ENGINEERED PRODUCTS CO.

Chemical Resistance of Polycarbonate Housings - Terms and Conditions

Chemical resistance is dependent on many different factors such as the level of chemical concentration, the mix of chemicals, as well as the ambient temperature, humidity, and airflow within the environment.

Engineered Products Company (herein known as EPCO) sells our Linear Fluorescent Light Fixtures and Linear LED Luminaires through Electrical Distributors that support a variety of illumination applications. However, it is not possible for EPCO to know the final environmental conditions of the installation.

To the best of our knowledge, the information referenced in this document is accurate. However, EPCO assumes no liability for the accuracy or completeness of this information, it is only intended as a guideline. With regard to any chemicals mentioned in this document, EPCO neither suggest or guarantee that such chemicals are the only ones that exist within the intended environment. Final determination of the suitability of any information for the use contemplated by the Building Owner and the manner of that use, is the sole responsibility of the Building Owner.

These guidelines were developed to assist a certified lighting designer, consulting-specifying engineer, or contractor/installer intending to rely on any information referenced in this document verify that all applicable safety and environmental health standards are met.

Engineered Products Company warranties its Linear Fluorescent Light Fixtures and the Linear LED Luminaires to be free from defects in materials and workmanship for one (1) year and five (5) years, respectively. Both warranty statements apply to the original purchaser and not transferable.

Note: The original purchaser is identified as the “first” initial installation completed by the building owner or the building owner’s agent.

The following is the explanation of Footnotes for the charts shown on the following pages:

Explanation of Footnotes	
Ratings -- Chemical Effect	
A = Excellent.	1. Satisfactory to 72°F (22° C)
B = Good -- Minor Effect, slight corrosion or discoloration.	2. Satisfactory to 120°F (48° C)
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.	

Chemical Resistance of Plastics

ENGINEERED PRODUCTS CO.

Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Acetaldehyde	A	A	C[1]	D	A
Acetamide	A	A	D	A	A
Acetate Solvent	N/A	A	N/A	N/A	A
Acetic Acid	D	D	B[1]	N/A	B
Acetic Acid 20%	C	D	A[1]	B-C	A
Acetic Acid 80%	D	D	B[1]	D	B
Acetic Acid, Glacial	D	B	B[1]	D	A
Acetic Anhydride	D	A[1]	D	D	A
Acetone	A	A	D	D	A
Acetyl Bromide	N/A	D	N/A	N/A	N/A
Acetyl Chloride (dry)	D	B	D	N/A	A
Acetylene	A	A	D	N/A	A
Acrylonitrile	N/A	A[1]	D	D	A[1]
Adipic Acid	N/A	N/A	N/A	N/A	A[2]
Alcohols:Amyl	A	A[1]	B[1]	D	A
Alcohols:Benzyl	A	B[1]	D	D	B
Alcohols:Butyl	A	D	A[2]	D	A
Alcohols:Diacetone	A	A	N/A	D	A
Alcohols:Ethyl	A[1]	A[1]	B[2]	D	A
Alcohols:Hexyl	A	A	N/A	D	A
Alcohols:Isobutyl	A	A[1]	A	D	A
Alcohols:Isopropyl	A	D	A[2]	D	B
Alcohols:Methyl	A	B[1]	B[1]	D	A
Alcohols:Octyl	A	A	N/A	D	A
Alcohols:Propyl	A	D	N/A	D	A
Aluminum Chloride	N/A	B[1]	A[1]	A	B
Aluminum Chloride 20%	C	D	A[1]	A	C[1]
Aluminum Fluoride	C	A[1]	N/A	N/A	D
Aluminum Hydroxide	A	A[1]	B[1]	N/A	C[1]
Aluminum Nitrate	B[1]	A[1]	A[1]	N/A	A
Aluminum Potassium Sulfate 10%	C	D	A[1]	N/A	A
Aluminum Potassium Sulfate 100%	C	D	A[2]	N/A	B[2]
Aluminum Sulfate	B[1]	A[2]	A	A	B[2]
Alums	N/A	A	N/A	N/A	A
Amines	D	D	D	N/A	A
Ammonia 10%	D	A	D	A	A
Ammonia Nitrate	C	D	N/A	N/A	A
Ammonia, anhydrous	D	A[1]	D	N/A	A[2]
Ammonia, liquid	D	B[1]	D	A	A[2]
Ammonium Acetate	N/A	A	B	N/A	A
Ammonium Bifluoride	D	N/A	N/A	N/A	B[1]
Ammonium Carbonate	D	A[1]	N/A	N/A	B
Ammonium Caseinate	D	N/A	N/A	N/A	A
Ammonium Chloride	B	B	A[2]	E	B[2]

