	1	4	1	2	-	4	4	1	4	4	4	4	1	4	1	1	1	-	
Amyl Alcohol	-	1	1	-	2	1	1	1	-	-	1	1	1	2	1	3	1	1	-	2	1	-	2	2	4	1	1	3	1	1	1	-	
Amyl Chloride	-	3	2	-	4	-	1	1	-	-	1	1	4	3	1	4	1	3	-	4	4	-	1	4	-	4	4	4	1	1	1	-	

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Aniline	2	1	1	1	3	1	2	3	-	-	3	3	4	4	1	4	4	3	4	3	2	1	3	4	3	4	2	4	1	1	1	-	
Anti-Freeze	-	1	1	-	1	-	1	2	2	2	3	-	1	2	1	1	1	1	2	2	1	1	1	1	1	3	1	1	1	1	1	1	1
Antimony Trichloride	-	4	4	-	4	3	1	-	-	-	-	-	1	1	1	-	-	4	-	1	-	-	1	-	-	3	-	1	1	-	1	-	
Aqua Regia (80% HCl, 20% HNO)	-	4	4	-	4	1	4	4	-	-	-	3	4	4	1	4	4	4	-	4	3	-	3	4	3	4	4	4	4	4	-	4	-
Arochlor 1248	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	4	-	-	-	-	-	-	1	4	-	4	2	4	1	1	-	-	-
Aromatic Hydrocarbons	-	-	1	-	1	-	-	1	-	1	1	-	4	-	-	4	1	-	-	3	-	-	1	4	-	4	4	4	1	1	-	-	-
Arsenic Acid	2	1	1	-	4	-	-	4	2	4	4	1	1	2	1	1	4	1	-	2	1	-	1	1	-	1	-	3	1	1	1	-	
Asphalt	-	2	1	-	3	-	-	1	-	3	-	-	1	-	-	-	1	1	-	-	1	1	1	2	3	2	4	4	1	-	1	1	
Barium Carbonate	2	1	1	1	2	1	1	2	-	2	2	-	1	1	1	1	1	1	-	2	1	-	1	1	-	1	-	1	1	1	1	1	1
Barium Chloride	3	4	1	1	4	1	1	2	-	-	3	1	1	2	1	1	1	2	-	2	1	1	1	1	2	1	1	1	1	1	1	1	-
Barium Cyanide	-	-	1	-	-	-	-	3	-	-	1	-	-	-	-	2	-	-	2	-	-	1	3	-	1	1	-	1	1	-	1	-	
Barium Hydroxide	2	3	1	1	4	2	2	2	-	3	3	1	1	-	1	1	4	1	-	2	1	1	1	1	1	3	1	1	1	1	1	1	1
Barium Nitrate	-	1	1	-	-	1	-	4	-	1	1	-	2	-	-	1	1	-	-	-	-	-	1	1	-	1	-	2	1	1	-	-	
Barium Sulphate	2	1	1	1	4	1	1	3	-	3	3	1	1	-	1	1	1	1	-	2	1	1	1	1	1	4	1	1	-	2	1	2	-
Barium Sulphide	2	1	1	-	4	2	-	3	-	3	3	-	1	1	1	1	1	1	-	2	1	-	1	1	3	1	1	1	1	1	1	-	
Beer	1	1	1	-	1	1	1	1	2	4	4	1	1	-	1	1	2	4	2	4	-	1	4	3	1	1	1	1	1	1	1	-	
Beet Sugar Liquids	1	1	1	-	1	-	-	1	2	1	-	-	1	-	1	1	2	1	2	-	1	-	1	1	-	2	1	1	1	1	1	-	
Benzaldehyde	1	1	1	-	2	1	1	1	-	2	1	3	4	4	1	4	1	3	4	4	4	1	4	4	2	4	1	4	1	1	1	-	
Benzene	2	1	1	1	2	1	2	2	1	2	3	2	4	3	1	4	1	1	4	4	4	1	1	4	-	4	4	4	1	1	1	1	1
Benzoic Acid	2	1	1	1	2	1	1	2	-	4	-	1	1	2	1	1	2	4	-	2	4	-	1	4	-	4	4	4	1	1	2	-	

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Benzol	-	1	1	-	2	1	1	2	1	-	-	-	4	-	1	4	1	1	-	-	1	-	4	4	-	4	-	-	1	1	1	1	
Borax (Sodium Borate)	-	1	1	1	3	2	1	1	2	1	3	1	1	1	1	1	1	1	-	2	1	1	1	2	3	1	1	3	1	1	1	1	
Boric Acid	2	1	1	1	2	1	1	2	3	4	-	1	1	2	1	1	1	1	-	2	1	-	1	1	-	1	1	1	1	1	1	1	
Brewery Slop	-	-	1	-	-	-	-	1	-	1	-	-	-	-	-	-	1	-	-	-	-	-	1	1	-	1	-	-	1	1	1	-	
Bromine (Wet)	4	4	4	4	4	1	1	3	-	4	4	1	2	2	1	4	4	4	4	4	4	4	4	1	4	4	4	4	4	3	4	1	4
Butadene	1	1	1	-	1	-	-	3	1	3	3	1	1	-	1	-	1	1	-	-	-	2	1	1	-	2	1	-	1	1	1	-	
Butane	1	1	1	-	1	-	-	1	1	3	3	1	1	3	1	4	1	1	2	3	4	1	1	1	4	2	4	4	1	1	1	-	
Butanol	-	1	1	-	1	-	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Butter	-	2	1	-	1	-	-	4	-	4	-	-	2	-	2	1	-	2	-	-	-	-	1	1	-	2	1	4	1	1	1	-	
Buttermilk	1	1	1	1	1	-	-	4	-	4	-	-	2	1	1	1	1	2	-	-	-	-	1	1	-	1	-	4	1	1	1	-	
Butylene	1	2	1	-	1	-	-	1	1	1	1	-	2	-	1	-	1	-	-	-	-	1	1	2	-	-	4	4	1	1	1	-	
Butyl Acetate	-	-	3	-	1	-	1	1	-	-	1	3	4	4	1	4	1	-	-	3	4	1	4	2	4	4	2	4	1	1	1	-	
Butyric Acid	2	2	1	1	2	1	1	3	-	4	-	1	2	-	1	1	3	4	4	-	1	-	4	4	-	4	2	-	1	1	4	-	
Calcium Bisulphate	3	4	1	-	4	-	-	4	4	4	-	-	1	1	1	-	-	1	-	-	-	-	1	1	3	3	-	1	1	-	-	-	
Calcium Bisulphide	-	-	2	-	3	1	1	3	-	-	-	-	1	-	1	1	4	1	-	2	1	-	1	1	-	1	4	-	1	1	1	-	
Calcium Bisufite	-	2	1	-	3	1	1	3	-	-	-	1	1	-	1	1	-	1	-	-	1	-	1	1	-	1	-	1	-	1	-	-	
Calcium Carbonate	2	1	1	1	3	1	1	3	-	4	-	-	1	1	1	1	1	1	-	2	1	-	1	1	-	1	-	1	1	1	1	-	
Calcium Chlorate	-	2	1	-	-	-	2	3	-	-	-	-	1	1	1	-	-	1	-	1	-	-	1	-	-	1	-	1	1	1	-	-	
Calcium Chloride	3	1	4	3	3	1	1	2	-	3	-	1	1	1	1	4	1	2	2	1	1	1	1	1	2	4	1	1	1	1	1	2	
Calcium Hydroxide	2	1	1	-	3	1	1	2	-	-	-	-	1	1	1	1	2	1	-	2	1	-	1	1	3	1	1	1	1	1	1	1	

Ratings	
1	No Effect (Excellent)
2	Minor Effect (Good)
3	Some Effect (Poor)
4	Strong Effect (Not Recommended)
-	No Available Data

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Chemical	Metals										Plastics										Elastomers					Other							
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Calcium Hypochlorite	4	4	3	3	3	1	2	4	-	4	-	1	4	-	1	1	4	4	-	2	1	-	1	2	3	4	1	3	1	1	1	-	
Calcium Sulphate	2	1	1	1	2	1	2	2	-	-	-	1	1	1	1	1	1	1	3	2	1	1	1	1	1	-	4	-	3	1	1	1	-
Calgon	-	1	1	-	-	-	-	3	-	4	-	-	-	-	-	1	2	-	-	-	1	-	1	1	-	1	-	-	1	1	1	-	
Cane Juice	-	1	1	-	2	-	-	2	3	1	-	-	1	-	-	-	1	1	-	-	4	-	-	1	-	1	-	1	1	1	1	-	
Carbolic Acid (See Phenol)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon Bisulphide	2	1	1	1	1	-	-	3	-	2	-	-	4	4	-	-	1	1	-	-	4	-	1	4	-	4	4	4	1	1	1	1	
Carbon Dioxide (Wet)	-	1	1	-	3	-	1	3	3	3	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	
Carbon Disulfide	-	2	1	-	3	-	-	3	3	2	3	-	4	3	1	4	1	1	-	4	4	1	1	4	-	4	4	4	1	1	2	-	
Carbon Monoxide	-	1	1	-	1	-	-	-	-	-	-	-	1	-	-	2	1	1	-	2	1	-	1	1	2	2	1	3	1	1	1	-	
Carbon Tetrachloride	2	2	2	1	3	1	1	3	1	3	4	1	3	3	1	4	1	1	4	4	4	4	3	1	3	3	4	-	4	3	1	1	
Carbonated Water	2	1	1	1	1	-	-	2	-	4	-	-	1	-	-	1	1	1	-	-	1	-	1	1	-	1	1	-	1	1	1	-	
Carbonic Acid	2	1	2	1	1	-	1	2	-	4	-	1	1	-	1	1	1	-	2	1	-	1	2	2	1	1	1	1	1	1	1	-	
Catsup	-	1	1	1	4	-	-	3	-	4	-	-	1	-	-	1	2	1	2	-	1	-	1	1	-	3	-	-	1	1	1	-	
Chloracetic Acid	4	4	4	4	3	1	1	4	-	4	-	4	1	4	1	-	4	4	-	4	4	-	4	4	-	4	4	2	4	2	1	1	
Chloric Acid	-	4	4	-	-	-	-	-	-	-	-	-	4	-	1	-	-	-	-	-	-	-	-	4	-	4	-	-	4	-	-	-	
Chlorinated Glue	-	1	1	-	4	-	-	3	-	4	-	-	-	-	-	3	-	3	4	-	-	-	-	1	3	-	4	2	4	1	-	1	
Chlorine, Anhydrous Liquid	-	4	4	4	4	4	1	4	-	3	-	-	4	2	1	1	4	4	-	4	4	3	1	4	-	4	2	4	2	1	4	-	
Chlorine (Dry)	2	1	1	-	4	4	1	1	2	1	-	-	-	-	1	-	-	-	-	-	-	3	4	-	-	4	-	4	4	1	1	-	
Chlorine Water	4	-	4	-	4	1	2	4	4	4	-	1	1	-	1	3	-	4	-	-	4	3	1	4	3	4	-	-	-	3	1	-	
Chlorobenzene (Mono)	1	1	1	-	2	-	1	2	-	2	3	1	4	4	1	4	1	1	4	4	4	1	1	4	-	4	4	4	1	1	1	-	

