TECHNICAL DATA SHEET

High-performance plastic type CP

General notes:

- **PEEK** polyetheretherketone reinforced with carbon nano
- very hard, rigid, high tensile and flexural strength, very high wear resistance
- high heat capability (260-300°C), good dimension stability, low thermal linear expansion coefficient
- excellent resistance to chemicals and aggressive agents, excellent resistance to thermal ageing
- ESD-safe material $10E^6$
- typical applications include handling of components in cleaning/chemical/assembly processes also at high temperature (soldering).

Mechanical properties

Flexural modulus +23°C	**21400 MPa**	*ISO 178 ASTM D 790*
Flexural strength +23°C	**350 MPa**	*ISO 178 ASTM D 790*
Tensile modulus +23°C	**24000 MPa**	*ISO 527 ASTM D 638*
Tensile strength +23°C	**190 MPa**	*ISO 527 ASTM D 638*
Izod - Impact strength (notched) +23°C	**65 J/m**	*ISO 180/4A ASTM D 256*

Thermal properties

Temp. of defl. under load (1.80 MPa)	**300 °C**	*ISO 75 ASTM D648*
Continuous Use Temperature	**260°C**	*20'000 h*
Short Time Temperature	**300°C**	

Electrical properties

Surface resistivity	**10^6 Ohm**	
Decay time	**< 0.2 sec**	*1000-10 V*

Other properties

Density	**1.28 g/ccm**	*ISO 1183*
Water absorption in water 23°C (24h)	**0.60%**	*ISO 62*

Chemical Compatibility Plastic Material Chart for CF, CP, LC, SV and DG

Ratings -- Chemical Effect

A = Excellent.
B = Good -- Minor Effect, slight corrosion or discoloration.
C = Fair -- Moderate Effect, not recommended for continuous use. Softening, loss of strength, swelling may occur.
D = Severe Effect, not recommended for **ANY** use. N/A = Information Not Available.

Explanation of Footnotes

1. Satisfactory to 72°F (22° C)
2. Satisfactory to 120°F (48° C)

Chemical	CF	CP	LC	SV	DG
Acetaldehyde	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect	A- Excellent
Acetamide	A- Excellent	N/A	A- Excellent	C- Fair	A- Excellent
Acetate Solvent	A- Excellent	N/A	A- Excellent	A- Excellent	N/A
Acetic Acid	D- Severe Effect	A- Excellent	A- Excellent	C- Fair	D- Severe Effect
Acetic Acid 20%	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	C- Fair
Acetic Acid 80%	D- Severe Effect	A- Excellent	A- Excellent	C- Fair	D- Severe Effect
Acetic Acid, Glacial	B- Good	A- Excellent	A- Excellent	A1- Excellent	D- Severe Effect
Acetic Anhydride	A1- Excellent	N/A	A- Excellent	B1- Good	D- Severe Effect
Acetone	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect	A- Excellent
Acetyl Bromide	D- Severe Effect	N/A	N/A	N/A	N/A
Acetyl Chloride (dry)	B- Good	N/A	A- Excellent	A2- Excellent	D- Severe Effect
Acetylene	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Acrylonitrile	A1- Excellent	A1- Excellent	N/A	A1- Excellent	N/A
Adipic Acid	N/A	N/A	N/A	A2- Excellent	N/A
Alcohols:Amyl	A1- Excellent	N/A	A- Excellent	A- Excellent	A- Excellent
Alcohols:Benzyl	B1- Good	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Alcohols:Butyl	D- Severe Effect	N/A	A- Excellent	A- Excellent	A- Excellent
Alcohols:Diacetone	A- Excellent	N/A	N/A	A1- Excellent	A- Excellent
Alcohols:Ethyl	A1- Excellent	N/A	A- Excellent	N/A	A1- Excellent
Alcohols:Hexyl	A- Excellent	N/A	N/A	N/A	A- Excellent
Alcohols:Isobutyl	A1- Excellent	N/A	N/A	N/A	A- Excellent
Alcohols:Isopropyl	D- Severe Effect	A- Excellent	A- Excellent	N/A	A- Excellent
Alcohols:Methyl	B1- Good	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Alcohols:Octyl	A- Excellent		N/A	N/A	A- Excellent
Alcohols:Propyl	D- Severe Effect	A- Excellent	A- Excellent	A2- Excellent	A- Excellent
Aluminum Chloride	B1- Good	A- Excellent	A- Excellent	A- Excellent	N/A
Aluminum Chloride 20%	D- Severe Effect	N/A	A- Excellent	A- Excellent	C- Fair