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Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Ammonium Hydroxide	C	A	D	E	A[1]
Ammonium Nitrate	A[2]	A[1]	N/A	N/A	A
Ammonium Oxalate	B	N/A	A[1]	N/A	A
Ammonium Persulfate	D	D	N/A	N/A	B
Ammonium Phosphate, Dibasic	B[2]	C[1]	A[2]	N/A	C
Ammonium Phosphate, Monobasic	B	B	N/A	N/A	C
Ammonium Phosphate, Tribasic	B	B	N/A	N/A	B
Ammonium Sulfate	B[1]	A[1]	A[2]	A	B
Ammonium Sulfite	D	A[1]	N/A	N/A	B
Ammonium Thiosulfate	B	N/A	N/A	N/A	A
Amyl Acetate	B[1]	B[2]	D	A	A
Amyl Alcohol	A	A[1]	B[1]	D	A
Amyl Chloride	A	C[1]	D	N/A	A[2]
Aniline	A[1]	A[2]	D	D	B
Aniline Hydrochloride	N/A	D	D	N/A	D
Antifreeze	D	D	N/A	N/A	A
Antimony Trichloride	N/A	D	A[2]	N/A	D
Aqua Regia (80% HCl, 20% HNO3)	D	D	D	D	D
Arochlor 1248	N/A	A[1]	N/A	N/A	B
Aromatic Hydrocarbons	A	N/A	N/A	N/A	C
Arsenic Acid	D	C[1]	A[1]	A	A[2]
Arsenic Salts	N/A	A	N/A	N/A	N/A
Asphalt	B[2]	A	D	N/A	A
Barium Carbonate	A	A[1]	A[2]	N/A	B
Barium Chloride	A	A	A	A	A[1]
Barium Cyanide	B	A[1]	N/A	N/A	A[2]
Barium Hydroxide	D	A[1]	D	N/A	B
Barium Nitrate	B[2]	A[1]	D	N/A	B
Barium Sulfate	B[2]	A[1]	D	N/A	B[1]
Barium Sulfide	A	A[1]	N/A	N/A	B[2]
Beer	A[1]	A[1]	A[2]	N/A	A
Beet Sugar Liquids	B	A	N/A	N/A	A
Benzaldehyde	A	A[1]	D	D	B
Benzene	A[1]	A[1]	D	D	B
Benzene Sulfonic Acid	N/A	D	D	N/A	B
Benzoic Acid	B	D	B[1]	A	B
Benzol	A	D	D	D	A[1]
Benzonitrile	N/A	N/A	A1	N/A	D
Benzyl Chloride	A	A[2]	N/A	N/A	B[1]
Bleach: Clorox	D	A	N/A	N/A	A
Bleaching Liquors	N/A	C	N/A	N/A	N/A
Borax (Sodium Borate)	B	A	N/A	N/A	A
Boric Acid	A	B	A	N/A	A[1]
Brewery Slop	B	N/A	N/A	N/A	A

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Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Bromine	D	D	C[1]	D	D
Butadiene	A	C[1]	D	N/A	A[1]
Butane	A	A[2]	D	A	A[2]
Butanol (Butyl Alcohol)	A	B[1]	B[1]	B-C	A[1]
Butter	A	N/A	N/A	N/A	A
Buttermilk	A	B[1]	A[1]	N/A	A
Butyl Amine	C[1]	A[2]	D	N/A	A
Butyl Ether	D	A[2]	N/A	N/A	A[1]
Butyl Phthalate	N/A	A[2]	D	N/A	B[2]
Butylacetate	A	A	D	N/A	A
Butylene	A	B[1]	D	N/A	A
Butyric Acid	A	C[1]	D	D	B[2]
Calcium Bisulfate	N/A	N/A	D	N/A	A
Calcium Bisulfide	D	A	N/A	N/A	B
Calcium Bisulfite	D	A[2]	D	N/A	A
Calcium Carbonate	A	A	C[2]	N/A	B
Calcium Chlorate	A	N/A	N/A	N/A	N/A
Calcium Chloride	D	A[1]	A	A	B[2]
Calcium Hydroxide	D	A[2]	D	C	B
Calcium Hypochlorite	D	D	D	A	B[1]
Calcium Nitrate	D	A[1]	A[2]	N/A	B[2]
Calcium Oxide	A	B	N/A	N/A	A
Calcium Sulfate	D	D	A[2]	N/A	B
Calgon	A	A	N/A	N/A	A
Cane Juice	A	A	N/A	N/A	A
Carbolic Acid (Phenol)	D	D	D	D	B
Carbon Bisulfide	A	A	N/A	N/A	B
Carbon Dioxide (dry)	A	A[1]	N/A	A	A[1]
Carbon Dioxide (wet)	A	A[1]	N/A	A	A[1]
Carbon Disulfide	A[1]	B[1]	D	D	B
Carbon Monoxide	A	A[1]	N/A	A	A
Carbon Tetrachloride	B[1]	D	D	C	B
Carbon Tetrachloride (dry)	N/A	N/A	N/A	D	B[2]
Carbon Tetrachloride (wet)	A[1]	N/A	N/A	D	A[2]
Carbonated Water	A	A	N/A	N/A	A
Carbonic Acid	B[1]	A[1]	A[1]	N/A	A
Catsup	B	A	N/A	N/A	A
Chloric Acid	D	D	N/A	N/A	C[1]
Chlorinated Glue	D	N/A	N/A	N/A	A
Chlorine (dry)	D	D	A	C	B
Chlorine Water	D	C[1]	B	C	C
Chlorine, Anhydrous Liquid	A[1]	D	C	D	C
Chloroacetic Acid	D	D	D	D	A[1]
Chlorobenzene (Mono)	D	D	D	N/A	B