Ratings
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Chemical	Metals										Plastics										Elastomers					Other							
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Chloroform	1	1	1	1	4	1	1	2	-	4	3	3	4	3	1	4	1	3	4	4	4	3	1	4	4	4	4	4	4	1	1	1	1
Chlorosulfonic Acid	4	4	-	4	4	1	2	4	-	-	4	4	3	3	1	4	4	4	-	4	4	4	4	4	4	4	4	4	4	3	-	3	-
Chlorox (Bleach)	-	1	1	-	3	-	1	1	-	4	3	-	1	2	1	1	4	4	2	-	4	3	1	3	-	2	2	4	1	1	1	-	
Chocolate Syrup	-	1	1	-	1	-	-	-	-	4	-	-	-	-	-	1	1	1	-	-	1	-	1	1	-	1	-	4	1	-	1	-	
Chromic Acid 5%	-	1	1	2	3	1	1	4	4	4	-	-	1	2	-	3	4	4	2	2	1	1	1	1	4	3	4	1	2	2	4	3	-
Chromic Acid 10%	-	2	-	-	-	1	1	-	4	-	-	1	1	-	1	1	-	4	-	-	1	-	1	4	-	4	-	-	3	-	1	-	
Chromic Acid 30%	-	2	-	-	-	1	1	-	4	-	-	2	1	-	1	4	-	4	-	-	1	-	1	4	-	4	-	-	4	-	1	-	
Chromic Acid 50%	3	2	2	-	3	1	1	4	4	4	-	3	2	2	1	4	4	4	3	3	2	2	1	4	-	4	1	4	3	4	1	-	
Cider	-	1	1	1	2	-	-	1	-	4	-	-	1	-	-	1	2	-	-	2	-	-	1	1	-	1	-	-	1	1	1	-	
Citric Acid	-	1	1	1	3	1	1	4	3	4	-	1	1	-	1	1	2	3	3	2	2	-	1	4	3	1	1	1	1	1	1	1	2
Citric Oils	-	1	1	-	3	-	-	2	-	-	-	-	-	-	-	1	2	-	-	-	1	-	1	1	3	4	-	-	1	1	1	-	
Coffee	1	1	1	1	1	-	-	2	-	3	-	-	-	-	1	1	1	1	-	-	1	-	1	1	-	1	-	1	1	1	1	-	
Copper Chloride	3	4	4	2	4	1	1	4	-	4	-	1	1	2	1	1	2	4	-	2	1	1	1	1	-	1	1	1	1	-	1	-	
Copper Cyanide	-	1	1	1	4	1	1	3	-	4	-	1	1	-	1	1	2	1	-	2	1	1	2	2	-	1	1	1	3	1	1	-	
Copper Florobate	-	4	4	-	4	-	2	4	-	4	-	-	1	-	1	-	2	-	-	1	-	-	1	2	-	1	-	1	1	-	1	-	
Copper Nitrate	2	1	1	2	4	1	1	4	-	-	-	1	1	-	1	1	2	4	-	2	1	-	1	1	-	1	1	-	1	1	1	-	
Copper Sulphate 5% solution	-	1	1	1	4	1	1	4	4	4	-	-	1	-	1	1	2	4	-	2	1	1	1	1	3	1	-	3	1	1	1	-	
Copper Sulphate	2	2	-	-	-	1	1	3	4	-	-	1	1	-	1	1	-	3	-	-	1	-	2	2	-	1	1	-	1	-	1	-	
Cream	-	1	1	-	1	-	-	3	-	4	-	-	-	-	1	1	1	-	-	1	-	1	1	-	3	-	-	1	1	1	-		
Cresols	-	1	1	-	2	-	-	4	3	-	-	-	4	4	-	-	4	-	4	4	3	1	4	4	4	4	4	4	1	1	1	-	

Ratings
 1 - No Effect (Excellent)
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Chemical	Metals										Plastics										Elastomers					Other							
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Cresylic Acid	2	1	1	-	3	1	2	3	-	-	-	2	2	4	1	-	4	4	-	3	-	-	1	4	-	4	4	4	1	1	1	-	
Cyclohexane	-	1	-	-	1	1	-	1	-	-	1	-	-	4	-	4	1	-	-	-	4	1	1	1	4	4	4	4	4	1	1	1	-
Cyanic Acid	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	3	-	4	-	-	1	-	-	-	
Detergents	-	1	1	-	1	-	-	1	-	-	1	-	1	-	-	1	2	1	2	2	1	1	1	1	1	-	2	1	3	1	1	1	-
Dichlorethane	-	1	1	-	-	-	1	-	-	-	-	-	4	4	1	-	-	1	-	4	-	-	2	-	-	4	-	4	1	-	-	-	-
Diesel Fuel	1	1	1	-	1	-	-	1	-	1	1	-	-	-	-	4	1	-	-	-	4	1	1	1	-	4	4	4	4	1	1	1	-
Diethylamine	1	1	-	-	1	-	-	1	-	-	-	-	4	-	1	2	4	-	-	-	3	-	4	2	-	2	2	3	1	1	1	-	
Diethylene Glycol	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	2	2	-	-	1	1	3	1	1	1	1	1	1	-	
Diphenyl Oxide	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	4	-	4	4	4	1	1	1	-	
Dyes	-	1	1	-	2	-	-	3	-	-	-	-	-	-	-	1	1	-	-	-	-	-	1	-	-	3	-	-	1	-	-	-	
Esom Salts (Magnesium Sulphate)	2	1	1	1	1	1	2	2	-	-	-	-	1	-	-	1	1	-	-	-	1	-	1	1	-	1	-	3	1	1	1	-	
Ethane	1	1	-	-	1	-	-	1	-	-	-	-	-	-	-	4	1	-	-	-	-	-	1	1	-	2	4	4	1	1	1	-	
Ethanolamine	-	1	1	-	-	-	-	-	-	-	3	-	-	-	-	-	4	-	-	-	-	1	4	2	3	2	-	3	1	1	1	-	
Ether	1	1	1	1	1	-	2	2	1	-	2	-	4	3	-	4	1	3	-	-	-	1	3	4	-	4	3	4	1	1	1	1	
Ethyl Acetate	-	1	1	-	2	-	2	2	-	-	3	4	4	4	1	4	1	1	4	3	3	1	4	4	3	4	2	4	1	1	1	-	
Ethyl Chloride	-	1	1	1	2	1	2	2	-	3	4	1	4	4	1	4	1	1	-	4	4	1	1	4	4	3	1	1	1	1	1	-	
Ethyl Sulphate	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	1	1	-	-	-	-	1	1	1	-	
Ethylene Chloride	-	1	1	-	3	2	2	1	-	3	3	-	4	-	1	4	1	-	4	-	4	1	1	4	4	4	3	4	1	1	1	-	
Ethylene Dichloride	-	1	1	-	4	1	2	3	-	-	3	-	4	4	1	4	1	1	-	4	1	1	1	4	4	4	3	4	1	3	1	-	
Ethylene Glycol	-	1	1	-	1	-	1	2	2	2	3	1	1	2	1	1	1	1	2	2	1	1	1	1	3	1	1	1	1	1	1	1	