Aluminum Fluoride	A1- Excellent	N/A	A- Excellent	A- Excellent	C- Fair
Aluminum Hydroxide	A1- Excellent	N/A	N/A	A- Excellent	A- Excellent
Aluminum Nitrate	A1- Excellent	N/A	N/A	A2- Excellent	B1- Good
Aluminum Potassium Sulfate 10%	D- Severe Effect	N/A	N/A	B- Good	C- Fair
Aluminum Potassium Sulfate 100%	D- Severe Effect	N/A	N/A	N/A	C- Fair
Aluminum Sulfate	A2- Excellent	A- Excellent	A- Excellent	A- Excellent	B1- Good
Alums	A- Excellent	A- Excellent	N/A	N/A	N/A
Amines	D- Severe Effect	N/A	B- Good	N/A	D- Severe Effect
Ammonia 10%	A- Excellent	A- Excellent	A1- Excellent	A- Excellent	D- Severe Effect
Ammonia Nitrate	D- Severe Effect	N/A	A- Excellent	A- Excellent	C- Fair
Ammonia, anhydrous	A1- Excellent	A- Excellent	A1- Excellent	A- Excellent	D- Severe Effect
Ammonia, liquid	B1- Good	A- Excellent	A1- Excellent	A- Excellent	D- Severe Effect
Ammonium Acetate	A- Excellent	N/A	N/A	N/A	N/A
Ammonium Bifluoride	N/A	N/A	N/A	A- Excellent	D- Severe Effect
Ammonium Carbonate	A1- Excellent	N/A	A- Excellent	A- Excellent	D- Severe Effect
Ammonium Caseinate	N/A	N/A	N/A	N/A	D- Severe Effect
Ammonium Chloride	B- Good	A- Excellent	A- Excellent	A- Excellent	B- Good
Ammonium Hydroxide	A- Excellent	A- Excellent	A- Excellent	A- Excellent	C- Fair
Ammonium Nitrate	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A2- Excellent
Ammonium Oxalate	N/A	N/A	N/A	N/A	B- Good
Ammonium Persulfate	D- Severe Effect	N/A	N/A	A1- Excellent	D- Severe Effect
Ammonium Phosphate, Dibasic	C1- Fair	N/A	A- Excellent	A- Excellent	B2- Good
Ammonium Phosphate, Monobasic	B- Good	N/A	N/A	N/A	B- Good
Ammonium Phosphate, Tribasic	B- Good	N/A	N/A	N/A	B- Good
Ammonium Sulfate	A1- Excellent	N/A	A- Excellent	A- Excellent	B1- Good
Ammonium Sulfite	A1- Excellent	N/A	N/A	N/A	D- Severe Effect
Ammonium Thiosulfate	N/A	N/A	N/A	N/A	B- Good
Amyl Acetate	B2- Good	A- Excellent	A- Excellent	A2- Excellent	B1- Good
Amyl Alcohol	A1- Excellent	N/A	A- Excellent	A- Excellent	A- Excellent
Amyl Chloride	C1- Fair	N/A	N/A	A- Excellent	A- Excellent
Aniline	A2- Excellent	A- Excellent	A- Excellent	A1- Excellent	A1- Excellent
Aniline Hydrochloride	D- Severe Effect	N/A	N/A	A2- Excellent	N/A
Antifreeze	D- Severe Effect	N/A	A- Excellent	N/A	D- Severe Effect
Antimony Trichloride	D- Severe Effect	A- Excellent	N/A	A- Excellent	N/A
Aqua Regia (80% HCl, 20% HNO3)	D- Severe Effect	N/A	D- Severe Effect	A2- Excellent	D- Severe Effect
Arochlor 1248	A1- Excellent	N/A	N/A	N/A	N/A
Aromatic Hydrocarbons	N/A	N/A	N/A	N/A	A- Excellent
Arsenic Acid	C1- Fair	N/A	A- Excellent	A- Excellent	D- Severe Effect
Arsenic Salts	A- Excellent	N/A	N/A	N/A	N/A
Asphalt	A- Excellent	N/A	A- Excellent	A- Excellent	B2- Good
Barium Carbonate	A1- Excellent	A- Excellent	A2- Excellent	A- Excellent	A- Excellent
Barium Chloride	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Barium Cyanide	A1- Excellent	A- Excellent	N/A	N/A	B- Good
Barium Hydroxide	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Barium Nitrate	A1- Excellent	A- Excellent	N/A	N/A	B2- Good
Barium Sulfate	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	B2- Good
Barium Sulfide	A1- Excellent	A- Excellent	N/A	A- Excellent	A- Excellent
Beer	A1- Excellent	A- Excellent	A2- Excellent	A- Excellent	A1- Excellent
Beet Sugar Liquids	A- Excellent	N/A	N/A	A- Excellent	B- Good
Benzaldehyde	A1- Excellent	N/A	A- Excellent	A2- Excellent	A- Excellent
Benzene	A1- Excellent	A- Excellent	A- Excellent	A2- Excellent	A1- Excellent
Benzene Sulfonic Acid	D- Severe Effect	C- Fair	A- Excellent	N/A	N/A
Benzoic Acid	D- Severe Effect	A- Excellent	A1- Excellent	A- Excellent	B- Good
Benzol	D- Severe Effect	N/A	A- Excellent	A- Excellent	A- Excellent