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Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Chlorobromomethane	N/A	C	N/A	N/A	N/A
Chloroform	A	A	D	D	A
Chlorosulfonic Acid	D	D	C[1]	D	B[2]
Chocolate Syrup	A	A	A	N/A	A
Chromic Acid 10%	D	D	B	C	B
Chromic Acid 30%	D	D	C	D	B[2]
Chromic Acid 5%	D	D	B	N/A	A
Chromic Acid 50%	D	D	D	D	B[2]
Chromium Salts	N/A	B	N/A	N/A	N/A
Cider	A	A	A	N/A	A
Citric Acid	B[1]	A[1]	A[1]	A	A[2]
Citric Oils	B	N/A	N/A	N/A	A
Clorox (Bleach)	D	A	N/A	A	A
Coffee	A	A	N/A	N/A	A
Copper Chloride	A	D	N/A	N/A	D
Copper Cyanide	A	D	D	N/A	B
Copper Fluoborate	B	N/A	N/A	N/A	D
Copper Nitrate	A	D	D	N/A	A[2]
Copper Sulfate >5%	D	D	A[1]	A	B
Copper Sulfate 5%	D	D	A[1]	A	B
Cream	A	A	N/A	N/A	A
Cresols	D	D	D	D	A
Cresylic Acid	D	D	D	N/A	A
Cupric Acid	N/A	D	A[1]	N/A	B[2]
Cyanic Acid	D	N/A	N/A	N/A	A
Cyclohexane	A[1]	A	B	B	A
Cyclohexanone	A	A	D	D	A[2]
Detergents	A[1]	A[1]	A[1]	N/A	A[1]
Diacetone Alcohol	N/A	A[1]	D	D	B
Dichlorobenzene	N/A	D	D	N/A	B[1]
Dichloroethane	A[1]	A[1]	D	N/A	B
Diesel Fuel	A	A	A[2]	A	A[1]
Diethyl Ether	N/A	A[1]	D	D	B[2]
Diethylamine	B	A	D	N/A	A
Diethylene Glycol	A[1]	A[1]	B[1]	A	A
Dimethyl Aniline	D	A	D	N/A	B[2]
Dimethyl Formamide	D	A	D	N/A	B
Diphenyl	N/A	N/A	N/A	N/A	B
Diphenyl Oxide	D	N/A	N/A	N/A	A
Dyes	C	A	N/A	N/A	A
Epsom Salts (Magnesium Sulfate)	B	A[1]	A[1]	N/A	B
Ethane	A[1]	D	N/A	N/A	A[1]
Ethanol	A[1]	A[1]	A	D	A
Ethanolamine	D	A	N/A	N/A	A

Chemical Resistance of Plastics

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Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Ether	A[1]	A	N/A	D	A
Ethyl Acetate	A	A[2]	D	D	B
Ethyl Benzoate	N/A	N/A	D	N/A	N/A
Ethyl Chloride	A[1]	A[1]	D	D	A
Ethyl Ether	A[1]	A[1]	N/A	N/A	B
Ethyl Sulfate	N/A	N/A	N/A	N/A	D
Ethylene Bromide	N/A	N/A	D	N/A	A
Ethylene Chloride	A[1]	A	D	A	B
Ethylene Chlorohydrin	D	D	D	N/A	B
Ethylene Diamine	D	D	A[2]	N/A	B
Ethylene Dichloride	B[1]	A[1]	D	N/A	B
Ethylene Glycol (PURE)	B	A	B[1]	B	B
Ethylene Oxide	D	A[1]	C[1]	B	B
Fatty Acids	A	A[1]	B[1]	N/A	A
Ferric Chloride	D	A	A[2]	N/A	D
Ferric Nitrate	D	A[1]	A[1]	N/A	B
Ferric Sulfate	D	A[1]	A[1]	N/A	A
Ferrous Chloride	D	D	D	N/A	D
Ferrous Sulfate	D	D	A[1]	A	B
Fluoboric Acid	A[1]	D	N/A	N/A	B
Fluorine	D	D	C	N/A	A
Fluosilicic Acid	A[1]	D	A[1]	N/A	B
Formaldehyde 100%	A	D	A[2]	N/A	A
Formaldehyde 40%	A[2]	A	A[1]	A	A
Formic Acid	A[2]	D	A[1]	D	A[1]
Freon 113	A	N/A	B[1]	N/A	N/A
Freon 12	B	A[1]	N/A	N/A	B
Freon 22	A	B	N/A	N/A	A
Freon TF	A	D	B	N/A	A
Freonr 11	D	D	N/A	N/A	A
Fruit Juice	D	A	N/A	N/A	A
Fuel Oils	A	A[1]	B[1]	N/A	A
Furan Resin	D	N/A	N/A	N/A	A
Furfural	A	B	D	N/A	B
Gallic Acid	N/A	A	N/A	N/A	B
Gasoline (high-aromatic)	B	A	C	D	A
Gasoline, leaded, ref.	A	A[2]	C	D	A[2]
Gasoline, unleaded	A	A[2]	C	D	A[2]
Gelatin	B	A[1]	N/A	N/A	A[2]
Glucose	A	A	A[1]	N/A	A
Glue, P.V.A.	A	A[1]	N/A	N/A	A[2]
Glycerin	A	A[1]	A[2]	A	A
Glycolic Acid	A	N/A	N/A	N/A	A
Gold Monocyanide	A	N/A	N/A	N/A	A

Chemical Resistance of Plastics

ENGINEERED PRODUCTS CO.

Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Grape Juice	A	A	N/A	N/A	A
Grease	D	N/A	N/A	N/A	A
Heptane	A	A	B	A	A
Hexane	A	B	D	A	A
Honey	A	A	A[1]	N/A	A
Hydraulic Oil (Petro)	B	A[1]	N/A	N/A	A
Hydraulic Oil (Synthetic)	N/A	A[1]	N/A	N/A	A
Hydrazine	B	N/A	D	N/A	A
Hydrobromic Acid 100%	D	D	N/A	N/A	D
Hydrobromic Acid 20%	C	D	B	D	D
Hydrochloric Acid 100%	C	D	D	N/A	D
Hydrochloric Acid 20%	C	D	B[1]	B	D
Hydrochloric Acid 37%	C	D	D	D	D
Hydrochloric Acid, Dry Gas	N/A	A[1]	N/A	A	D
Hydrocyanic Acid	B	B	N/A	N/A	A
Hydrocyanic Acid (Gas 10%)	C	N/A	B[1]	N/A	N/A
Hydrofluoric Acid 100%	D	D	D	N/A	B[1]
Hydrofluoric Acid 20%	D	C[1]	D	N/A	D
Hydrofluoric Acid 50%	D	D	D	D	D
Hydrofluoric Acid 75%	D	D	D	N/A	D
Hydrofluosilicic Acid 100%	A	D	N/A	N/A	D
Hydrofluosilicic Acid 20%	B	D	N/A	N/A	B[1]
Hydrogen Gas	N/A	A[2]	A[2]	N/A	A
Hydrogen Peroxide 10%	D	C[1]	A[2]	A	B
Hydrogen Peroxide 100%	D	D	A	D	A[2]
Hydrogen Peroxide 30%	D	D	A[2]	C	B
Hydrogen Peroxide 50%	D	D	A[2]	C	A[2]
Hydrogen Sulfide (aqua)	C	C[1]	A	A	A
Hydrogen Sulfide (dry)	N/A	C[1]	N/A	N/A	A
Hydroquinone	A	D	N/A	N/A	B
Hydroxyacetic Acid 70%	A	N/A	N/A	N/A	N/A
Ink	B	C	N/A	N/A	C
Iodine	D	A	B	A	D
Iodine (in alcohol)	D	C	N/A	N/A	N/A
Iodoform	N/A	N/A	N/A	N/A	A
Isooctane	N/A	A[1]	B[1]	N/A	A[1]
Isopropyl Acetate	D	B[1]	D	N/A	A
Isopropyl Ether	D	A[1]	D	N/A	A
Isotane	N/A	D	N/A	N/A	N/A
Jet Fuel (JP3, JP4, JP5)	A[1]	C	B	N/A	A
Kerosene	A[2]	A	D	D	A
Ketones	D	A[2]	D	N/A	A
Lacquer Thinners	D	A[1]	B	N/A	A
Lacquers	D	A[1]	D	N/A	A

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Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Lactic Acid	B	B	A	B	B[1]
Lard	A	A[1]	A[1]	N/A	A
Latex	B	A[1]	N/A	N/A	A[2]
Lead Acetate	B	A	A	N/A	B[1]
Lead Nitrate	N/A	N/A	N/A	N/A	B[1]
Lead Sulfamate	A	B[1]	A[1]	N/A	C
Ligroin	B	D	N/A	N/A	A
Lime	B	A[1]	N/A	N/A	A
Linoleic Acid	B	N/A	N/A	N/A	A
Lithium Chloride	A	N/A	B[1]	N/A	A2
Lithium Hydroxide	N/A	N/A	D	N/A	B
Lubricants	A	A[1]	A[1]	N/A	A[2]
Lye: Ca(OH)2 Calcium Hydroxide	D	A[2]	D	C	B
Lye: KOH Potassium Hydroxide	A	C	D	A	A[1]
Lye: NaOH Sodium Hydroxide	C	A	D	B	B[1]
Magnesium Bisulfate	N/A	A[1]	A[1]	N/A	A[1]
Magnesium Carbonate	A	N/A	A[1]	N/A	B
Magnesium Chloride	B[1]	A[1]	A[2]	A	D
Magnesium Hydroxide	A	B[1]	A[1]	N/A	A[1]
Magnesium Nitrate	A	A[1]	A[1]	N/A	B
Magnesium Oxide	A	N/A	N/A	N/A	A
Magnesium Sulfate (Epsom Salts)	B	A[1]	A[1]	A	B
Maleic Acid	A	A	N/A	N/A	B
Maleic Anhydride	D	N/A	N/A	N/A	A
Malic Acid	A	A	N/A	N/A	A[2]
Manganese Sulfate	A[1]	A[2]	A[1]	N/A	B[2]
Mash	A	A	N/A	N/A	A
Mayonnaise	A	A	N/A	N/A	A
Melamine	A	A	N/A	N/A	D
Mercuric Chloride (dilute)	B	D	A	A	D
Mercuric Cyanide	N/A	A[2]	N/A	N/A	C
Mercurous Nitrate	N/A	N/A	A[2]	N/A	A[1]
Mercury	A	A	D	A	A
Methane	A	A	N/A	A	A
Methanol (Methyl Alcohol)	A	B[1]	B[1]	D	A
Methyl Acetate	B	A[2]	D	N/A	B
Methyl Acetone	D	A	N/A	N/A	A
Methyl Acrylate	B	N/A	N/A	N/A	N/A
Methyl Alcohol 10%	A	B[1]	B[1]	N/A	A
Methyl Bromide	D	B[1]	N/A	N/A	A
Methyl Butyl Ketone	D	D	D	N/A	A
Methyl Cellosolve	D	C	D	N/A	B
Methyl Chloride	B	B[1]	D	A	A
Methyl Dichloride	D	C	N/A	N/A	N/A