Ratings	
1	No Effect (Excellent)
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3	Some Effect (Poor)
4	Strong Effect (Not Recommended)
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Chemical	Metals										Plastics										Elastomers					Other							
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Ethylene Oxide	-	-	1	-	1	-	-	1	-	-	-	-	4	-	1	1	1	1	-	-	-	-	4	4	4	4	3	4	1	1	1	-	
Fatty Acids	-	1	1	-	2	1	1	3	-	4	-	1	1	2	1	2	1	1	-	2	1	-	1	3	3	2	3	3	1	1	1	-	
Ferric Chloride	-	4	4	4	4	1	2	4	4	4	-	1	1	2	1	1	2	4	-	2	1	1	1	4	3	2	1	1	1	1	1	-	
Ferric Nitrate	-	1	1	1	4	1	1	4	-	-	-	1	1	-	1	1	2	4	-	2	1	1	1	1	1	4	1	1	1	1	1	-	
Ferric Sulphate	-	1	3	1	4	1	1	4	4	4	-	1	1	2	1	1	2	1	3	-	1	1	1	1	2	3	1	-	1	1	3	1	-
Ferrous Chloride	-	4	4	-	4	1	2	3	-	4	-	1	1	2	1	1	2	4	-	2	1	1	1	1	2	3	1	-	1	1	1	1	-
Ferrous Sulphate	2	1	3	-	4	1	2	3	-	4	4	1	1	2	1	1	2	4	-	2	1	1	1	1	2	-	1	-	1	1	1	1	-
Fluboric Acid	-	4	2	-	-	4	1	-	-	4	-	1	1	2	1	2	2	3	-	2	1	-	1	2	-	1	-	-	1	1	4	-	
Fluorine	4	4	4	-	4	4	1	4	-	4	4	-	3	-	3	-	-	4	-	3	-	-	-	-	-	-	-	-	-	4	4	-	-
Fluosilicic Acid	-	-	2	-	4	4	2	-	-	4	-	1	1	2	1	1	2	4	-	2	1	-	2	1	-	1	-	-	-	3	1	4	-
Formaldehyde 40%	-	-	1	-	-	1	1	-	-	-	-	2	2	-	1	1	-	4	-	-	1	1	4	2	2	1	-	-	1	-	1	-	
Formaldehyde	1	1	1	-	1	1	2	1	2	4	1	-	1	2	1	4	1	1	-	2	1	1	4	3	2	4	2	3	1	1	1	-	
Formic Acid	3	1	2	2	4	3	1	3	3	4	4	1	4	2	1	1	4	4	-	2	1	1	2	4	3	4	1	3	2	1	1	2	
Freon 11	-	-	1	-	4	-	-	-	-	3	-	-	-	-	1	-	1	4	-	-	4	-	3	3	-	4	-	-	-	-	-	-	
Freon 12 (wet)	-	-	1	-	4	-	-	-	-	-	-	-	-	-	1	-	1	4	-	-	2	-	1	1	-	2	-	-	-	-	-	-	
Freon 22	-	-	1	-	4	-	-	-	-	-	-	-	-	-	1	-	1	2	-	-	4	-	4	4	-	1	-	-	-	-	-	-	
Freon 113	-	-	1	-	4	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	4	-	3	1	-	1	-	-	-	-	-	-	
Fruit Juice	1	1	1	1	2	-	-	2	-	4	4	-	1	-	4	1	2	1	-	2	1	-	1	1	-	1	-	-	1	1	1	1	
Fuel Oils	1	1	1	-	1	1	1	2	-	3	2	1	1	-	1	1	1	1	-	4	2	1	1	1	3	2	4	4	1	1	1	-	
Furan Resin	-	1	1	-	1	-	-	1	-	1	1	-	-	-	1	-	1	-	-	-	-	1	1	4	-	4	-	4	1	-	1	-	

Ratings
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Furfural	1	1	1	-	1	-	2	1	-	-	1	4	4	-	1	4	2	1	4	4	4	1	4	4	4	4	2	4	1	1	1	-	
Gallic Acid	2	1	1	-	1	-	1	1	-	4	4	-	1	1	1	-	-	1	-	-	-	-	2	1	-	-	-	-	-	-	-	-	
Gasoline	1	1	1	1	1	4	1	1	-	1	1	1	3	-	1	4	1	1	4	4	3	1	1	1	4	4	3	4	1	1	1	1	
Gelatine	1	1	1	1	1	-	1	1	3	4	4	-	1	-	1	1	1	1	-	-	1	-	1	1	-	1	1	1	1	1	1	-	
Glucose	1	-	1	-	1	-	-	1	1	2	2	-	1	2	1	2	1	1	2	2	1	-	1	1	2	1	1	1	1	1	1	1	-
Glue P.V.A.	2	2	1	-	2	1	-	1	-	-	1	-	1	2	1	-	1	1	-	-	-	-	1	1	-	1	-	-	1	1	1	1	-
Glycerine	1	1	1	1	1	1	1	1	2	2	2	1	1	2	1	1	1	1	3	-	1	-	1	1	2	1	1	1	1	1	1	1	-
Cycolic Acid	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	1	3	-	-	2	1	1	1	1	1	-	1	-	-	-	1	1	-
Gold Monocyanide	-	-	1	-	-	-	-	1	-	4	-	-	-	-	-	-	1	-	-	-	-	-	1	1	-	1	-	-	-	1	1	1	-
Grape Juice	-	1	1	-	2	-	-	2	-	4	-	-	1	-	-	1	2	-	2	2	-	-	1	1	-	1	-	-	1	1	1	1	-
Grease	1	1	1	-	1	-	-	2	-	1	1	-	-	-	1	-	1	1	-	-	-	-	1	1	-	4	-	-	1	1	1	1	-
Heptane	1	-	1	-	1	-	1	1	-	-	2	1	1	-	1	4	1	1	3	4	4	1	1	1	-	2	4	-	1	1	1	1	-
Hexane	1	1	1	-	1	-	1	2	-	-	2	1	3	-	1	4	1	1	4	-	3	1	1	1	2	2	4	4	1	1	1	1	-
Honey	-	1	1	-	1	-	-	1	-	1	-	-	1	-	-	1	1	1	2	-	1	-	1	1	-	1	1	-	1	1	1	1	-
Hydraulic Oils (Petroleum)	1	1	1	-	1	-	-	2	-	1	1	-	-	-	1	-	1	1	-	-	4	-	1	1	-	2	4	4	1	1	1	1	-
Hydraulic Oils (Synthetic)	-	1	1	-	1	-	-	1	-	1	-	-	-	-	-	-	1	1	-	-	4	-	1	3	4	-	-	-	1	1	1	1	-
Hydrazine	-	1	1	-	-	-	-	-	-	3	-	-	-	-	-	-	4	-	-	-	-	-	1	2	4	2	1	3	-	-	1	1	-
Hydrobromic Acid 20%	-	-	4	-	-	1	1	-	-	-	-	1	1	-	1	1	-	4	-	-	1	-	1	4	-	3	-	-	2	-	2	-	-
Hydrobromic Acid	4	4	4	4	4	1	1	4	-	4	4	1	1	2	1	3	4	4	-	2	2	-	1	4	4	4	4	1	1	1	1	1	-
Hydrochloric/Muriatic Acid (Dry Gas)	4	3	1	-	4	-	1	-	-	-	4	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1	-	-	-

Ratings
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Chemical	Metals										Plastics										Elastomers					Other							
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Hydrochloric/ Muriatic Acid (20%)	-	4	4	4	4	3	2	4	-	4	-	1	1	2	1	1	4	4	2	1	1	4	1	3	-	3	1	3	1	1	1	4	
Hydrochloric Acid/Muriatic (37%)	-	4	4	4	4	3	2	4	-	4	-	1	1	2	1	1	4	4	3	1	1	4	1	3	3	3	3	4	1	1	3	4	
Hydrochloric Acid/Muriatic 100%	-	4	4	-	4	4	3	4	-	4	-	-	1	1	1	-	4	-	1	-	-	3	4	-	3	-	1	1	1	3	-		
Hydrocyanic Acid	1	1	1	3	1	1	1	4	4	-	3	-	1	2	1	1	2	1	-	2	1	-	1	3	-	2	-	1	1	1	1	-	
Hydrocyanic Acid (Gas 10%)	-	4	4	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	3	1	3	1	-	-	-	
Hydrofluoric Acid (20%)	-	4	4	4	4	4	2	4	-	4	-	-	4	2	1	1	4	4	-	3	1	3	1	4	-	3	1	3	2	2	3	4	
Hydrofluoric Acid (75%)	-	3	4	-	4	4	3	4	-	4	-	1	3	2	1	4	4	4	-	3	2	3	1	4	4	4	3	3	3	4	4	4	
Hydrofluoric Acid 100%	4	4	4	-	4	4	2	4	-	4	4	-	3	4	1	-	-	-	4	-	3	-	4	-	4	-	4	1	4	4	-		
Hydrofluosilicic Acid (20%)	-	4	4	-	4	4	2	1	-	4	-	-	4	-	1	2	4	4	-	-	1	-	1	2	-	2	1	1	3	1	4	-	
Hydrofluosilicic Acid	-	4	4	-	3	-	3	4	-	-	-	-	3	1	-	-	-	-	-	-	-	-	-	-	4	1	-	-	-	1	-	-	
Hydrogen Gas	1	1	1	-	1	-	-	1	-	2	2	1	1	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-
Hydrogen Peroxide 10%	-	3	3	-	1	3	1	4	4	4	-	-	1	1	1	-	-	4	-	1	-	2	-	1	-	4	-	3	4	1	1	-	
Hydrogen Peroxide 30%	-	-	2	-	-	2	1	-	4	-	-	-	1	-	1	-	-	4	-	-	1	3	1	4	-	3	-	-	2	-	-	-	
Hydrogen Peroxide	-	1	2	1	1	2	1	4	4	4	4	3	1	3	1	2	4	4	-	2	1	3	1	4	3	4	3	3	1	-	1	1	
Hydrogen Sulphide, Aqueous Solution	-	4	1	3	3	1	1	4	3	4	-	1	1	2	1	1	4	4	-	2	1	1	4	3	-	2	1	4	1	1	1	1	
Hydrogen Sulphide (Dry)	1	3	1	-	4	-	1	4	3	2	2	-	1	-	1	-	-	4	-	-	-	1	4	-	-	-	1	1	1	1	1	-	
Hydroxyacetic Acid (70%)	-	-	-	-	4	2	-	-	-	-	-	-	1	-	-	-	4	-	-	-	-	-	1	1	-	1	1	-	1	1	1	-	
Ink	1	1	1	-	3	-	-	3	-	4	4	-	-	-	2	1	1	-	2	-	-	-	1	1	-	1	-	1	1	1	1	1	
Iodine	-	4	4	4	1	2	4	-	4	-	-	-	4	2	1	1	3	4	4	4	4	-	1	2	-	4	2	4	1	4	1	-	
Iodine (In Alcohol)	-	-	2	-	-	4	1	-	-	-	-	-	4	-	1	3	-	4	-	-	2	-	1	4	-	4	-	-	-	-	1	-	