Chemical	CF	CP	LC	SV	DG
Benzonitrile	N/A	N/A	A2- Excellent	N/A	N/A
Benzyl Chloride	A2- Excellent	N/A	A2- Excellent	N/A	A- Excellent
Bleaching Liquors	C- Fair	A- Excellent	N/A	N/A	N/A
Borax (Sodium Borate)	A- Excellent	N/A	A- Excellent	A- Excellent	B- Good
Boric Acid	B- Good	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Brewery Slop	N/A	N/A	N/A	N/A	B- Good
Bromine	D- Severe Effect	D- Severe Effect	D- Severe Effect	A- Excellent	D- Severe Effect
Butadiene	C1- Fair	N/A	A1- Excellent	A- Excellent	A- Excellent
Butane	A2- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Butanol (Butyl Alcohol)	B1- Good	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Butter	N/A	N/A	N/A	N/A	A- Excellent
Buttermilk	B1- Good	N/A	N/A	N/A	A- Excellent
Butyl Amine	A2- Excellent	N/A	D- Severe Effect	A1- Excellent	C1- Fair
Butyl Ether	A2- Excellent	N/A	A2- Excellent	A1- Excellent	D- Severe Effect
Butyl Phthalate	A2- Excellent	N/A	A- Excellent	B1- Good	N/A
Butylacetate	A- Excellent	A- Excellent	A- Excellent	B2- Good	A- Excellent
Butylene	B1- Good	N/A	A- Excellent	A- Excellent	A- Excellent
Butyric Acid	C1- Fair	N/A	A- Excellent	A- Excellent	A- Excellent
Calcium Bisulfate	N/A	N/A	N/A	N/A	N/A
Calcium Bisulfide	A- Excellent	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Calcium Bisulfite	A2- Excellent	N/A	A- Excellent	A- Excellent	D- Severe Effect
Calcium Carbonate	A- Excellent	A- Excellent	N/A	A- Excellent	A- Excellent
Calcium Chlorate	N/A	N/A	N/A	A- Excellent	A- Excellent
Calcium Chloride	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Calcium Hydroxide	A2- Excellent	A- Excellent	A- Excellent	A2- Excellent	D- Severe Effect
Calcium Hypochlorite	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Calcium Nitrate	A1- Excellent	A- Excellent	A- Excellent	A2- Excellent	D- Severe Effect
Calcium Oxide	B- Good	N/A	A- Excellent	A- Excellent	A- Excellent
Calcium Sulfate	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Calgon	A- Excellent	N/A	N/A	N/A	A- Excellent
Cane Juice	A- Excellent	N/A	N/A	A1- Excellent	A- Excellent
Carbolic Acid (Phenol)	D- Severe Effect	A- Excellent	A- Excellent	A1- Excellent	D- Severe Effect
Carbon Bisulfide	A- Excellent	N/A	A- Excellent	N/A	A- Excellent
Carbon Dioxide (dry)	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Carbon Dioxide (wet)	A1- Excellent	N/A	A- Excellent	A- Excellent	A- Excellent
Carbon Disulfide	B1- Good	N/A	A- Excellent	B2- Good	A1- Excellent
Carbon Monoxide	A1- Excellent	A- Excellent	N/A	B- Good	A- Excellent
Carbon Tetrachloride	D- Severe Effect	A- Excellent	A- Excellent	A2- Excellent	B1- Good
Carbon Tetrachloride (dry)	N/A	N/A	A2- Excellent	A2- Excellent	N/A
Carbon Tetrachloride (wet)	N/A	N/A	A2- Excellent	A2- Excellent	A1- Excellent
Carbonated Water	A- Excellent	N/A	A- Excellent	N/A	A- Excellent
Carbonic Acid	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	B1- Good
Catsup	A- Excellent	N/A	N/A	N/A	B- Good
Chloric Acid	D- Severe Effect	N/A	N/A	N/A	D- Severe Effect
Chlorinated Glue	N/A	N/A	N/A	N/A	D- Severe Effect
Chlorine (dry)	D- Severe Effect	A- Excellent	D- Severe Effect	A- Excellent	D- Severe Effect
Chlorine Water	C1- Fair	D- Severe Effect	D- Severe Effect	B- Good	D- Severe Effect
Chlorine, Anhydrous Liquid	D- Severe Effect	D- Severe Effect	D- Severe Effect	A1- Excellent	A1- Excellent
Chloroacetic Acid	D- Severe Effect	A- Excellent	A- Excellent	A1- Excellent	D- Severe Effect
Chlorobenzene (Mono)	D- Severe Effect	N/A	A- Excellent	A1- Excellent	D- Severe Effect
Chlorobromomethane	C- Fair	N/A	N/A	N/A	N/A
Chloroform	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Chlorosulfonic Acid	D- Severe Effect	D- Severe Effect	D- Severe Effect	D- Severe Effect	D- Severe Effect
Chocolate Syrup	A- Excellent	N/A	N/A	N/A	A- Excellent
Chromic Acid 10%	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Chromic Acid 30%	D- Severe Effect	A- Excellent	B- Good	A2- Excellent	D- Severe Effect
Chromic Acid 5%	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Chromic Acid 50%	D- Severe Effect	D- Severe Effect	A1- Excellent	A2- Excellent	D- Severe Effect
Chromium Salts	B- Good	N/A	N/A	N/A	N/A
Cider	A- Excellent	N/A	N/A	N/A	A- Excellent
Citric Acid	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	B1- Good
Citric Oils	N/A	N/A	N/A	N/A	B- Good
Clorox® (Bleach)	A- Excellent	N/A	D- Severe Effect	A- Excellent	D- Severe Effect
Coffee	A- Excellent	N/A	N/A	N/A	A- Excellent
Copper Chloride	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Copper Cyanide	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Copper Fluoborate	N/A	N/A	N/A	N/A	B- Good
Copper Nitrate	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Copper Sulfate >5%	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Copper Sulfate 5%	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Cream	A- Excellent	N/A	N/A	N/A	A- Excellent
Cresols	D- Severe Effect	N/A	A- Excellent	A2- Excellent	D- Severe Effect
Cresylic Acid	D- Severe Effect	N/A	N/A	B1- Good	D- Severe Effect
Cupric Acid	D- Severe Effect	N/A	A- Excellent	N/A	N/A
Cyanic Acid	N/A	N/A	N/A	N/A	D- Severe Effect
Cyclohexane	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A1- Excellent
Cyclohexanone	A- Excellent	N/A	A- Excellent	D- Severe Effect	A- Excellent
Detergents	A1- Excellent	N/A	A- Excellent	A- Excellent	A1- Excellent
Diacetone Alcohol	A1- Excellent	N/A	N/A	D- Severe Effect	N/A
Dichlorobenzene	D- Severe Effect	A- Excellent	N/A	A- Excellent	N/A
Dichloroethane	A1- Excellent	A- Excellent	A2- Excellent	A- Excellent	A1- Excellent
Diesel Fuel	A- Excellent	N/A	A- Excellent	A- Excellent	A- Excellent
Diethyl Ether	A1- Excellent	A- Excellent	A- Excellent	A1- Excellent	N/A
Diethylamine	A- Excellent	A- Excellent	A2- Excellent	D- Severe Effect	B- Good
Diethylene Glycol	A1- Excellent	N/A	A- Excellent	A- Excellent	A1- Excellent
Dimethyl Aniline	A- Excellent	N/A	A- Excellent	A1- Excellent	D- Severe Effect
Dimethyl Formamide	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect	D- Severe Effect
Diphenyl	N/A	N/A	N/A	N/A	N/A
Diphenyl Oxide	N/A	N/A	A- Excellent	B2- Good	D- Severe Effect
Dyes	A- Excellent	N/A	N/A	N/A	C- Fair