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Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Methyl Ethyl Ketone	C	A[1]	D	D	A
Methyl Ethyl Ketone Peroxide	N/A	N/A	N/A	N/A	N/A
Methyl Isobutyl Ketone	N/A	B[2]	D	D	B
Methyl Isopropyl Ketone	N/A	A	D	N/A	A
Methyl Methacrylate	D	N/A	N/A	N/A	B
Methylamine	D	N/A	N/A	N/A	A
Methylene Chloride	B	C[1]	D	N/A	B
Milk	A	A	A	N/A	A
Mineral Spirits	A	A	C	N/A	A
Molasses	A	A[1]	N/A	N/A	A
Monochloroacetic acid	D	D	D	N/A	A[1]
Monoethanolamine	D	A	N/A	N/A	A
Morpholine	N/A	A[2]	D	N/A	A[1]
Motor oil	B	A[2]	A	A	A[2]
Mustard	C	A	A	N/A	A
Naphtha	A[1]	A	B	N/A	A
Naphthalene	A[1]	A[1]	N/A	N/A	A
Natural Gas	B	N/A	N/A	N/A	A
Nickel Chloride	A	C[1]	A[2]	N/A	C
Nickel Nitrate	N/A	A[1]	D	N/A	B[2]
Nickel Sulfate	A	A[1]	A	A	B[1]
Nitrating Acid (<15% HNO3)	N/A	N/A	A	N/A	D
Nitrating Acid (>15% H2SO4)	D	N/A	N/A	N/A	C
Nitrating Acid (S1% Acid)	N/A	N/A	N/A	N/A	A
Nitrating Acid (S15% H2SO4)	N/A	N/A	N/A	N/A	C
Nitric Acid (20%)	D	D	B[1]	A	A
Nitric Acid (50%)	D	D	B	B-C	A[1]
Nitric Acid (5-10%)	D	D	A	N/A	A
Nitric Acid (Concentrated)	D	D	C[1]	D	A[1]
Nitrobenzene	C	B[1]	D	D	B
Nitrogen Fertilizer	N/A	N/A	N/A	N/A	N/A
Nitromethane	A	B[1]	D	N/A	A[1]
Nitrous Acid	N/A	N/A	N/A	N/A	B
Nitrous Oxide	N/A	C	N/A	A	B
Oils:Aniline	D	A	N/A	N/A	A
Oils:Anise	D	N/A	N/A	N/A	A
Oils:Bay	D	N/A	N/A	N/A	A
Oils:Bone	D	N/A	N/A	N/A	A
Oils:Castor	A	A	N/A	N/A	A
Oils:Cinnamon	D	N/A	C	N/A	A
Oils:Citric	A	A	A	N/A	A
Oils:Clove	N/A	N/A	N/A	N/A	A
Oils:Coconut	A	N/A	N/A	N/A	A
Oils:Cod Liver	B	N/A	N/A	N/A	A

Chemical Resistance of Plastics

ENGINEERED PRODUCTS CO.

Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Oils:Corn	A	A	N/A	N/A	A
Oils:Cottonseed	A	B	N/A	N/A	A
Oils:Creosote	D	D	N/A	N/A	B
Oils:Diesel Fuel (20, 30, 40, 50)	D	A	N/A	N/A	A
Oils:Fuel (1, 2, 3, 5A, 5B, 6)	D	A	B	N/A	A
Oils:Ginger	A	N/A	N/A	N/A	D
Oils:Hydraulic Oil (Petro)	B	A[1]	N/A	N/A	A
Oils:Hydraulic Oil (Synthetic)	N/A	A[1]	N/A	N/A	A
Oils:Lemon	D	N/A	N/A	N/A	A
Oils:Linseed	A	A[1]	N/A	N/A	A
Oils:Mineral	A	A	A	A	A
Oils:Olive	A	A[1]	A[2]	N/A	A
Oils:Orange	D	N/A	C[1]	N/A	A
Oils:Palm	A	N/A	N/A	N/A	A
Oils:Peanut	A	N/A	N/A	N/A	A
Oils:Peppermint	D	N/A	N/A	N/A	A
Oils:Pine	A	A	B	N/A	A
Oils:Rapeseed	A	N/A	N/A	N/A	A
Oils:Rosin	N/A	A[1]	N/A	N/A	A[1]
Oils:Sesame Seed	D	N/A	N/A	N/A	A
Oils:Silicone	A	A[1]	A	C	A
Oils:Soybean	A	A	N/A	N/A	A
Oils:Sperm (whale)	D	N/A	N/A	N/A	A
Oils:Tanning	D	N/A	N/A	N/A	A
Oils:Transformer	A	A[1]	N/A	N/A	A
Oils:Turbine	A	A	N/A	N/A	A
Oleic Acid	A	A	N/A	N/A	A
Oleum 100%	D	D	N/A	N/A	A
Oleum 25%	D	D	N/A	N/A	B
Oxalic Acid (cold)	B	B[2]	A	A	A
Ozone	C	D	D	A	A
Palmitic Acid	A	A	N/A	N/A	A[1]
Paraffin	A	A[1]	A[1]	A	A
Pentane	B	A[1]	A	N/A	C
Perchloric Acid	C	D	D	A	C
Perchloroethylene	B	C[1]	D	D	A[1]
Petrolatum	B	D	N/A	N/A	A
Petroleum	B	A[1]	C	N/A	A[1]
Phenol (10%)	B	D	B[1]	D	B
Phenol (Carbolic Acid)	D	D	D	D	B
Phosphoric Acid (>40%)	D	B[1]	A	A-B	D
Phosphoric Acid (crude)	D	B[1]	A	N/A	B
Phosphoric Acid (molten)	D	N/A	N/A	N/A	C
Phosphoric Acid (S40%)	D	B[1]	A	N/A	C

Chemical Resistance of Plastics

ENGINEERED PRODUCTS CO.

Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Phosphoric Acid Anhydride	D	N/A	D	N/A	N/A
Phosphorus	B	N/A	N/A	N/A	A[2]
Phosphorus Trichloride	D	N/A	C	D	A[2]
Photographic Developer	D	N/A	A[2]	A	A
Photographic Solutions	D	A[1]	A[1]	A	N/A
Phthalic Acid	C	B[1]	N/A	N/A	A
Phthalic Anhydride	C	N/A	A[1]	N/A	A
Picric Acid	A	C[1]	D	A	B
Plating Solutions, Antimony Plating 130°F	A	D	N/A	N/A	A
Plating Solutions, Arsenic Plating 110°F	A	A	N/A	N/A	A
Plating Solutions, Brass Plating: High-Speed Brass Bath 110°F	A	A	N/A	N/A	A
Plating Solutions, Brass Plating: Regular Brass Bath 100°F	A	A	N/A	N/A	A
Plating Solutions, Bronze Plating: Cu-Cd Bronze Bath R.T.	A	A	N/A	N/A	A
Plating Solutions, Bronze Plating: Cu-Sn Bronze Bath 160°F	B	A	N/A	N/A	A
Plating Solutions, Bronze Plating: Cu-Zn Bronze Bath 100°F	A	A	N/A	N/A	A
Plating Solutions, Cadmium Plating: Cyanide Bath 90°F	A	A	N/A	N/A	A
Plating Solutions, Cadmium Plating: Fluoborate Bath 100°F	C	D	N/A	N/A	A
Plating Solutions, Chromium Plating: Barrel Chrome Bath 95°F	D	D	N/A	N/A	D
Plating Solutions, Chromium Plating: Black Chrome Bath 115°F	D	D	N/A	N/A	C
Plating Solutions, Chromium Plating: Chromic-Sulfuric Bath 130°F	D	D	N/A	N/A	C
Plating Solutions, Chromium Plating: Fluoride Bath 130°F	D	D	N/A	N/A	D
Plating Solutions, Chromium Plating: Fluosilicate Bath 95°F	D	D	N/A	N/A	C
Plating Solutions, Copper Plating (Acid): Copper Fluoborate Bath 120°F	C	D	N/A	N/A	D
Plating Solutions, Copper Plating (Acid): Copper Sulfate Bath R.T.	A	D	N/A	N/A	D
Plating Solutions, Copper Plating (Cyanide): Copper Strike Bath 120°F	A	A	N/A	N/A	A
Plating Solutions, Copper Plating (Cyanide): High-Speed Bath 180°F	B	A	N/A	N/A	A
Plating Solutions, Copper Plating (Cyanide): Rochelle Salt Bath 150°F	B	A	N/A	N/A	A
Plating Solutions, Copper Plating (Misc): Copper (Electroless)	D	A	N/A	N/A	N/A
Plating Solutions, Copper Plating (Misc): Copper Pyrophosphate	A	A	N/A	N/A	A
Plating Solutions, Gold Plating: Acid 75°F	N/A	A	N/A	N/A	C
Plating Solutions, Gold Plating: Cyanide 150°F	N/A	A	N/A	N/A	A
Plating Solutions, Gold Plating: Neutral 75°F	N/A	A	N/A	N/A	C
Plating Solutions, Indium Sulfamate Plating R.T.	N/A	D	N/A	N/A	C
Plating Solutions, Iron Plating: Ferrous Am Sulfate Bath 150°F	N/A	D	N/A	N/A	C
Plating Solutions, Iron Plating: Ferrous Chloride Bath 190°F	N/A	D	N/A	N/A	D
Plating Solutions, Iron Plating: Ferrous Sulfate Bath 150°F	N/A	D	N/A	N/A	C
Plating Solutions, Iron Plating: Fluoborate Bath 145°F	N/A	D	N/A	N/A	D
Plating Solutions, Iron Plating: Sulfamate 140°F	N/A	D	N/A	N/A	D
Plating Solutions, Iron Plating: Sulfate-Chloride Bath 160°F	N/A	D	N/A	N/A	D
Plating Solutions, Lead Fluoborate Plating	N/A	D	N/A	N/A	C
Plating Solutions, Nickel Plating: Electroless 200°F	N/A	D	N/A	N/A	N/A
Plating Solutions, Nickel Plating: Fluoborate 100-170°F	N/A	D	N/A	N/A	C
Plating Solutions, Nickel Plating: High-Chloride 130-160°F	N/A	D	N/A	N/A	C
Plating Solutions, Nickel Plating: Sulfamate 100-140°F	N/A	A	N/A	N/A	C

Chemical Resistance of Plastics

ENGINEERED PRODUCTS CO.

Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Plating Solutions, Nickel Plating: Watts Type 115-160°F	N/A	A	N/A	N/A	C
Plating Solutions, Rhodium Plating 120°F	N/A	D	N/A	N/A	D
Plating Solutions, Silver Plating 80-120°F	N/A	A	N/A	N/A	A
Plating Solutions, Tin-Fluoborate Plating 100°F	N/A	D	N/A	N/A	C
Plating Solutions, Tin-Lead Plating 100°F	N/A	D	N/A	N/A	C
Plating Solutions, Zinc Plating: Acid Chloride 140°F	N/A	D	N/A	N/A	D
Plating Solutions, Zinc Plating: Acid Fluoborate Bath R.T.	N/A	D	N/A	N/A	C
Plating Solutions, Zinc Plating: Acid Sulfate Bath 150°F	N/A	D	N/A	N/A	C
Plating Solutions, Zinc Plating: Alkaline Cyanide Bath R.T.	N/A	A	N/A	N/A	A
Potash (Potassium Carbonate)	B	A	N/A	A	B
Potassium Bicarbonate	C	A[1]	N/A	A	B
Potassium Bromide	A	A[1]	A[1]	N/A	B
Potassium Chlorate	B	C[1]	A[1]	N/A	B
Potassium Chloride	A	A[1]	A	A	A[1]
Potassium Chromate	C	B	N/A	N/A	B[1]
Potassium Cyanide Solutions	C	A[1]	N/A	N/A	B[1]
Potassium Dichromate	A	B[1]	A[1]	N/A	B[1]
Potassium Ferricyanide	B[1]	B[1]	N/A	N/A	B[1]
Potassium Ferrocyanide	N/A	B[1]	N/A	N/A	B
Potassium Hydroxide (Caustic Potash)	A	C[1]	D	A	A[1]
Potassium Hypochlorite	N/A	B[1]	N/A	N/A	B
Potassium Iodide	N/A	A[1]	N/A	N/A	A[1]
Potassium Nitrate	A	B[1]	A[1]	A	B
Potassium Oxalate	N/A	N/A	N/A	N/A	B[1]
Potassium Permanganate	A	D	A[2]	C	B
Potassium Sulfate	B	A[1]	A[1]	N/A	A
Potassium Sulfide	N/A	A	N/A	N/A	B
Propane (liquefied)	A	A[1]	C[1]	N/A	A
Propylene	N/A	N/A	N/A	N/A	A[1]
Propylene Glycol	B	A	B[1]	N/A	B
Pyridine	B	C[1]	D	D	A
Pyrogallic Acid	D	N/A	N/A	N/A	B
Resorcinal	N/A	D	B[1]	N/A	N/A
Rosins	B	A[1]	N/A	N/A	A[1]
Rum	A	A	N/A	N/A	A
Rust Inhibitors	A	N/A	N/A	N/A	A
Salad Dressings	A	A	N/A	N/A	A
Salicylic Acid	D	A[1]	A[1]	N/A	B[2]
Salt Brine (NaCl saturated)	N/A	A	A	N/A	A[2]
Sea Water	A	A[2]	A[2]	N/A	C
Shellac (Bleached)	A	A[1]	N/A	N/A	A
Shellac (Orange)	A	A[1]	N/A	N/A	A
Silicone	A	A[1]	A[2]	N/A	A
Silver Bromide	C	N/A	N/A	N/A	D

Chemical Resistance of Plastics

ENGINEERED PRODUCTS CO.

Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Silver Nitrate	A	A[1]	A[2]	N/A	B
Soap Solutions	A	A[1]	A[1]	A	A[1]
Soda Ash (see Sodium Carbonate)	A	B	A	A	A
Sodium Acetate	B	B[1]	A[1]	N/A	B[1]
Sodium Aluminate	B	A[1]	N/A	N/A	A
Sodium Benzoate	N/A	B[1]	A[2]	N/A	N/A
Sodium Bicarbonate	A	A	A[2]	N/A	A[1]
Sodium Bisulfate	B	A[1]	A[1]	N/A	C
Sodium Bisulfite	C	C[1]	A[1]	A	B[1]
Sodium Borate (Borax)	N/A	A[1]	A[1]	N/A	B
Sodium Bromide	A	B[1]	N/A	N/A	C
Sodium Carbonate	A[1]	B[1]	B[1]	B	A
Sodium Chlorate	A	D	A[1]	A	B[1]
Sodium Chloride	A[1]	A[1]	A[2]	A	B
Sodium Chromate	D	C	A[2]	N/A	B
Sodium Cyanide	A	A[1]	N/A	N/A	B[1]
Sodium Ferrocyanide	A	N/A	N/A	N/A	B
Sodium Fluoride	N/A	B	N/A	N/A	D
Sodium Hydrosulfite	N/A	A	N/A	N/A	N/A
Sodium Hydroxide (20%)	A	A	A[2]	N/A	B[2]
Sodium Hydroxide (50%)	A	A	B[1]	B	B[1]
Sodium Hydroxide (80%)	D	C	D	N/A	B[1]
Sodium Hypochlorite (<20%)	D	D	B	B	C
Sodium Hypochlorite (100%)	D	D	N/A	N/A	D
Sodium Hyposulfate	N/A	N/A	N/A	N/A	A
Sodium Metaphosphate	B	A[1]	N/A	N/A	A
Sodium Metasilicate	D	N/A	N/A	N/A	A
Sodium Nitrate	A	A[1]	N/A	N/A	B[1]
Sodium Perborate	B	B[1]	N/A	N/A	B
Sodium Peroxide	D	A[1]	A[2]	N/A	A
Sodium Polyphosphate	B	A[1]	N/A	N/A	B
Sodium Silicate	C	A[1]	N/A	N/A	B
Sodium Sulfate	B	A	A[2]	A	B[1]
Sodium Sulfide	B	A[1]	D	N/A	D
Sodium Sulfite	N/A	D	N/A	N/A	A
Sodium Tetraborate	B	A	N/A	N/A	A
Sodium Thiosulfate (hypo)	C[1]	B	D	N/A	B
Sorghum	A	A	N/A	N/A	A
Soy Sauce	A	A	N/A	N/A	A
Stannic Chloride	C	B[1]	A[1]	N/A	D
Stannic Fluoborate	C	N/A	N/A	N/A	A
Stannous Chloride	N/A	C[1]	N/A	N/A	A[2]
Starch	A	A[1]	N/A	N/A	A
Stearic Acid	A	A[2]	A[1]	B	A