Ratings
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Chemical	Metals										Plastics										Elastomers					Other							
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Iodoform	2	3	1	-	1	-	-	3	-	3	2	-	-	-	1	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Isotane	-	-	-	-	1	-	-	-	-	-	-	-	-	-	4	1	-	-	-	-	4	-	1	1	-	-	-	4	1	-	1	-	-
Isopropyl Acetate	-	-	2	-	3	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	4	4	-	4	2	4	1	1	1	-	-
Isopropyl Ether	1	-	1	-	1	-	-	1	-	-	1	-	-	1	4	1	-	-	-	-	4	-	4	2	-	4	4	4	-	1	1	-	-
Jet Fuel (JP3,JP4,JP5)	1	1	1	-	1	-	-	1	-	1	1	1	1	1	4	1	1	-	-	4	1	1	1	1	4	4	4	4	1	1	1	1	-
Kerosene	1	1	1	1	1	1	1	1	1	1	2	1	1	4	1	4	1	1	2	4	4	4	1	1	1	4	4	1	4	1	1	1	1
Ketones	1	1	1	-	2	1	1	1	-	1	1	4	4	4	1	4	2	1	-	4	4	1	4	4	-	4	4	3	3	3	1	-	-
Lacquers	1	1	1	-	1	-	-	1	3	3	3	-	-	4	-	3	1	1	-	-	1	-	4	4	-	4	-	4	1	1	1	-	-
Lacquer Thinners	-	-	1	-	-	1	1	-	3	-	-	-	3	-	1	4	-	1	-	-	2	-	-	4	-	4	1	-	-	-	1	-	-
Lactic Acid	1	1	2	3	3	1	1	4	-	4	4	3	1	2	1	1	2	3	-	2	1	1	2	2	-	1	2	1	1	1	1	-	-
Lard	2	1	1	1	1	-	-	1	-	1	3	-	1	-	-	-	1	1	3	-	1	-	1	1	3	2	-	4	1	1	1	-	-
Latex	-	1	1	-	1	-	-	1	-	-	-	-	-	-	1	1	1	-	2	-	-	1	1	-	3	1	-	1	-	1	-	1	-
Lead Acetate	2	1	1	-	4	1	1	3	-	-	4	-	1	2	1	1	1	1	-	2	1	-	4	2	-	4	1	1	1	1	1	-	-
Lead Sulfamate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1	2	3	1	4	3	1	-	-	-	-	-
Ligroin	-	-	1	-	-	-	-	1	-	-	-	-	-	-	4	1	-	-	-	4	-	1	1	-	2	1	4	1	-	1	-	1	-
Lime	-	1	1	-	3	1	-	1	-	1	-	-	1	-	-	1	4	-	3	-	-	-	1	1	3	2	4	-	1	1	1	-	-
Lubricants	-	1	1	-	1	1	1	2	-	-	-	-	1	-	1	-	1	1	2	-	1	1	1	1	3	4	-	4	1	1	1	-	-
Magnesium Carbonate	-	1	1	1	-	-	2	-	-	-	-	-	1	-	-	1	1	-	-	2	1	-	-	1	-	1	1	-	1	-	1	-	-
Magnesium Chloride	2	2	2	1	4	1	1	2	3	4	3	-	1	2	1	1	1	1	-	2	1	1	1	1	-	1	1	1	1	1	-	1	-
Magnesium Hydroxide	1	1	1	-	4	1	1	3	2	2	2	1	1	-	1	1	1	1	-	2	1	1	1	2	-	2	-	3	1	1	1	-	-

Ratings	
1	No Effect (Excellent)
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3	Some Effect (Poor)
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Chemical	Metals										Plastics										Elastomers					Other								
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C		
Magnesium Nitrate	-	1	1	1	-	1	1	-	-	-	-	-	1	-	1	1	1	1	-	2	1	-	1	1	-	1	-	-	1	-	1	-	-	-
Magnesium Oxide	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	1	1	-	1	-	1	-	-
Magnesium Sulphate	2	2	1	-	2	1	2	2	2	3	2	-	1	2	1	1	1	1	-	2	1	1	1	1	1	-	1	4	3	1	1	1	-	-
Maleic Acid	3	1	1	1	2	1	1	3	-	-	2	-	1	2	1	1	3	1	-	-	3	-	1	4	-	1	4	4	1	1	1	1	-	-
Maleic Anhydride	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	1	4	-	4	-	4	1	1	1	1	-	-
Malic Acid	2	1	1	-	3	-	1	4	-	-	4	-	1	-	1	-	-	1	-	-	-	-	2	-	-	1	-	1	-	-	1	-	1	-
Mash	-	1	1	-	-	-	-	1	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	1	-	1	-	-	1	1	1	1	-	-
Mayonnaise	1	1	1	-	4	-	-	4	-	4	4	-	-	-	1	1	1	1	2	-	1	-	1	1	-	-	-	-	1	1	1	1	-	-
Melamine	-	4	4	-	-	-	-	4	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	3	-	-	-	-	1	1	1	1	-	-
Mercuric Chloride (Dilute Solution)	4	4	4	4	4	1	2	4	4	4	4	-	1	1	1	1	1	1	-	2	1	-	1	1	-	1	1	1	1	1	1	1	1	-
Mercuric Cyanide	1	1	1	-	4	1	-	4	-	-	4	-	1	-	1	1	1	-	-	2	1	-	-	1	-	-	-	-	1	1	1	1	-	-
Mercury	1	1	1	1	3	3	1	4	4	1	1	-	1	-	1	1	1	1	-	2	1	-	1	1	-	1	1	1	1	1	1	1	1	-
Methanol (See Alcohol Methyl)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Acetate	1	-	1	-	1	-	1	1	-	-	2	-	-	-	1	-	1	-	4	-	-	-	4	4	4	2	2	4	-	1	1	1	-	-
Methyl Acrylate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	4	4	-	2	2	4	1	1	1	1	-	-
Methyl Acetone	1	-	1	-	1	-	-	1	-	1	1	-	-	-	1	4	1	-	-	-	-	-	4	4	-	4	-	-	3	-	1	-	-	-
Methyl Alcohol 10%	1	-	1	-	3	-	1	3	-	-	2	-	1	-	1	-	-	1	-	-	-	-	-	2	-	-	-	1	-	-	-	-	-	-
Methyl Bromide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	4	-	-	-	1	2	-	4	4	4	4	2	1	1	-	-
Methyl Butyl Ketone	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	4	2	-	-	-	-	-	4	4	3	4	1	4	2	1	1	-	-	
Methyl Cellosolve	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	3	2	-	-	-	1	-	4	4	-	4	2	4	3	1	1	-	-	

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Methyl Chloride	-	1	1	-	4	1	1	1	-	-	-	1	4	-	1	4	1	1	-	4	4	-	1	4	4	4	3	4	1	1	1	-
Methyl Dichloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	-	-	-	-	-	-	1	4	-	4	4	4	1	1	1	-
Methyl Ethyl Ketone	-	1	1	-	1	1	1	1	-	-	-	4	4	-	1	4	2	1	4	4	1	1	4	4	3	4	1	4	2	1	1	-
Methyl Isobutyl Ketone	-	-	1	-	-	1	1	-	-	-	-	4	4	-	1	4	2	1	4	-	3	1	4	4	3	4	3	4	2	1	1	-
Methyl Isopropyl Ketone	-	-	1	-	-	-	-	-	-	-	-	-	-	-	4	2	1	-	-	-	-	-	4	4	2	4	2	4	2	1	1	-
Methyl Methacrylate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	4	4	-	4	4	4	1	1	1	-
Methylamine	1	-	1	-	1	-	-	4	-	2	2	-	-	-	-	2	4	-	-	-	-	-	-	2	-	-	-	-	1	1	1	-
Methylene Chloride	1	1	1	-	1	1	1	1	3	-	2	4	4	-	1	4	1	4	-	4	4	-	4	4	-	4	4	4	1	1	1	-
Milk	1	1	1	1	1	-	-	3	3	4	4	-	1	-	-	1	1	1	2	2	1	-	1	1	2	1	1	1	1	1	1	1
Molasses	1	1	1	1	1	-	-	1	2	1	1	-	1	-	-	2	1	1	-	2	1	-	1	1	-	1	-	-	1	1	1	1
Mustard	1	1	1	1	2	-	-	2	-	3	2	-	1	-	-	2	2	1	2	-	1	-	1	2	3	3	-	-	1	1	1	-
Naphtha	1	1	1	1	1	1	1	2	-	2	2	1	1	3	1	4	1	1	3	4	1	1	1	2	4	4	4	4	1	1	1	-
Naphthalene	2	1	2	-	2	1	1	3	-	2	1	1	4	-	1	4	1	-	-	4	2	1	2	4	-	4	4	4	1	1	1	-
Nickel Chloride	-	1	2	-	4	1	1	4	-	4	-	1	1	2	1	1	2	1	-	2	1	-	1	1	-	1	1	1	1	1	1	-
Nickel Sulphate	2	1	2	-	4	1	2	3	3	4	4	1	1	1	1	1	2	1	-	2	1	-	1	1	-	1	1	3	1	1	1	-
Nitric Acid (10% Solution)	1	1	1	1	4	1	1	4	-	4	4	1	1	2	1	1	4	4	3	2	1	4	1	4	-	4	2	4	1	3	2	4
Nitric Acid (20% Solution)	-	1	1	1	4	1	1	4	-	4	-	2	1	2	1	1	4	4	4	2	1	3	1	4	-	4	4	4	2	4	3	4
Nitric Acid (50% Solution)	-	1	1	1	4	1	1	4	-	4	-	2	1	2	1	1	4	4	4	3	4	3	1	4	-	4	4	4	4	4	1	-
Nitric Acid (Concentrated Solution)	-	4	2	1	2	1	2	4	4	4	-	-	4	3	1	4	4	4	4	4	4	3	2	4	-	4	4	4	4	1	3	
Nitrobenzene	2	1	2	-	3	1	2	4	-	2	2	4	4	4	1	4	2	3	4	4	3	2	4	4	4	4	4	2	1	1	-	