Chemical	CF	CP	LC	SV	DG
Epsom Salts (Magnesium Sulfate)	A1- Excellent	N/A	A- Excellent	A- Excellent	B- Good
Ethane	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	A1- Excellent
Ethanol	A1- Excellent	N/A	A- Excellent	N/A	A1- Excellent
Ethanolamine	A- Excellent	N/A	A- Excellent	C1- Fair	D- Severe Effect
Ether	A- Excellent	N/A	A- Excellent	B1- Good	A1- Excellent
Ethyl Acetate	A2- Excellent	A- Excellent	A- Excellent	D- Severe Effect	A- Excellent
Ethyl Benzoate	N/A	N/A	N/A	D- Severe Effect	N/A
Ethyl Chloride	A1- Excellent	N/A	A- Excellent	A- Excellent	A1- Excellent
Ethyl Ether	A1- Excellent	N/A	A- Excellent	A2- Excellent	A1- Excellent
Ethyl Sulfate	N/A	N/A	N/A	N/A	N/A
Ethylene Bromide	N/A	N/A	N/A	A- Excellent	N/A
Ethylene Chloride	A- Excellent	N/A	A- Excellent	A- Excellent	A1- Excellent
Ethylene Chlorohydrin	D- Severe Effect	N/A	A2- Excellent	A- Excellent	D- Severe Effect
Ethylene Diamine	D- Severe Effect	N/A	A- Excellent	B- Good	D- Severe Effect
Ethylene Dichloride	A1- Excellent	N/A	A- Excellent	A- Excellent	B1- Good
Ethylene Glycol	A- Excellent	A- Excellent	A- Excellent	A- Excellent	B- Good
Ethylene Oxide	A1- Excellent	A- Excellent	D- Severe Effect	A- Excellent	D- Severe Effect
Fatty Acids	A1- Excellent	A- Excellent	N/A	A- Excellent	A- Excellent
Ferric Chloride	A- Excellent	B- Good	A- Excellent	A- Excellent	D- Severe Effect
Ferric Nitrate	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Ferric Sulfate	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Ferrous Chloride	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Ferrous Sulfate	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Fluoboric Acid	D- Severe Effect	N/A	A- Excellent	A1- Excellent	A1- Excellent
Fluorine	D- Severe Effect	D- Severe Effect	D- Severe Effect	A1- Excellent	D- Severe Effect
Fluosilicic Acid	D- Severe Effect	N/A	A- Excellent	A1- Excellent	A1- Excellent
Formaldehyde 100%	D- Severe Effect	A- Excellent	B- Good	A- Excellent	A- Excellent
Formaldehyde 40%	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A2- Excellent
Formic Acid	D- Severe Effect	B- Good	A- Excellent	A- Excellent	A2- Excellent
Freon 113	N/A	A- Excellent	A- Excellent	B- Good	A- Excellent
Freon 12	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	B- Good
Freon 22	B- Good	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Freon TF	D- Severe Effect	N/A	D- Severe Effect	B- Good	A- Excellent
Freon® 11	D- Severe Effect	N/A	A- Excellent	A- Excellent	D- Severe Effect
Fruit Juice	A- Excellent	A- Excellent	N/A	A- Excellent	D- Severe Effect
Fuel Oils	A1- Excellent	N/A	A- Excellent	B- Good	A- Excellent
Furan Resin	N/A	N/A	A- Excellent	D- Severe Effect	D- Severe Effect
Furfural	B- Good	N/A	A- Excellent	B2- Good	A- Excellent
Gallic Acid	A- Excellent	N/A	A- Excellent	A1- Excellent	N/A
Gasoline (high-aromatic)	A- Excellent	A- Excellent	A- Excellent	A- Excellent	B- Good
Gasoline, leaded, ref.	A2- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Gasoline, unleaded	A2- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Gelatin	A1- Excellent	A- Excellent	N/A	A- Excellent	B- Good
Glucose	A- Excellent	N/A	B- Good	A- Excellent	A- Excellent
Glue, P.V.A.	A1- Excellent	N/A	N/A	N/A	A- Excellent
Glycerin	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Glycolic Acid	N/A	N/A	A- Excellent	B- Good	A- Excellent
Gold Monocyanide	N/A	N/A	N/A	A- Excellent	A- Excellent
Grape Juice	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Grease	N/A	N/A	N/A	A- Excellent	D- Severe Effect
Heptane	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Hexane	B- Good	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Honey	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Hydraulic Oil (Petro)	A1- Excellent	A- Excellent	D- Severe Effect	A- Excellent	B- Good
Hydraulic Oil (Synthetic)	A1- Excellent	A- Excellent	N/A	A- Excellent	N/A
Hydrazine	N/A	A- Excellent	A2- Excellent	A- Excellent	B- Good
Hydrobromic Acid 100%	D- Severe Effect	D- Severe Effect	A1- Excellent	A- Excellent	D- Severe Effect
Hydrobromic Acid 20%	D- Severe Effect	N/A	A1- Excellent	A- Excellent	C- Fair
Hydrochloric Acid 100%	D- Severe Effect	A- Excellent	D- Severe Effect	A- Excellent	C- Fair
Hydrochloric Acid 20%	D- Severe Effect	A- Excellent	D- Severe Effect	A- Excellent	C- Fair
Hydrochloric Acid 37%	D- Severe Effect	A- Excellent	D- Severe Effect	A- Excellent	C- Fair
Hydrochloric Acid, Dry Gas	A1- Excellent	N/A	A- Excellent	A- Excellent	N/A
Hydrocyanic Acid	B- Good	A- Excellent	B- Good	A- Excellent	B- Good
Hydrocyanic Acid (Gas 10%)	N/A	N/A	N/A	N/A	C- Fair
Hydrofluoric Acid 100%	D- Severe Effect	D- Severe Effect	D- Severe Effect	A- Excellent	D- Severe Effect
Hydrofluoric Acid 20%	C1- Fair	D- Severe Effect	C1- Fair	A- Excellent	D- Severe Effect
Hydrofluoric Acid 50%	D- Severe Effect	D- Severe Effect	D- Severe Effect	A- Excellent	D- Severe Effect
Hydrofluoric Acid 75%	D- Severe Effect	D- Severe Effect	D- Severe Effect	A- Excellent	D- Severe Effect
Hydrofluosilicic Acid 100%	D- Severe Effect	N/A	A1- Excellent	A1- Excellent	A- Excellent
Hydrofluosilicic Acid 20%	D- Severe Effect	N/A	A- Excellent	A- Excellent	B- Good
Hydrogen Gas	A2- Excellent	N/A	A- Excellent	A- Excellent	N/A
Hydrogen Peroxide 10%	C1- Fair	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Hydrogen Peroxide 100%	D- Severe Effect	N/A	C- Fair	A1- Excellent	D- Severe Effect
Hydrogen Peroxide 30%	D- Severe Effect	N/A	A1- Excellent	A- Excellent	D- Severe Effect
Hydrogen Peroxide 50%	D- Severe Effect	N/A	N/A	A1- Excellent	D- Severe Effect
Hydrogen Sulfide (aqua)	C1- Fair	N/A	A- Excellent	A- Excellent	C- Fair
Hydrogen Sulfide (dry)	C1- Fair	A- Excellent	A- Excellent	A- Excellent	N/A
Hydroquinone	D- Severe Effect	N/A	N/A	N/A	A- Excellent
Hydroxyacetic Acid 70%	N/A	N/A	N/A	A- Excellent	A- Excellent
Ink	C- Fair	N/A	N/A	A- Excellent	B- Good
Iodine	A- Excellent	C- Fair	D- Severe Effect	A2- Excellent	D- Severe Effect
Iodine (in alcohol)	C- Fair	N/A	N/A	A- Excellent	D- Severe Effect
Iodoform	N/A	N/A	N/A	C- Fair	N/A
Isooctane	A1- Excellent	A- Excellent	A- Excellent	A2- Excellent	N/A
Isopropyl Acetate	B1- Good	N/A	N/A	D- Severe Effect	D- Severe Effect
Isopropyl Ether	A1- Excellent	N/A	N/A	D- Severe Effect	D- Severe Effect
Isotane	D- Severe Effect	N/A	N/A	A- Excellent	N/A
Jet Fuel (JP3, JP4, JP5)	C- Fair	N/A	A- Excellent	B- Good	A1- Excellent
Kerosene	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A2- Excellent
Ketones	A2- Excellent	N/A	A- Excellent	C1- Fair	D- Severe Effect