Chemical Resistance of Plastics

ENGINEERED PRODUCTS CO.

Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Stoddard Solvent	A	A	A[2]	N/A	A
Styrene	A	A[1]	D	N/A	A
Sugar (Liquids)	A	A[1]	N/A	N/A	A
Sulfate (Liquors)	D	B[1]	N/A	N/A	B
Sulfur Chloride	D	A[1]	N/A	N/A	D
Sulfur Dioxide	B	C[1]	A	D	A[1]
Sulfur Dioxide (dry)	B	B[1]	A[1]	D	A
Sulfur Hexafluoride	N/A	B	N/A	N/A	N/A
Sulfur Trioxide	N/A	D	N/A	N/A	C
Sulfur Trioxide (dry)	D	A[1]	N/A	N/A	A
Sulfuric Acid (<10%)	D	C[1]	A[1]	A	B
Sulfuric Acid (10-75%)	D	D	B[1]	C	D
Sulfuric Acid (75-100%)	N/A	D	B	D	D
Sulfuric Acid (cold concentrated)	N/A	D	B	D	B
Sulfuric Acid (hot concentrated)	N/A	D	D	D	C
Sulfurous Acid	C	D	N/A	D	B
Sulfuryl Chloride	A	N/A	N/A	N/A	N/A
Tallow	A	A[1]	N/A	A	A
Tannic Acid	B	C[1]	C	A	A
Tanning Liquors	B	A[1]	N/A	N/A	A[2]
Tartaric Acid	B	B[2]	A	B	C[2]
Tetrachloroethane	A	C[1]	N/A	N/A	A
Tetrachloroethylene	A	A[1]	D	N/A	A
Tetrahydrofuran	A	A	D	D	A
Tin Salts	N/A	N/A	N/A	A	D
Toluene (Toluol)	C[1]	A[1]	D	D	A
Tomato Juice	B	A[1]	A[1]	N/A	A
Trichloroacetic Acid	N/A	C	C	D	C
Trichloroethane	A	C[1]	D	D	B
Trichloroethylene	D	C[1]	A	D	B
Trichloropropane	A	N/A	N/A	N/A	A
Tricresylphosphate	C	A[2]	N/A	A	B
Triethylamine	D	A[1]	N/A	A	A
Trisodium Phosphate	A	A	A	B	B
Turpentine	A[2]	B	D	D	A
Urea	A	A	B	A	B
Uric Acid	N/A	A	N/A	N/A	B
Urine	A	B	N/A	A	A
Varnish	A	A	N/A	N/A	A
Vegetable Juice	A	A	N/A	N/A	A
Vinegar	B	A	A[2]	A	A
Vinyl Acetate	N/A	N/A	N/A	N/A	B
Vinyl Chloride	N/A	A[1]	N/A	N/A	A[1]
Water, Acid, Mine	A1	A	B[2]	N/A	B

Chemical Resistance of Plastics

ENGINEERED PRODUCTS CO.

Chemical	Material				
	ACETAL/POM	NYLON	PC	ACRYLIC	316SS
Water, Deionized	N/A	A[1]	N/A	N/A	A[2]
Water, Distilled	B	A[1]	A[2]	N/A	A
Water, Fresh	A[2]	A[1]	A[2]	N/A	A
Water, Salt	A	A[2]	A[2]	N/A	B
Weed Killers	A	A	N/A	N/A	A
Whey	A	N/A	N/A	N/A	A
Whiskey & Wines	A	A[1]	A[1]	N/A	A
White Liquor (Pulp Mill)	D	A[1]	N/A	N/A	A
White Water (Paper Mill)	B	A	N/A	N/A	A
Xylene	A	A[2]	D	D	B
Zinc Chloride	C	A	A[2]	A	B
Zinc Hydrosulfite	C	A	N/A	N/A	A
Zinc Sulfate	C	A	A[2]	A	A

Explanation of Footnotes	
Ratings -- Chemical Effect	
A = Excellent.	**1. Satisfactory to 72°F (22° C)**
B = Good -- Minor Effect, slight corrosion or discoloration.	**2. Satisfactory to 120°F (48° C)**
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.	