Ratings
 1 - No Effect (Excellent)
 2 - Minor Effect (Good)
 3 - Some Effect (Poor)
 4 - Strong Effect (Not Recommended)
 - No Available Data



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Chemical	Metals										Plastics										Elastomers					Other							
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Aniline Oil	-	1	1	-	3	1	4	1	-	1	-	-	4	-	1	4	4	3	4	-	1	-	1	4	-	4	2	4	1	1	1	-	
Anise Oil	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	4	-	-	1	1	1	-	
Bay Oil	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	4	-	-	1	1	1	-	
Bone Oil	-	1	1	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	1	-	4	-	-	1	1	1	-	
Castor Oil	-	1	1	-	1	-	-	1	-	1	-	-	1	-	-	-	-	-	-	-	-	-	1	1	-	1	2	1	1	1	1	1	
Cinnamon Oil	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	1	-	4	-	-	4	-	-	1	1	1	-	
Citric Oils	-	1	1	-	-	-	-	4	-	4	-	-	-	-	-	1	1	-	-	-	1	-	1	1	-	4	-	-	1	1	1	-	
Clove Oil	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	2	-	-	-	1	-	-	-	-	1	1	1	-	
Coconut Oil	-	1	1	-	2	-	-	1	-	1	-	-	-	-	-	1	1	-	-	1	-	1	1	-	1	1	4	1	1	1	-		
Cod Liver Oil	-	1	1	-	2	-	-	-	-	-	-	-	-	-	-	1	1	3	-	1	-	1	1	-	2	1	4	1	1	1	-		
Corn Oil	-	1	1	1	2	-	-	2	-	1	-	-	-	-	-	1	1	3	-	1	-	1	1	-	4	3	4	1	1	1	-		
Cotton Seed Oil	2	1	1	1	2	-	-	2	-	1	3	-	1	-	1	1	3	-	1	1	1	1	1	1	1	4	3	4	1	1	1	-	
Creosote Oil	-	1	1	-	1	-	-	-	-	-	-	-	-	-	-	4	-	-	-	4	-	4	-	1	1	-	2	4	4	1	1	1	-
Diesel Fuel (2D,3D,4D,5D)	-	1	1	-	1	-	-	1	-	-	-	-	-	-	4	1	1	-	-	1	1	1	1	1	1	-	4	4	4	1	1	1	-
Fuel (1,2,3,5A,5B,6) Oil	-	1	1	-	1	1	1	1	-	-	-	-	1	-	1	4	1	-	-	-	2	-	1	2	-	4	4	4	1	1	1	-	
Ginger Oil	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	1	-	1	-	-	1	1	1	-	
Hydraulic (See Hydraulic) Oil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lemon Oil	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	4	-	1	-	4	-	-	-	1	1	1	-		
Linseed Oil	-	1	1	1	1	-	-	1	-	1	-	-	1	2	-	1	1	3	-	1	-	1	1	-	4	4	4	1	1	1	1		
Mineral Oil	1	1	1	1	1	-	-	1	-	1	2	-	1	-	2	1	1	-	-	2	1	1	1	1	-	2	4	4	1	1	1	1	

Ratings	
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Olive Oil	1	1	1	-	1	-	-	2	-	1	2	-	1	-	1	-	1	1	-	-	1	-	1	1	3	2	-	4	1	1	1	-
Orange Oil	-	1	1	-	-	-	-	-	-	-	-	-	-	1	-	1	1	-	-	-	1	-	1	1	-	4	-	-	1	1	1	-
Palm Oil	-	1	1	-	1	-	-	2	-	-	-	-	1	-	-	1	1	-	-	-	-	-	1	1	-	4	-	-	1	1	1	-
Peanut Oil	-	1	1	-	1	-	-	1	-	1	-	-	1	-	-	1	-	-	-	-	4	-	1	1	-	4	-	4	1	1	1	-
Peppermint Oil	-	1	1	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	4	-	1	4	-	4	-	-	1	1	1	-
Pine Oil	1	1	1	-	1	-	-	4	-	3	2	-	1	-	1	-	1	-	-	-	-	-	1	1	-	4	-	4	1	1	1	-
Rape Seed Oil	-	1	1	-	-	-	-	1	-	-	-	-	1	-	-	1	-	-	-	-	-	-	1	2	-	4	-	4	1	1	1	-
Rosin Oil	-	1	1	-	1	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	-	1	1	-	-	-	-	1	1	1	-
Sesame Seed Oil	-	1	1	-	1	-	-	1	-	1	-	-	1	-	-	1	-	-	-	-	-	-	1	1	-	4	-	-	1	1	1	-
Silicone Oil	-	1	1	-	-	-	-	1	-	1	-	-	-	-	1	1	1	-	-	-	1	-	1	1	-	1	-	1	1	1	1	1
Soybean Oil	-	1	1	-	1	-	-	2	-	1	-	-	1	-	-	1	1	-	-	-	1	-	1	1	-	4	-	4	1	1	1	-
Sperm Oil	-	1	1	-	-	-	-	1	-	-	-	-	1	-	-	1	-	-	-	-	-	-	1	1	-	4	-	-	1	1	1	-
Tanning Oil	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	1	-	4	-	-	1	1	1	-
Turbine Oil	-	1	1	-	1	-	-	1	-	1	-	-	1	-	-	1	-	3	-	-	-	-	1	1	-	4	-	4	1	1	1	-
Oleic Acid Oil	2	1	1	2	2	-	2	3	3	3	-	1	3	1	3	2	1	2	2	4	3	-	4	2	4	4	4	4	1	1	1	-
Oleum 25% Oil	-	-	-	-	-	-	1	-	-	-	2	4	-	1	4	-	-	-	-	-	-	-	1	4	4	4	4	-	4	-	1	-
Oleum Oil	2	-	1	-	2	-	-	3	3	-	2	4	4	-	1	-	4	-	-	-	4	-	1	3	4	4	4	4	1	-	1	-
Oxalic Acid (cold) Oil	3	1	2	1	3	3	2	2	3	4	4	-	1	2	1	3	3	4	-	1	1	-	1	2	3	2	1	3	1	1	1	-
Paraffin Oil	1	1	1	1	1	-	-	1	-	2	2	1	1	-	1	2	1	1	2	-	1	-	1	1	-	-	-	-	1	1	1	-
Pentane	1	3	3	-	1	-	2	1	-	2	2	-	-	1	4	1	1	4	-	-	-	-	1	1	-	2	4	4	1	1	1	-

Ratings
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Perchloroethylene	2	1	1	-	1	-	-	3	-	2	2	1	-	-	1	4	1	-	4	-	4	1	1	3	4	4	4	4	1	1	1	1	-
Petrolatum	1	-	1	-	2	-	-	2	-	3	3	-	-	-	1	4	1	1	2	-	-	-	1	1	-	2	1	4	1	1	1	1	-
Phenol 10%	2	1	1	-	1	-	2	3	-	2	4	-	1	3	1	-	-	4	-	-	-	1	2	4	-	3	4	3	3	-	-	-	-
Phenol (Carbolic Acid)	2	1	1	1	2	3	1	2	4	4	4	1	1	3	1	3	4	4	-	4	2	1	1	1	4	-	4	4	4	2	1	4	1
Phosphoric Acid (to 40% Solution)	-	2	1	1	4	1	1	4	4	4	-	-	1	2	1	1	4	4	3	2	1	1	1	4	-	4	2	3	1	2	3	4	
Phosphoric Acid (40%-100% Solution)	-	3	2	2	4	2	1	4	4	4	-	-	1	2	1	1	4	4	4	3	1	1	1	4	-	4	2	3	3	2	4	4	
Phosphoric Acid (Crude)	-	4	3	3	4	3	1	4	4	4	4	1	-	-	1	-	4	4	4	3	-	1	1	4	-	4	2	-	1	3	4	-	
Phosphoric Anhydride (Dry or Moist)	-	1	1	-	-	-	-	-	4	-	-	-	4	4	1	-	-	-	-	-	-	-	4	4	-	4	-	1	-	1	-	-	
Phosphoric Anhydride (Molten)	-	1	1	-	4	-	-	4	4	-	-	-	4	-	1	-	-	1	-	4	-	-	4	3	-	4	-	4	1	-	-	-	
Photographic (Developer)	-	3	1	3	3	1	1	-	-	4	-	-	1	-	-	1	3	-	-	2	1	-	1	1	-	1	-	-	1	1	1	-	-
Phthalic Anhydride	2	1	2	-	2	-	1	2	-	3	3	-	-	-	1	-	-	1	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-
Picric Acid	2	1	1	-	3	-	1	4	4	4	4	-	1	1	1	-	-	1	-	1	-	-	1	1	4	1	-	1	1	-	-	-	
Plating Solution Antimony Plating 130°F	-	-	1	-	-	1	1	-	-	-	-	-	1	-	1	1	-	4	-	-	1	-	1	1	4	1	-	-	2	-	1	-	
Plating Solutions Arsenic Plating 110°F	-	-	1	-	-	1	1	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	4	1	-	-	2	-	3	-	
Brass Plating Regular Brass Bath 100°F	-	-	1	-	-	1	1	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	4	1	-	-	2	-	3	-	
Brass Plating High Speed Brass Bath 110°F	-	-	1	-	-	1	1	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	4	1	-	-	2	-	4	-	
Bronze Plating Copper-Cadmium Bronze Bath R.T.	-	-	1	-	-	1	1	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	4	1	-	-	2	-	3	-	
Bronze Plating Copper-Tin Bronze Bath 160°F	-	-	1	-	-	1	1	-	-	-	-	-	4	-	1	1	-	1	-	-	1	-	1	1	4	2	-	-	3	-	4	-	
Bronze Plating Copper-Zinc Bronze Bath 100°F	-	-	1	-	-	1	1	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	4	1	-	-	2	-	3	-	
Cadmium Plating Cyanide Bath 90°F	-	-	1	-	-	1	1	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	4	1	-	-	2	-	3	-	