Chemical	CF	CP	LC	SV	DG
Lacquer Thinners	A1- Excellent	N/A	N/A	N/A	D- Severe Effect
Lacquers	A1- Excellent	N/A	N/A	D- Severe Effect	D- Severe Effect
Lactic Acid	B- Good	A- Excellent	A- Excellent	B1- Good	B- Good
Lard	A1- Excellent	N/A	N/A	A- Excellent	A- Excellent
Latex	A1- Excellent	N/A	N/A	A- Excellent	B- Good
Lead Acetate	A- Excellent	A- Excellent	A- Excellent	A- Excellent	B- Good
Lead Nitrate	N/A	N/A	A- Excellent	A2- Excellent	N/A
Lead Sulfamate	B1- Good	N/A	N/A	A- Excellent	A- Excellent
Ligroin	D- Severe Effect	N/A	N/A	A- Excellent	B- Good
Lime	A1- Excellent	A- Excellent	N/A	A- Excellent	B- Good
Linoleic Acid	N/A	N/A	N/A	A2- Excellent	B- Good
Lithium Chloride	N/A	N/A	A- Excellent	A2- Excellent	A- Excellent
Lithium Hydroxide	N/A	N/A	N/A	N/A	N/A
Lubricants	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Lye: Ca(OH)2 Calcium Hydroxide	A2- Excellent	N/A	A- Excellent	A2- Excellent	D- Severe Effect
Lye: KOH Potassium Hydroxide	C- Fair	N/A	A- Excellent	A- Excellent	A- Excellent
Lye: NaOH Sodium Hydroxide	A- Excellent	N/A	A- Excellent	D- Severe Effect	C- Fair
Magnesium Bisulfate	A1- Excellent	N/A	N/A	N/A	N/A
Magnesium Carbonate	N/A	N/A	N/A	A- Excellent	A- Excellent
Magnesium Chloride	A1- Excellent	A- Excellent	A1- Excellent	A- Excellent	B1- Good
Magnesium Hydroxide	B1- Good	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Magnesium Nitrate	A1- Excellent	N/A	A- Excellent	A- Excellent	A- Excellent
Magnesium Oxide	N/A	N/A	N/A	N/A	A- Excellent
Magnesium Sulfate (Epsom Salts)	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	B- Good
Maleic Acid	A- Excellent	A- Excellent	B- Good	A- Excellent	A- Excellent
Maleic Anhydride	N/A	N/A	N/A	A- Excellent	D- Severe Effect
Malic Acid	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Manganese Sulfate	A2- Excellent	N/A	A2- Excellent	A2- Excellent	A1- Excellent
Mash	A- Excellent	N/A	N/A	N/A	A- Excellent
Mayonnaise	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Melamine	A- Excellent	N/A	N/A	N/A	A- Excellent
Mercuric Chloride (dilute)	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	B- Good
Mercuric Cyanide	A2- Excellent	N/A	A- Excellent	A- Excellent	N/A
Mercurous Nitrate	N/A	N/A	N/A	A- Excellent	N/A
Mercury	A- Excellent	A- Excellent	N/A	A- Excellent	A- Excellent
Methane	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Methanol (Methyl Alcohol)	B1- Good	N/A	A- Excellent	A- Excellent	A- Excellent
Methyl Acetate	A2- Excellent	N/A	N/A	B1- Good	B- Good
Methyl Acetone	A- Excellent	N/A	N/A	D- Severe Effect	D- Severe Effect
Methyl Acrylate	N/A	N/A	A- Excellent	B1- Good	B- Good
Methyl Alcohol 10%	B1- Good	N/A	A- Excellent	A- Excellent	A- Excellent
Methyl Bromide	B1- Good	N/A	N/A	A- Excellent	D- Severe Effect
Methyl Butyl Ketone	D- Severe Effect	N/A	N/A	D- Severe Effect	D- Severe Effect
Methyl Cellosolve	C- Fair	N/A	N/A	A- Excellent	D- Severe Effect
Methyl Chloride	B1- Good	N/A	B- Good	A- Excellent	B- Good
Methyl Dichloride	C- Fair	N/A	N/A	D- Severe Effect	D- Severe Effect
Methyl Ethyl Ketone	A1- Excellent	A- Excellent	A- Excellent	D- Severe Effect	C- Fair
Methyl Ethyl Ketone Peroxide	N/A	N/A	N/A	N/A	N/A
Methyl Isobutyl Ketone	B2- Good	N/A	A- Excellent	D- Severe Effect	N/A
Methyl Isopropyl Ketone	A- Excellent	N/A	N/A	N/A	N/A
Methyl Methacrylate	N/A	N/A	A- Excellent	B1- Good	D- Severe Effect
Methylamine	N/A	N/A	N/A	C- Fair	D- Severe Effect
Methylene Chloride	C1- Fair	N/A	A- Excellent	B1- Good	B- Good
Milk	A- Excellent	A- Excellent	N/A	A2- Excellent	A- Excellent
Mineral Spirits	A- Excellent	N/A	A- Excellent	N/A	A- Excellent
Molasses	A1- Excellent	A- Excellent	N/A	B1- Good	A- Excellent
Monochloroacetic acid	D- Severe Effect	N/A	N/A	B1- Good	D- Severe Effect
Monoethanolamine	A- Excellent	N/A	A- Excellent	C- Fair	D- Severe Effect
Morpholine	A2- Excellent	N/A	C- Fair	B1- Good	N/A
Motor oil	A2- Excellent	A- Excellent	A- Excellent	B- Good	B- Good
Mustard	A- Excellent	N/A	N/A	A- Excellent	C- Fair
Naphtha	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A1- Excellent
Naphthalene	A1- Excellent	A- Excellent	A- Excellent	A2- Excellent	A1- Excellent
Natural Gas	N/A	A- Excellent	N/A	N/A	B- Good
Nickel Chloride	C1- Fair	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Nickel Nitrate	A1- Excellent	A- Excellent	N/A	A2- Excellent	N/A
Nickel Sulfate	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Nitrating Acid (<15% HNO3)	N/A	N/A	C- Fair	N/A	N/A
Nitrating Acid (>15% H2SO4)	N/A	N/A	D- Severe Effect	N/A	D- Severe Effect
Nitrating Acid (Š1% Acid)	N/A	N/A	C- Fair	N/A	N/A
Nitrating Acid (Š15% H2SO4)	N/A	N/A	C- Fair	N/A	N/A
Nitric Acid (20%)	D- Severe Effect	B- Good	C- Fair	A- Excellent	D- Severe Effect
Nitric Acid (50%)	D- Severe Effect	D- Severe Effect	C- Fair	A1- Excellent	D- Severe Effect
Nitric Acid (5-10%)	D- Severe Effect	A- Excellent	B1- Good	A1- Excellent	D- Severe Effect
Nitric Acid (Concentrated)	D- Severe Effect	D- Severe Effect	C- Fair	A1- Excellent	D- Severe Effect
Nitrobenzene	B1- Good	A- Excellent	A2- Excellent	A1- Excellent	C- Fair
Nitrogen Fertilizer	N/A	N/A	N/A	N/A	N/A
Nitromethane	B1- Good	N/A	A2- Excellent	A2- Excellent	A- Excellent
Nitrous Acid	N/A	A- Excellent	N/A	B- Good	N/A
Nitrous Oxide	C- Fair	A- Excellent	N/A	D- Severe Effect	N/A
Oils:Aniline	A- Excellent	N/A	N/A	A- Excellent	D- Severe Effect
Oils:Anise	N/A	N/A	N/A	N/A	D- Severe Effect
Oils:Bay	N/A	N/A	N/A	A- Excellent	D- Severe Effect
Oils:Bone	N/A	N/A	N/A	A- Excellent	D- Severe Effect
Oils:Castor	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Oils:Cinnamon	N/A	N/A	N/A	N/A	D- Severe Effect
Oils:Citric	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Oils:Clove	N/A	N/A	N/A	N/A	N/A
Oils:Coconut	N/A	N/A	N/A	A- Excellent	A- Excellent
Oils:Cod Liver	N/A	N/A	N/A	A- Excellent	B- Good