Ratings	
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Cadmium Plating Fluoborate Bath 100°F	-	-	1	-	-	4	1	-	-	-	-	-	1	-	1	1	-	4	-	-	1	-	1	2	-	3	-	-	2	-	4	-
Chromium Plating Chromic-Sulphuric Bath 130°F	-	-	3	-	-	1	1	-	-	-	-	-	1	-	1	4	-	4	-	-	1	-	3	4	-	4	-	-	4	-	1	-
Chromium Plating Fluosilicate Bath 95°F	-	-	3	-	-	3	1	-	-	-	-	-	1	-	1	4	-	4	-	-	1	-	3	4	-	4	-	4	-	2	-	
Chromium Plating Fluoride Bath 130°F	-	-	4	-	-	3	1	-	-	-	-	-	1	-	1	4	-	4	-	-	1	-	3	4	-	4	-	-	4	-	2	-
Chromium Plating Black Chrome Bath 115°F	-	-	3	-	-	1	1	-	-	-	-	-	1	-	1	4	-	4	-	-	1	-	3	4	-	4	-	-	4	-	1	-
Chromium Plating Barrel Chrome Bath 95°F	-	-	4	-	-	3	1	-	-	-	-	-	1	-	1	4	-	4	-	-	1	-	3	4	-	4	-	-	4	-	1	-
Copper Plating (Cyanide) Copper Strike Bath 120°F	-	-	-	-	1	1	1	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	2	-	-	1	-	-	-	-	3	-
Copper Plating (Cyanide) Rochelle Salt Bath 150°F	-	-	1	-	-	1	1	-	-	-	-	-	4	-	1	1	-	1	-	-	1	-	1	1	-	2	-	-	3	-	4	-
Copper Plating (Cyanide) High Speed Bath 180°F	-	-	1	-	-	1	1	-	-	-	-	-	4	-	1	1	-	1	-	-	1	-	1	1	-	2	-	-	3	-	4	-
Copper Plating (Acid) Copper Sulphate Bath R.T.	-	-	4	-	-	1	1	-	-	-	-	-	1	-	1	1	-	4	-	-	1	-	1	1	-	1	-	-	4	-	4	-
Copper Plating (Acid) Copper Fluoborate Bath 120°F	-	-	4	-	-	4	1	-	-	-	-	-	1	-	1	1	-	4	-	-	1	-	1	2	-	3	-	-	4	-	4	-
Copper (Misc.) Copper Pyrophosphate 140°F	-	-	1	-	-	1	1	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	-	1	-	-	2	-	2	-
Copper (Misc.) Copper (Electrolysis) 140°F	-	-	-	-	-	-	4	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	4	-	4	-	-	2	-	4	-
Gold Plating Cyanide 150°F	-	-	1	-	-	1	1	3	-	-	-	-	4	-	1	1	-	1	-	-	1	-	1	1	-	1	-	-	4	-	2	-
Gold Plating Neutral 75°F	-	-	3	-	-	1	1	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	-	1	-	-	1	-	1	-
Gold Plating Acid 75°F	-	-	3	-	-	1	1	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	-	1	-	-	1	-	1	-

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Indium Sulfamate Plating R.T.	-	-	3	-	-	1	1	-	-	-	-	-	1	-	1	1	-	4	-	-	1	-	1	1	-	1	-	-	1	-	1	-	-
Iron Plating Ferrous Chloride Bath 190°F	-	-	4	-	-	1	4	-	-	-	-	-	4	-	1	1	-	4	-	-	3	-	1	2	-	4	-	-	4	-	1	-	-
Iron Plating Ferrous Sulphate Bath 150°F	-	-	3	-	-	1	1	-	-	-	-	-	4	-	1	1	-	4	-	-	1	-	1	1	-	2	-	-	4	-	1	-	-
Iron Plating Ferrous Am. Sulphate Bath 150°F	-	-	3	-	-	1	1	-	-	-	-	-	4	-	1	1	-	4	-	-	1	-	1	1	-	2	-	-	4	-	1	-	-
Iron Plating Sulphate-Chloride Bath 160°F	-	-	4	-	-	1	4	-	-	-	-	-	4	-	1	1	-	4	-	-	1	-	1	2	-	3	-	-	4	-	1	-	-
Iron Plating Fluoborate Bath 145°F	-	-	4	-	-	4	2	-	-	-	-	-	4	-	1	1	-	4	-	-	1	-	1	2	-	3	-	-	4	-	4	-	-
Iron Plating Sulfamate 140°F	-	-	4	-	-	1	2	-	-	-	-	-	1	-	1	1	-	4	-	-	1	-	1	1	-	1	-	-	1	-	1	-	-
Lead Fluoborate Plating	-	-	3	-	-	4	1	-	-	-	-	-	1	-	1	1	-	4	-	-	1	-	1	2	-	3	-	-	1	-	4	-	-
Nickel Plating Watts Type 115-160°F	-	-	3	-	-	1	1	-	-	-	-	-	4	-	1	1	-	1	-	-	1	-	1	1	-	1	-	-	4	-	1	-	-
Nickel Plating High Chloride 130-160°F	-	-	3	-	-	1	1	-	-	-	-	-	4	-	1	1	-	4	-	-	1	-	1	1	-	2	-	-	4	-	1	-	-
Nickel Plating Fluoborate 100-170°F	-	-	3	-	-	4	1	4	-	-	-	-	4	-	1	1	-	4	-	-	1	-	1	2	-	3	-	-	4	-	4	-	-
Nickel Plating Sulfamate 100-140°F	-	-	3	-	-	1	1	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	-	1	-	-	1	-	1	-	-
Nickel Plating Electrolysis 200°F	-	-	-	-	-	-	-	-	-	-	-	-	4	-	1	4	-	4	-	-	4	-	1	4	-	4	-	-	2	-	1	-	-
Rhodium Plating 120°F	-	-	4	-	-	4	4	-	-	-	-	-	1	-	1	1	4	4	-	-	1	-	1	1	-	2	-	-	1	-	1	-	-
Silver Plating 80-120°F	-	-	1	-	-	1	1	-	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	-	1	-	-	1	-	2	-	-
Tin-Fluoborate Plating 100°F	-	-	3	-	-	4	1	-	-	-	-	-	1	-	1	1	-	4	-	-	1	-	1	2	-	3	-	-	1	-	4	-	-
Tin-Lead Plating 100°F	-	-	3	-	-	4	1	-	-	-	-	-	1	-	1	1	-	4	-	-	1	-	1	2	-	3	-	-	1	-	4	-	-
Zinc Plating	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc Plating Acid Chloride 140°F	-	-	4	-	-	1	4	-	-	-	-	-	1	-	1	1	-	4	-	-	1	-	1	1	-	1	-	-	1	-	1	-	-
Zinc Plating Acid Sulphate Bath 150°F	-	-	3	-	-	1	1	-	-	-	-	-	4	-	1	1	-	4	-	-	1	-	1	1	-	2	-	-	4	-	1	-	-

Ratings
 1 - No Effect (Excellent)
 2 - Minor Effect (Good)
 3 - Some Effect (Poor)
 4 - Strong Effect (Not Recommended)
 - No Available Data



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Chemical	Metals										Plastics										Elastomers					Other							
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Zinc Plating Acid Fluoborate Bath R.T.	-	-	-	3	-	4	-	-	-	-	-	1	-	1	1	-	4	-	-	1	-	1	2	-	3	-	-	1	-	4	-		
Zinc Plating Alkaline Cyanide Bath R.T.	-	-	-	1	-	1	1	-	-	-	-	1	-	1	1	-	1	-	-	1	-	1	1	-	1	-	-	1	-	4	-		
Potash	-	1	-	1	3	-	1	3	-	2	-	1	2	-	1	2	1	-	2	1	1	-	1	1	-	2	-	2	1	1	1	1	
Potassium Bicarbonate	-	1	-	2	3	1	2	2	-	4	-	1	1	-	1	1	3	1	3	2	1	1	1	1	1	-	1	-	2	1	1	1	-
Potassium Bromide	1	1	-	2	3	1	2	3	-	4	4	1	1	-	1	1	1	3	-	2	1	3	1	1	-	1	1	2	1	1	1	-	
Potassium Carbonate	2	1	-	1	3	1	1	3	-	2	2	1	1	2	1	1	2	1	-	2	1	1	1	1	2	-	1	-	2	1	1	1	1
Potassium Chlorate	2	1	1	1	2	1	2	2	-	2	2	1	1	2	1	1	2	4	-	2	1	1	1	1	1	-	1	-	2	1	1	1	-
Potassium Chloride	3	1	1	2	2	1	1	3	3	2	2	1	1	1	1	1	2	3	2	2	1	1	1	1	1	-	1	1	1	1	1	1	-
Potassium Chromate	-	-	2	2	1	-	2	1	-	1	-	-	1	-	-	1	3	-	-	2	-	1	1	1	1	-	1	-	2	3	1	4	-
Potassium Cyanide Solutions	2	1	2	1	4	1	1	4	-	2	2	1	1	-	1	1	3	1	-	2	1	1	2	1	-	1	1	1	1	3	1	-	
Potassium Dichromate	2	1	1	1	1	1	2	3	-	2	3	1	1	-	1	1	3	4	-	2	1	1	2	1	-	1	1	1	1	1	1	-	
Potassium Ferrocyanide	2	1	-	1	3	-	2	1	-	-	3	-	1	-	1	-	1	-	1	-	-	-	-	4	-	-	-	1	1	-	-	-	
Potassium Hydroxide (50%)	1	2	2	2	4	3	1	4	4	3	1	4	1	2	1	1	4	1	3	2	1	1	4	2	3	1	1	3	1	-	4	1	
Potassium Nitrate	2	1	2	1	2	1	2	2	-	-	2	1	1	3	1	1	2	3	-	2	1	3	2	1	-	1	1	1	1	1	1	-	
Potassium Permanganate	2	1	2	2	2	2	2	2	-	2	2	1	1	-	1	1	3	4	3	2	2	1	2	1	-	1	-	2	2	1	1	-	
Potassium Sulphate	2	1	2	2	1	1	1	2	2	2	2	1	1	1	1	1	2	3	-	2	1	1	1	1	1	3	1	1	3	1	1	-	
Potassium Sulphide	1	1	-	1	2	-	2	2	-	2	2	-	1	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Propane (Liquified)	1	1	-	1	1	-	-	1	1	-	2	-	4	-	1	4	1	1	-	4	-	1	1	4	2	4	4	4	1	1	1	-	
Propylene Glycol	2	2	-	1	1	-	-	2	-	2	2	-	-	-	1	-	2	2	2	2	-	-	1	1	-	3	-	-	1	1	1	-	
Pyridine	-	3	-	2	2	-	-	-	-	2	1	4	-	4	1	4	4	-	-	3	2	1	4	4	-	4	2	4	1	1	1	-	

Ratings	
1	No Effect (Excellent)
2	Minor Effect (Good)
3	Some Effect (Poor)
4	Strong Effect (Not Recommended)
-	No Available Data

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Chemical	Metals										Plastics										Elastomers					Other							
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Pyrogallic Acid	2	1	1	1	2	-	1	2	-	2	2	-	1	-	1	-	4	1	-	-	-	-	1	1	-	-	-	-	-	1	1	1	-
Rosins	1	1	1	1	1	-	2	1	3	-	3	-	-	-	1	-	2	1	-	-	1	-	-	1	1	-	-	-	-	1	1	1	-
Rum	-	1	-	1	-	-	-	-	-	-	-	-	1	-	-	1	1	1	-	-	1	-	1	1	-	1	-	-	1	1	1	-	
Rust Inhibitors	-	1	-	1	-	-	-	1	-	1	-	-	-	-	-	-	1	-	-	-	1	-	1	1	-	3	-	-	-	1	1	1	-
Salad Dressing	-	1	-	1	2	-	-	2	-	4	-	-	1	-	-	1	1	1	-	-	1	-	1	1	-	1	1	-	-	1	1	1	-
Sea Water	1	1	3	1	3	1	-	3	-	-	4	-	1	-	1	1	1	1	-	2	1	-	1	1	1	2	2	1	1	1	1	1	1
Shellac (Bleached)	1	1	-	1	1	-	-	1	2	2	1	-	-	-	1	-	1	1	-	-	1	-	-	1	-	-	-	-	1	-	1	-	
Shellac (Orange)	1	1	-	1	1	-	-	1	3	3	1	-	-	-	1	-	1	1	-	-	1	-	-	1	-	-	-	-	1	-	1	-	
Silicone	-	2	-	1	2	-	-	1	-	-	-	-	-	-	-	1	1	1	-	-	1	-	1	1	2	1	1	1	1	1	1	-	
Silver Bromide	-	3	3	2	4	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-
Silver Nitrate	2	1	2	1	4	1	1	4	-	4	4	1	1	2	1	1	3	1	-	2	1	-	1	3	-	1	3	1	1	1	1	1	
Soap Solutions	1	1	1	1	3	1	2	2	-	2	1	-	2	2	1	1	1	1	-	2	1	1	1	1	1	2	2	-	3	1	1	1	
Soda Ash (See Sodium Carbonate)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sodium Acetate	2	1	1	2	2	1	-	2	-	3	3	1	1	-	1	1	2	1	-	2	1	-	4	4	-	3	-	1	1	1	1	-	
Sodium Aluminate	2	-	-	1	3	2	2	2	-	-	3	-	-	-	1	1	2	1	-	-	1	-	1	1	1	-	1	1	2	1	1	-	
Sodium Bicarbonate	2	1	1	1	1	1	-	2	1	3	3	1	1	2	1	1	2	1	2	2	1	1	1	1	1	3	1	1	1	1	1	1	
Sodium Bisulphate	1	1	-	1	4	2	2	3	3	4	4	1	1	2	1	1	2	3	3	2	1	1	2	1	3	1	-	1	1	1	1	-	
Sodium Bisulphite	-	1	-	1	1	2	3	-	4	-	1	1	2	1	1	2	4	2	2	2	1	1	1	1	3	1	-	1	1	1	1	-	
Sodium Borate	2	1	-	1	3	-	1	1	-	3	3	-	3	-	1	-	1	-	1	-	1	-	1	-	2	1	-	-	-	-	-	-	
Sodium Carbonate	2	1	2	2	3	1	1	2	2	2	2	1	1	2	1	1	1	1	3	2	2	1	1	1	1	-	1	1	1	2	1	-	

Ratings
 1 - No Effect (Excellent)
 2 - Minor Effect (Good)
 3 - Some Effect (Poor)
 4 - Strong Effect (Not Recommended)
 - No Available Data



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Chemical	Metals										Plastics										Elastomers					Other							
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Sodium Chlorate	2	1	-	1	2	1	2	2	-	-	3	1	1	2	1	1	4	1	-	2	1	1	1	4	-	1	-	1	1	1	1	-	
Sodium Chloride	2	1	3	2	3	1	1	2	3	2	3	1	1	2	1	1	1	1	2	2	1	1	1	1	1	3	1	1	2	1	1	1	1
Sodium Chromate	1	1	1	-	4	-	2	2	-	2	2	-	-	-	1	1	4	1	-	-	1	1	2	1	-	1	-	-	3	1	2	-	
Sodium Cyanide	2	1	-	1	4	1	-	4	4	2	2	1	1	-	1	1	4	3	-	2	1	1	1	1	1	4	1	1	1	1	1	-	
Sodium Fluoride	2	3	-	3	3	1	1	3	-	4	4	-	4	4	1	-	-	1	-	3	-	-	2	4	-	4	-	4	1	-	-	-	
Sodium Hydrosulphite	-	-	-	-	1	-	1	3	-	-	-	-	3	1	1	-	-	1	-	-	-	-	1	-	-	1	-	1	-	-	1	-	
Sodium Hydroxide (20%)	-	1	1	1	4	1	1	3	4	1	-	1	1	2	1	1	4	3	3	2	1	1	1	1	1	4	2	1	1	1	3	4	1
Sodium Hydroxide (50% Solution)	-	1	2	-	4	1	1	3	4	2	-	4	1	2	1	1	4	3	3	3	1	2	4	4	4	3	-	1	1	3	4	1	
Sodium Hydroxide (80% Solution)	-	1	4	-	4	1	2	3	4	3	-	-	1	2	1	1	4	3	3	3	1	2	2	4	4	3	-	2	1	3	4	1	
Sodium Hypochlorite/Bleach (to 20%)	-	3	3	3	3	1	1	4	4	4	-	-	1	2	1	1	4	1	-	2	3	3	1	3	4	4	2	3	2	4	1	2	
Sodium Hypochlorite/Bleach	4	-	4	-	4	1	1	4	-	4	4	1	1	-	1	-	1	-	-	3	3	2	2	3	1	-	-	1	-	4	-		
Sodium Hyposulphate	-	1	1	-	4	-	-	4	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	3	-	3	3	-	-	-	
Sodium Metaphosphate	1	-	1	-	1	-	-	3	3	2	2	-	-	-	1	-	2	1	-	-	4	-	1	1	-	2	1	1	1	1	1	-	
Sodium Metasilicate	1	-	1	-	2	-	-	2	-	3	3	-	-	-	1	-	4	-	-	-	-	-	1	1	4	1	-	-	1	1	-	-	
Sodium Nitrate	2	1	1	1	1	1	2	2	3	1	2	1	1	2	1	1	2	1	-	2	1	-	4	3	4	2	1	3	1	1	1	1	
Sodium Perborate	2	-	3	-	2	-	-	3	3	2	2	-	-	-	1	1	2	1	-	-	1	-	1	2	4	2	1	3	1	1	1	-	
Sodium Peroxide	2	1	1	-	3	-	2	3	3	4	3	-	1	-	1	-	4	4	-	-	-	-	1	3	4	2	1	3	1	1	1	-	
Sodium Polyphosphate (Mono, Di , Tribasic)	-	1	1	-	4	1	1	3	-	-	-	-	-	-	1	1	2	-	-	-	-	-	1	1	-	4	1	1	1	1	1	-	
Sodium Silicate	2	1	2	1	3	1	2	3	3	-	2	-	1	2	1	1	3	1	-	-	1	-	1	1	-	1	1	1	1	1	1	-	
Sodium Sulphate	2	1	1	3	2	1	2	2	2	1	2	-	1	-	1	1	2	1	-	2	1	1	1	1	-	1	1	3	1	1	1	-	

Ratings
 1 - No Effect (Excellent)
 2 - Minor Effect (Good)
 3 - Some Effect (Poor)
 4 - Strong Effect (Not Recommended)
 - No Available Data