Chemical	CF	CP	LC	SV	DG
Oils:Corn	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Oils:Cottonseed	B- Good	N/A	A- Excellent	A- Excellent	A- Excellent
Oils:Creosote	D- Severe Effect	N/A	N/A	N/A	D- Severe Effect
Oils:Diesel Fuel (20, 30, 40, 50)	A- Excellent	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Oils:Fuel (1, 2, 3, 5A, 5B, 6)	A- Excellent	A- Excellent	A- Excellent	B- Good	D- Severe Effect
Oils:Ginger	N/A	N/A	N/A	A- Excellent	A- Excellent
Oils:Hydraulic Oil (Petro)	A1- Excellent	N/A	D- Severe Effect	A- Excellent	B- Good
Oils:Hydraulic Oil (Synthetic)	A1- Excellent	N/A	N/A	A- Excellent	N/A
Oils:Lemon	N/A	N/A	N/A	A- Excellent	D- Severe Effect
Oils:Linseed	A1- Excellent	A- Excellent	B- Good	A- Excellent	A- Excellent
Oils:Mineral	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Oils:Olive	A1- Excellent	A- Excellent	N/A	N/A	A- Excellent
Oils:Orange	N/A	N/A	N/A	A- Excellent	D- Severe Effect
Oils:Palm	N/A	A- Excellent	N/A	A- Excellent	A- Excellent
Oils:Peanut	N/A	A- Excellent	N/A	A- Excellent	A- Excellent
Oils:Peppermint	N/A	N/A	N/A	A- Excellent	D- Severe Effect
Oils:Pine	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Oils:Rapeseed	N/A	N/A	N/A	A- Excellent	A- Excellent
Oils:Rosin	A1- Excellent	N/A	N/A	A- Excellent	N/A
Oils:Sesame Seed	N/A	A- Excellent	N/A	A- Excellent	D- Severe Effect
Oils:Silicone	A1- Excellent	N/A	A1- Excellent	A- Excellent	A- Excellent
Oils:Soybean	A- Excellent	A- Excellent	N/A	A- Excellent	A- Excellent
Oils:Sperm (whale)	N/A	N/A	N/A	A- Excellent	D- Severe Effect
Oils:Tanning	N/A	N/A	N/A	A- Excellent	D- Severe Effect
Oils:Transformer	A1- Excellent	N/A	N/A	A- Excellent	A- Excellent
Oils:Turbine	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Oleic Acid	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Oleum 100%	D- Severe Effect	D- Severe Effect	A1- Excellent	D- Severe Effect	D- Severe Effect
Oleum 25%	D- Severe Effect	D- Severe Effect	A1- Excellent	C1- Fair	D- Severe Effect
Oxalic Acid (cold)	B2- Good	A- Excellent	A- Excellent	B- Good	B- Good
Ozone	D- Severe Effect	A- Excellent	max 100 pppm	A- Excellent	C- Fair
Palmitic Acid	A- Excellent	N/A	N/A	A2- Excellent	A- Excellent
Paraffin	A1- Excellent	A- Excellent	N/A	A- Excellent	A- Excellent
Pentane	A1- Excellent	A- Excellent	N/A	A- Excellent	B- Good
Perchloric Acid	D- Severe Effect	A- Excellent	N/A	A- Excellent	C- Fair
Perchloroethylene	C1- Fair	N/A	A- Excellent	A- Excellent	B- Good
Petrolatum	D- Severe Effect	N/A	N/A	A- Excellent	B- Good
Petroleum	A1- Excellent	N/A	N/A	A- Excellent	B- Good
Phenol (10%)	D- Severe Effect	N/A	A- Excellent	A- Excellent	B- Good
Phenol (Carbolic Acid)	D- Severe Effect	N/A	A- Excellent	A1- Excellent	D- Severe Effect
Phosphoric Acid (>40%)	B1- Good	A- Excellent	A- Excellent	B- Good	D- Severe Effect
Phosphoric Acid (crude)	B1- Good	N/A	A- Excellent	A- Excellent	D- Severe Effect
Phosphoric Acid (molten)	N/A	N/A	N/A	D- Severe Effect	D- Severe Effect
Phosphoric Acid (<40%)	B1- Good	A- Excellent	A- Excellent	B- Good	D- Severe Effect
Phosphoric Acid Anhydride	N/A	N/A	D- Severe Effect	D- Severe Effect	D- Severe Effect
Phosphorus	N/A	N/A	N/A	A1- Excellent	B- Good
Phosphorus Trichloride	N/A	A- Excellent	A- Excellent	A2- Excellent	D- Severe Effect
Photographic Developer	N/A	N/A	N/A	N/A	D- Severe Effect
Photographic Solutions	A1- Excellent	N/A	A2- Excellent	B2- Good	D- Severe Effect
Phthalic Acid	B1- Good	A- Excellent	N/A	A2- Excellent	C- Fair
Phthalic Anhydride	N/A	N/A	N/A	A- Excellent	C- Fair
Picric Acid	C1- Fair	A- Excellent	A- Excellent	A1- Excellent	A- Excellent
Plating Solutions, Antimony Plating	D- Severe Effect	N/A	N/A	A- Excellent	A- Excellent
Plating Solutions, Arsenic Plating	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Plating Solutions, Brass Plating: High-Speed Brass Bath	A- Excellent	N/A	N/A	B- Good	A- Excellent
Plating Solutions, Brass Plating: Regular Brass Bath	A- Excellent	N/A	N/A	B- Good	A- Excellent
Plating Solutions, Bronze Plating: Cu-Cd Bronze Bath	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Plating Solutions, Bronze Plating: Cu-Sn Bronze Bath	A- Excellent	N/A	N/A	A- Excellent	B- Good
Plating Solutions, Bronze Plating: Cu-Zn Bronze Bath	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Plating Solutions, Cadmium Plating: Cyanide Bath 90°F	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Plating Solutions, Cadmium Plating: Fluoborate Bath	D- Severe Effect	N/A	N/A	A- Excellent	C- Fair
Plating Solutions, Chromium Plating: Barrel Chrome	D- Severe Effect	N/A	N/A	C- Fair	D- Severe Effect
Plating Solutions, Chromium Plating: Black Chrome	D- Severe Effect	N/A	N/A	C- Fair	D- Severe Effect
Plating Solutions, Chromium Plating: Chromic-Sulfuric	D- Severe Effect	N/A	N/A	C- Fair	D- Severe Effect
Plating Solutions, Chromium Plating: Fluoride Bath	D- Severe Effect	N/A	N/A	C- Fair	D- Severe Effect
Plating Solutions, Chromium Plating: Fluosilicate Bath	D- Severe Effect	N/A	N/A	C- Fair	D- Severe Effect
Plating Solutions, Copper Plating	D- Severe Effect	N/A	N/A	A- Excellent	C- Fair
Plating Solutions, Copper Plating	D- Severe Effect	N/A	N/A	A- Excellent	A- Excellent
Plating Solutions, Copper Plating	A- Excellent	N/A	N/A	B- Good	A- Excellent
Plating Solutions, Copper Plating	A- Excellent	N/A	N/A	A- Excellent	B- Good
Plating Solutions, Copper Plating	A- Excellent	N/A	N/A	A- Excellent	B- Good
Plating Solutions, Copper Plating	A- Excellent	N/A	N/A	A- Excellent	D- Severe Effect
Plating Solutions, Copper Plating	A- Excellent	N/A	N/A	A- Excellent	A- Excellent
Plating Solutions, Gold Plating: Acid	A- Excellent	N/A	N/A	N/A	N/A
Plating Solutions, Gold Plating: Cyanide 150°F	A- Excellent	N/A	N/A	N/A	N/A
Plating Solutions, Gold Plating: Neutral 75°F	A- Excellent	N/A	N/A	N/A	N/A
Plating Solutions, Indium Sulfamate	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Iron Plating: Ferrous Am Sulfate Bath	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Iron Plating: Ferrous Chloride Bath	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Iron Plating: Ferrous Sulfate Bath	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Iron Plating: Fluoborate Bath 145°F	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Iron Plating: Sulfamate 140°F	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Iron Plating: Sulfate-Chloride Bath	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Lead Fluoborate	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Nickel Plating: Electroless 200°F	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Nickel Plating: Fluoborate 100-170°F	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Nickel Plating: High-Chloride 130-	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Nickel Plating: Sulfamate 100-140°F	A- Excellent	N/A	N/A	N/A	N/A
Plating Solutions, Nickel: Watts	A- Excellent	N/A	N/A	N/A	N/A
Plating Solutions, Rhodium 120°F	D- Severe Effect	N/A	N/A	N/A	N/A