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Chemical	Metals											Plastics										Elastomers					Other						
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Sodium Sulphide	2	1	2	-	4	1	2	4	4	1	2	-	1	2	1	1	2	1	-	2	1	1	1	3	-	1	1	3	1	1	1	-	
Sodium Sulphite	-	3	3	-	3	1	1	3	-	1	-	-	1	1	1	-	-	4	-	1	-	-	1	1	-	1	-	1	1	1	1	-	
Sodium Tetraborate	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	1	2	-	-	-	-	-	1	1	-	-	-	-	1	1	1	-	
Sodium Thiosulphate ("Hypo")	1	1	1	-	2	1	-	4	4	3	2	-	1	-	1	1	3	1	-	-	1	1	1	2	-	1	1	3	1	1	1	-	
Sorghum	-	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1	1	-	-	-	-	1	1	-	1	-	-	1	1	1	-	
Soy Sauce	-	1	1	-	1	-	-	1	-	4	-	-	-	-	-	1	1	1	-	-	-	-	1	1	-	1	-	4	1	1	1	-	
Stannic Chloride	4	4	4	-	4	1	2	4	-	4	4	1	1	-	1	1	3	1	-	2	1	-	1	1	4	1	1	1	1	-	1	-	
Stannic Fluoborate	-	-	1	-	-	-	-	-	-	4	-	-	-	-	-	1	3	-	-	-	-	-	1	1	-	1	-	-	1	-	1	-	
Stannous Chloride	4	4	3	-	4	1	1	4	-	4	4	-	1	1	1	-	-	4	-	1	-	-	2	3	4	4	-	1	1	-	-	-	
Starch	2	1	1	-	1	-	-	2	-	3	3	-	1	-	1	1	1	1	-	2	-	-	1	1	-	1	-	-	1	1	1	-	
Stearic Acid	2	1	1	1	2	1	1	3	3	3	3	1	1	2	1	1	1	1	-	2	4	-	1	2	4	2	2	3	1	1	1	1	
Stoddard Solvent	1	1	1	1	1	1	1	1	1	2	2	1	1	4	1	4	1	1	2	4	4	1	1	2	4	4	4	4	4	1	1	1	-
Styrene	1	1	1	-	1	-	-	1	-	-	1	-	-	-	1	1	1	-	-	-	-	-	2	4	4	4	4	4	4	1	1	1	-
Sugar (Liquids)	1	1	1	1	1	-	1	1	-	2	2	-	-	-	1	1	1	1	2	-	1	-	1	1	-	2	-	1	1	1	1	1	
Sulphate Liquors	-	3	3	-	2	-	1	3	-	-	-	-	-	-	-	-	4	-	-	-	1	-	-	-	-	3	-	-	1	1	1	-	
Sulphur Chloride	-	4	4	4	4	-	-	3	4	-	-	-	1	3	1	1	4	1	-	1	4	-	1	4	-	4	4	4	3	1	1	3	-
Sulphur Dioxide	-	1	1	3	1	1	2	2	-	-	2	4	2	1	4	2	4	4	4	3	4	1	4	4	3	2	1	4	1	1	1	-	
Sulphur Dioxide (Dry)	1	1	1	-	1	-	1	1	3	1	2	-	4	-	1	-	1	-	4	-	4	-	4	-	4	-	4	4	1	1	1	-	
Sulphur Trioxide (Dry)	1	1	3	-	1	-	-	2	-	2	2	-	1	2	1	4	4	4	-	-	-	-	1	4	-	4	2	3	1	2	1	-	
Sulphuric Acid (to 10%)	-	4	3	3	3	1	1	4	4	4	-	1	1	2	1	1	4	4	2	2	1	1	1	3	-	4	4	3	1	1	1	-	

Ratings
 1 - No Effect (Excellent)
 2 - Minor Effect (Good)
 3 - Some Effect (Poor)
 4 - Strong Effect (Not Recommended)
 - No Available Data



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Chemical	Metals										Plastics										Elastomers					Other						
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C
Sulphuric Acid (10%-75%)	-	4	4	4	4	3	2	4	4	4	-	1	1	2	1	2	4	4	2	3	1	2	1	4	-	4	4	4	2	1	1	3
Sulphuric Acid 75%-100%	-	-	4	-	-	4	2	-	4	-	-	1	2	-	1	1	-	4	-	-	2	3	1	4	-	4	-	-	4	-	1	-
Sulphurous Acid	3	3	2	3	3	1	2	4	-	4	4	-	1	2	1	1	4	4	-	2	1	-	1	3	4	2	2	3	1	2	1	-
Sulphuryl Chloride	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-
Syrup	-	1	1	1	1	-	-	4	-	-	-	-	1	-	-	1	1	1	2	-	1	-	1	1	-	2	-	1	1	1	1	1
Tallow	-	1	1	-	1	-	-	-	-	-	-	-	-	-	1	1	1	-	3	-	-	-	1	1	-	-	-	-	1	1	1	-
Tannic Acid	2	1	1	1	3	1	2	2	-	3	3	1	1	2	1	1	2	4	-	2	1	-	1	4	3	1	1	1	1	1	1	1
Tanning Liquors	-	1	1	-	3	1	1	1	-	-	-	-	1	2	1	-	2	-	-	-	1	-	1	3	-	-	-	-	1	1	1	-
Tartaric Acid	2	1	2	2	3	1	2	1	3	4	4	1	1	2	1	1	2	1	-	2	1	-	1	4	3	1	-	1	1	1	1	-
Tetrachlorethane	-	-	1	-	-	1	1	-	-	-	-	-	4	-	1	4	1	1	-	-	1	-	1	4	-	-	4	4	1	1	1	-
Tetrahydrofuran	-	1	1	-	4	-	-	4	-	4	1	4	4	-	1	4	1	1	-	4	3	1	4	4	-	4	2	4	1	1	1	-
Toluene, Toluol	1	1	1	-	1	1	1	1	1	1	1	1	4	4	1	4	1	1	4	4	4	1	3	4	4	4	4	4	1	1	1	1
Tomato Juice	1	1	1	-	1	-	-	3	-	3	3	-	-	-	1	1	2	1	2	-	1	1	1	1	-	1	-	1	1	1	-	
Trichlorethane	-	3	1	-	3	1	1	3	-	3	-	-	-	-	1	4	1	-	-	-	-	-	1	4	4	4	4	4	1	1	1	-
Trichloroethylene	2	1	1	-	2	1	1	2	1	3	2	1	4	-	1	4	1	3	4	4	4	3	1	4	4	4	4	4	1	1	1	3
Trichloropropane	-	-	1	-	-	-	-	1	-	-	-	-	-	-	4	1	-	4	-	-	-	-	1	1	-	1	-	-	1	1	1	-
Tricresylphosphate	-	-	1	-	-	2	1	1	-	-	-	-	4	-	1	3	3	-	-	-	-	-	2	4	-	4	1	-	1	1	1	-
Triethylamine	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	2	4	-	-	-	-	-	1	1	4	2	-	-	1	1	1	-
Turpentine	2	1	1	-	3	-	1	2	3	2	2	1	1	2	1	4	1	1	-	4	2	1	1	4	-	4	4	4	1	1	1	-
Urine	-	1	1	-	2	-	-	3	-	2	-	-	1	-	-	1	1	1	-	2	1	-	1	1	-	4	1	-	1	1	1	-

Ratings
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Chemical	Metals										Plastics										Elastomers					Other							
	302 Stainless Steel	304 Stainless Steel	316 Stainless Steel	440 Stainless Steel	Aluminium	Titanium	Hastelloy C	Cast Bronze	Brass	Cast Iron	Carbon Steel	Kynar	PVC 0°C to 60°C	Tygon -50°C to 70°C	Teflon -29°C to 107°C	Noryl -40°C to 130°C	Polyacetal -28°C to 82°C	Nylon -18°C to 93°C	ABS -20°C to 60°C	Polyethylene to 60°C	Polypropylene -20°C to 90°C	Ryton 0°C to 60°C	Viton -40°C to 176°C	Nitrile (Buna N) -12°C to 82°C	Silicon -55°C to 200°C	Neoprene -18°C to 83°C	EPDM to 90°C	Natural Rubber -55°C to 55°C	Epoxy	Carbon	Ceramic	Ceramagnet A to 22°C	
Vegetable Juice	-	1	1	-	1	-	-	3	-	4	-	-	-	-	1	1	1	-	-	-	-	-	1	1	2	4	-	4	1	1	1	-	
Vinegar	1	1	1	1	4	1	1	2	2	3	4	1	1	-	1	1	2	1	2	2	1	1	1	1	3	-	2	1	3	1	1	1	1
Varnish (Use Viton® for Aromatic)	1	1	1	1	1	-	-	1	2	-	3	-	-	-	1	4	1	1	-	-	1	-	1	2	3	4	-	4	1	1	1	1	1
Water, Acid , Mine	-	1	1	-	3	-	-	3	4	3	-	-	1	2	-	1	4	1	2	-	1	2	1	1	1	-	2	-	2	1	1	1	-
Water, Distilled , Lab Grade 7	-	1	1	-	2	-	-	1	-	4	-	-	1	2	1	1	1	1	1	-	1	1	1	1	1	-	2	1	1	1	1	1	1
Water, Fresh	1	1	1	-	1	-	-	1	3	2	4	-	1	2	1	1	1	1	1	1	1	1	1	1	1	-	2	1	1	1	1	1	1
Water, Salt	-	1	1	-	2	-	-	2	3	4	-	-	1	2	-	1	1	1	-	-	1	1	1	1	1	-	2	1	1	1	1	1	1
Weed Killers	-	1	1	-	3	-	-	3	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	1	2	-	3	-	-	1	1	1	-
Whey	-	1	1	-	2	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	-	-	-	-	1	1	1	-
Whiskey and Wines	1	1	1	1	4	-	-	2	2	4	4	-	1	-	1	1	1	1	-	2	1	-	1	1	2	1	1	1	1	1	1	1	-
White Liquor (Pulp Mill)	-	1	1	-	-	-	1	4	-	3	-	-	1	-	1	1	4	1	-	-	1	-	1	1	-	1	-	-	1	1	1	-	
White Water (Paper Mill)	-	1	1	-	-	-	-	1	-	-	-	-	-	-	-	2	1	1	-	-	1	-	1	-	-	1	-	-	1	1	1	-	
Xylene	1	1	1	-	1	-	1	1	1	1	2	1	4	-	1	4	1	1	4	4	4	1	1	1	4	4	4	4	4	1	1	1	1
Zinc Chloride	4	4	2	2	4	1	2	4	4	4	4	1	1	-	1	1	3	1	-	2	1	1	1	1	1	-	1	1	1	1	1	1	-
Zinc Hydrosulphite	-	-	1	-	4	-	-	4	-	4	-	-	-	-	1	3	-	-	-	-	1	1	-	1	-	1	1	-	1	1	1	1	-
Zinc Sulphate	2	1	1	1	4	1	2	2	3	3	4	1	3	2	1	1	3	1	-	2	1	1	1	1	1	-	1	1	1	1	1	1	-