Chemical	CF	CP	LC	SV	DG
Plating Solutions, Silver 80-120°F	A- Excellent	N/A	N/A	N/A	N/A
Plating Solutions, Tin-Fluoborate	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Tin-Lead 100°F	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Zinc Plating: Acid	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Zinc Plating: Acid	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Zinc Plating: Acid	D- Severe Effect	N/A	N/A	N/A	N/A
Plating Solutions, Zinc Plating: Alkaline Cyanide Bath	A- Excellent	N/A	N/A	N/A	N/A
Potash (Potassium Carbonate)	A- Excellent	N/A	N/A	A- Excellent	B- Good
Potassium Bicarbonate	A1- Excellent	A- Excellent	A- Excellent	B- Good	C- Fair
Potassium Bromide	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Potassium Chlorate	C1- Fair	A- Excellent	A- Excellent	A- Excellent	B- Good
Potassium Chloride	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Potassium Chromate	B- Good	A- Excellent	max 0.1%	B- Good	C- Fair
Potassium Cyanide Solutions	A1- Excellent	N/A	A- Excellent	A- Excellent	C- Fair
Potassium Dichromate	B1- Good	N/A	A- Excellent	A- Excellent	A- Excellent
Potassium Ferricyanide	B1- Good	A- Excellent	N/A	A2- Excellent	B1- Good
Potassium Ferrocyanide	B1- Good	A- Excellent	N/A	A- Excellent	N/A
Potassium Hydroxide (Caustic Potash)	C1- Fair	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Potassium Hypochlorite	B1- Good	N/A	A- Excellent	A1- Excellent	N/A
Potassium Iodide	A1- Excellent	N/A	A2- Excellent	A2- Excellent	N/A
Potassium Nitrate	B1- Good	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Potassium Oxalate	N/A	N/A	N/A	N/A	N/A
Potassium Permanganate	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Potassium Sulfate	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	B- Good
Potassium Sulfide	A- Excellent	A- Excellent	A- Excellent	A- Excellent	N/A
Propane (liquefied)	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Propylene	N/A	N/A	A- Excellent	N/A	N/A
Propylene Glycol	A- Excellent	N/A	A- Excellent	N/A	B- Good
Pyridine	C1- Fair	A- Excellent	A- Excellent	D- Severe Effect	B- Good
Pyrogallic Acid	N/A	N/A	N/A	A- Excellent	D- Severe Effect
Resorcinal	D- Severe Effect	N/A	N/A	N/A	N/A
Rosins	A1- Excellent	N/A	N/A	N/A	B- Good
Rum	A- Excellent	N/A	N/A	N/A	A- Excellent
Rust Inhibitors	N/A	N/A	N/A	N/A	A- Excellent
Salad Dressings	A- Excellent	N/A	N/A	N/A	A- Excellent
Salicylic Acid	A1- Excellent	A- Excellent	N/A	A- Excellent	D- Severe Effect
Salt Brine (NaCl saturated)	A- Excellent	N/A	A- Excellent	A- Excellent	N/A
Sea Water	A2- Excellent	N/A	A- Excellent	A- Excellent	A- Excellent
Shellac (Bleached)	A1- Excellent	N/A	N/A	N/A	A- Excellent
Shellac (Orange)	A1- Excellent	N/A	N/A	N/A	A- Excellent
Silicone	A1- Excellent	N/A	A1- Excellent	A- Excellent	A- Excellent
Silver Bromide	N/A	N/A	N/A	N/A	C- Fair
Silver Nitrate	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Soap Solutions	A1- Excellent	N/A	A- Excellent	A1- Excellent	A- Excellent
Soda Ash (see Sodium Carbonate)	B- Good	N/A	A- Excellent	A- Excellent	A- Excellent
Sodium Acetate	B1- Good	A- Excellent	A- Excellent	A- Excellent	B- Good
Sodium Aluminate	A1- Excellent	N/A	A- Excellent	N/A	B- Good
Sodium Benzoate	B1- Good	N/A	N/A	A2- Excellent	N/A
Sodium Bicarbonate	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Sodium Bisulfate	A1- Excellent	N/A	A- Excellent	A- Excellent	B- Good
Sodium Bisulfite	C1- Fair	N/A	A- Excellent	A- Excellent	C- Fair
Sodium Borate (Borax)	A1- Excellent	N/A	A- Excellent	A- Excellent	N/A
Sodium Bromide	B1- Good	N/A	N/A	A2- Excellent	A- Excellent
Sodium Carbonate	B1- Good	A- Excellent	A- Excellent	A- Excellent	A1- Excellent
Sodium Chlorate	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Sodium Chloride	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A1- Excellent
Sodium Chromate	C- Fair	N/A	A- Excellent	A- Excellent	D- Severe Effect
Sodium Cyanide	A1- Excellent	N/A	A- Excellent	A- Excellent	A- Excellent
Sodium Ferrocyanide	N/A	N/A	N/A	A- Excellent	A- Excellent
Sodium Fluoride	B- Good	N/A	N/A	A- Excellent	N/A
Sodium Hydrosulfite	A- Excellent	N/A	A- Excellent	N/A	N/A
Sodium Hydroxide (20%)	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Sodium Hydroxide (50%)	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Sodium Hydroxide (80%)	C- Fair	N/A	A- Excellent	A- Excellent	D- Severe Effect
Sodium Hypochlorite (<20%)	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	D- Severe Effect
Sodium Hypochlorite (100%)	D- Severe Effect	N/A	A- Excellent	A- Excellent	D- Severe Effect
Sodium Hyposulfate	N/A	N/A	N/A	N/A	N/A
Sodium Metaphosphate	A1- Excellent	N/A	N/A	A- Excellent	B- Good
Sodium Metasilicate	N/A	N/A	N/A	N/A	D- Severe Effect
Sodium Nitrate	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Sodium Perborate	B1- Good	N/A	N/A	N/A	B- Good
Sodium Peroxide	A1- Excellent	A- Excellent	N/A	A- Excellent	D- Severe Effect
Sodium Polyphosphate	A1- Excellent	N/A	N/A	A- Excellent	B- Good
Sodium Silicate	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	C- Fair
Sodium Sulfate	A- Excellent	A- Excellent	A- Excellent	A- Excellent	B- Good
Sodium Sulfide	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	B- Good
Sodium Sulfite	D- Severe Effect	A- Excellent	N/A	A- Excellent	N/A
Sodium Tetraborate	A- Excellent	N/A	N/A	N/A	B- Good
Sodium Thiosulfate (hypo)	B- Good	N/A	A- Excellent	A- Excellent	C1- Fair
Sorghum	A- Excellent	N/A	N/A	N/A	A- Excellent
Soy Sauce	A- Excellent	N/A	N/A	N/A	A- Excellent
Stannic Chloride	B1- Good	A- Excellent	A- Excellent	A- Excellent	C- Fair
Stannic Fluoborate	N/A	N/A	N/A	N/A	C- Fair
Stannous Chloride	C1- Fair	A- Excellent	A1- Excellent	A- Excellent	N/A
Starch	A1- Excellent	A- Excellent	N/A	N/A	A- Excellent
Stearic Acid	A2- Excellent	N/A	N/A	A- Excellent	A- Excellent
Stoddard Solvent	A- Excellent	N/A	A- Excellent	A- Excellent	A- Excellent
Styrene	A1- Excellent	A- Excellent	N/A	N/A	A- Excellent
Sugar (Liquids)	A1- Excellent	N/A	N/A	N/A	A- Excellent
Sulfate (Liquors)	B1- Good	N/A	N/A	A- Excellent	D- Severe Effect

Chemical	CF	CP	LC	SV	DG
Sulfur Chloride	A1- Excellent	A- Excellent	N/A	A1- Excellent	D- Severe Effect
Sulfur Dioxide	C1- Fair	A- Excellent	A- Excellent	A- Excellent	B- Good
Sulfur Dioxide (dry)	B1- Good	N/A	A- Excellent	A- Excellent	B- Good
Sulfur Hexafluoride	B- Good	A- Excellent	N/A	N/A	N/A
Sulfur Trioxide	D- Severe Effect	A- Excellent	N/A	N/A	N/A
Sulfur Trioxide (dry)	A1- Excellent	N/A	N/A	C1- Fair	D- Severe Effect
Sulfuric Acid (<10%)	C1- Fair	B-Good	A- Excellent	A- Excellent	D- Severe Effect
Sulfuric Acid (10-75%)	D- Severe Effect	C- Fair	A- Excellent	A- Excellent	D- Severe Effect
Sulfuric Acid (75-100%)	D- Severe Effect	D- Severe Effect	A1- Excellent	A- Excellent	N/A
Sulfuric Acid (cold concentrated)	D- Severe Effect	D- Severe Effect	A1- Excellent	A- Excellent	N/A
Sulfuric Acid (hot concentrated)	D- Severe Effect	D- Severe Effect	D- Severe Effect	C- Fair	N/A
Sulfurous Acid	D- Severe Effect	A- Excellent	A- Excellent	A- Excellent	C- Fair
Sulfuryl Chloride	N/A	N/A	N/A	N/A	A- Excellent
Tallow	A1- Excellent	A- Excellent	N/A	N/A	A- Excellent
Tannic Acid	C1- Fair	A- Excellent	A- Excellent	B- Good	B- Good
Tanning Liquors	A1- Excellent	N/A	N/A	N/A	B- Good
Tartaric Acid	B2- Good	A- Excellent	A- Excellent	B- Good	B- Good
Tetrachloroethane	C1- Fair	N/A	N/A	A- Excellent	A- Excellent
Tetrachloroethylene	A1- Excellent	N/A	N/A	N/A	A- Excellent
Tetrahydrofuran	A- Excellent	A- Excellent	A- Excellent	B1- Good	A- Excellent
Tin Salts	N/A	N/A	N/A	A- Excellent	N/A
Toluene (Toluol)	A1- Excellent	A- Excellent	A- Excellent	A1- Excellent	C1- Fair
Tomato Juice	A1- Excellent	N/A	A- Excellent	A- Excellent	B- Good
Trichloroacetic Acid	C- Fair	N/A	A- Excellent	B- Good	N/A
Trichloroethane	C1- Fair	N/A	N/A	A- Excellent	A- Excellent
Trichloroethylene	C1- Fair	A- Excellent	A1- Excellent	B- Good	D- Severe Effect
Trichloropropane	N/A	N/A	N/A	N/A	A- Excellent
Tricresylphosphate	A2- Excellent	N/A	N/A	D- Severe Effect	C- Fair
Triethylamine	A1- Excellent	N/A	A2- Excellent	A2- Excellent	D- Severe Effect
Trisodium Phosphate	A- Excellent	N/A	A- Excellent	A- Excellent	A- Excellent
Turpentine	B- Good	A- Excellent	A- Excellent	A- Excellent	A2- Excellent
Urea	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Uric Acid	A- Excellent	N/A	N/A	N/A	N/A
Urine	B- Good	N/A	N/A	A- Excellent	A- Excellent
Varnish	A- Excellent	A- Excellent	N/A	N/A	A- Excellent
Vegetable Juice	A- Excellent	N/A	N/A	N/A	A- Excellent
Vinegar	A- Excellent	A- Excellent	A- Excellent	B- Good	B- Good
Vinyl Acetate	N/A	N/A	N/A	A2- Excellent	N/A
Vinyl Chloride	A1- Excellent	N/A	N/A	B1- Good	N/A
Water, Acid, Mine	A- Excellent	A- Excellent	A- Excellent	A- Excellent	A1- Excellent
Water, Deionized	A1- Excellent	A- Excellent	A- Excellent	A2- Excellent	N/A
Water, Distilled	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	B- Good
Water, Fresh	A1- Excellent	A- Excellent	A- Excellent	A- Excellent	A2- Excellent
Water, Salt	A2- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Weed Killers	A- Excellent	N/A	N/A	N/A	A- Excellent
Whey	N/A	N/A	N/A	N/A	A- Excellent
Whiskey & Wines	A1- Excellent	A- Excellent	N/A	A- Excellent	A- Excellent
White Liquor (Pulp Mill)	A1- Excellent	A- Excellent	N/A	A1- Excellent	D- Severe Effect
White Water (Paper Mill)	A- Excellent	N/A	N/A	N/A	B- Good
Xylene	A2- Excellent	A- Excellent	A- Excellent	A- Excellent	A- Excellent
Zinc Chloride	A- Excellent	A- Excellent	A- Excellent	A- Excellent	C- Fair
Zinc Hydrosulfite	A- Excellent	N/A	A- Excellent	N/A	C- Fair
Zinc Sulfate	A- Excellent	A- Excellent	A- Excellent	A- Excellent	C- Fair

Source: Cole-Parmer chemical resistance database

WARNING
The information in this chart has been supplied to Ideal-tek by other reputable sources and is to be used ONLY as a guide in selecting equipment for appropriate chemical compatibility. Before permanent installation, test the equipment with the chemicals and under the specific conditions of your application.
Ratings of chemical behavior listed in this chart apply at a 48-hr exposure period.
Ideal-tek has no knowledge of possible effects beyond this period. Ideal-tek does not warrant (neither express nor implied) that the information in this chart is accurate or complete or that any material is suitable for any purpose.
DANGER
Variations in chemical behavior during handling due to factors such as temperature, pressure, and concentrations can cause equipment to fail, even though it passed an initial test.
SERIOUS INJURY MAY RESULT
Use suitable guards and/or personal protections when handling chemicals.