Polyethylene / Chemical Compatibility Guide

Key

L =Products should be suitable for prolonged or repeated contact with these substances, under the conditions specified.

S =These substances may adversely affect the polyethylene. ENPAC products may be suitable for intermittent contact; however, some deterioration in properties may occur. The user should perform qualification tests before or during usage of the container.

N =These substances aggressively attack polyethylene or have vapor pressures incompatible with closed containers. **Do not use polyethylene containers in these applications.**

Acetaldehyde (40%),	L
Acetamide,	L
Acetic Acid (50%),	L
Acetic Acid (100%),	N
Acetic Acid Anhydride,	S
Acetic Ether,	S
Acetone,	L
Acetylene Tetrabromide,	S
Acrylic Emulsions,	S
Acrylonitrile,	L
Adipic Acid,	L
Aliphatic Hydrocarbons (Hexane, Octane, hexene, Octene, Etc.),	L
Allyl Alcohol (96%),	L
Alum (Aqueous Solutions),	L
Aluminum Chloride (20%),	L
Aluminum Fluoride,	L
Aluminum Hydrogen Solution (10%),	L
Aluminum Hydroxide,	L
Alums (All Types),	L
Ammonia (Anhydrous),	L
Ammonia (Aqueous),	L
Ammonia (100% Dry Gas),	L
Ammonium Salts,	L
Ammonium Acetate,	L
Ammonium Biflouride,	L
Ammonium Carbonate 50%,	L
Ammonium Chloride,	L
Ammonium Hydrogen Fluoride (50%),	L
Ammonium Hydroxide,	L
Ammonium Metaphosphate Sat'd,	L
Ammonium Nitrate (10%),	L
Ammonium Nitrate Sat'd,	L
Ammonium Persulfate Sat'd,	L
Ammonium Phosphate,	L
Ammonium Sulfate (1)%),	L
Ammonium Sulfate Sat'd,	L
Ammonium Sulfide Sat'd,	L
Ammonium Thiocyanate Sat'd,	L
Amyl Acetate,	L
Amyl Alcohol (100%),	L
Amyl Chloride,	N
Aniline (100%),	S
Aniline Hydrochloride,	S
Animal Fats,	L
Anti-Freeze,	L
Antimony Salts,	L
Antimony Trichloride 90%,	L
Aqua Regia,	N
Aqueous Salt Solutions (NaCl),	L
Aqueous Alkalies (NaOH),	L
Arsenic Acid,	L
Arsenic Salts,	L
Barium Salts,	L
Barium Carbonate,	L
Barium Chloride,	L
Barium Cyanide,	L
Barium Hydroxide,	L
Barium Nitrate,	L
Barium Sulfate,	L
Barium Sulfide,	L
Battery Fluid Acid,	S
Beef Tallow Emulsion, Sulfonated,	L
Beer,	L
Benzaldehyde,	L
Benzene,	L
Benzene Sulfonic Acid,	S
Benzoic Acid,	L
Benzyl Alcohol,	L
Benzyl Chloroformate,	L
Bismuth Salts,	L
Bleach Lye (10%),	S
Black Liquor,	L
Borax Cold Sat'd,	L
Boric Acid Dilute,	L
Boric Acid Conc.,	L
Bromine, Liquid,	N
Bromine, Water,	N
Bromobenzene,	N
Bromoform,	N
Butadiene,	L
Butane,	L
Butanediol (100%),	L
Butanol,	L
Butyl Acetate,	L
Butyl Alcohol (100%),	L
Butylene,	N
Butylene Glycol,	L
Butylene Liquid,	N
Butyl Phenol,	N
Butyric Acid,	L
Calcium Carbonate,	L
Calcium Chloride,	L
Calcium Hydroxide,	L
Calcium Hypochlorite,	L
Calcium Nitrate (50%),	L
Calcium Sulfate,	L
Camphor Oil,	N
Carbon Disulfide,	N
Carbonic Acid (Aq.CO2),	L
Carbon Monoxide,	L
Carbon Tetrachloride,	N
Castor Oil Conc.,	L
Caustic (Aqueous),	L
Caustic Potash Sol. (50%),	L
Caustic Soda Sol. (10%),	L
Chloral Hydrate,	L
Chloroethanol,	L
Chloric Acid (10%),	L
Chloroacetic Acid,	L
Chlorobenzene,	L
Chloroform,	N
Chloromethane,	N
Chlorosulfonic Acid 100%,	N
Chrome Alum Sat'd,	L
Chromic Acid (50%),	S
Cider,	L
Citric Acid (All Conc.),	L
Clorox Bleach,	L
Coconut Oil Alcohols,	L
Cola Concentrates,	L
Compressed Air Conditioning Oil,	L
Copper Salts,	L
Copper Cyanide,	L
Copper Nitrate,	L
Copper Sulfate,	L
Corn Oil,	L
Cottonseed Oil,	L
Cresol (90%),	L
Cresylic Acid,	L
Crotonic Aldehyde,	L
Cuprous Chloride Sat'd,	L
Cyclohexane,	L
Cyclohexanol,	L
Cyclohexanone,	S
Detergents, General,	L
Developer, Photographic,	L
Dextrin Sat'd,	L
Dextrose Sat'd,	L
Dibutyl Ether,	N
Dibutylphthalate,	S
Dibutyl Sebacate,	S
Dichloroacetic Acid,	S
Dichloroacetic Acid, Methyl Ester,	S
Dichlorobenzene, Liquid,	N
Dichloroethylene,	N
Diesel Fuel,	S
Diesel Oil,	S
Diethyl Carbonate,	L
Disodium Phosphate,	L
Diazo Salts,	L
Diethylene Glycol,	L
Diethanolamine,	S
Diglycolic Acid (30%),	L
Di-Isobutyl Ketone,	S
Dimethylamine,	S
Dimethyl Formamide,	S
Dinonyl Phthalate,	N
Dioctyl Phthalate,	N
Dioxane,	L
Diphenyl Oxide,	N
Electrolyte,	L
Emulsions, Photographic,	L
Ethanol,	L
Ether,	N
Ethyl Acetate (100%),	S
Ethyl Alcohol,	L
Ethyl Butyrate,	S
Ethyl Chloride,	N
Ethyl Ether,	N
Ethylene Chloride,	N
Ethylene Chlorohydrin,	L
Ethylene Diamine,	L
Ethylene Dichloride,	N
Ethylene Glycol,	L
Ethylene Oxide,	N
Fatty Acids,	L
Fatty Alcohol Sulfonate,	L
Ferric Salts,	L
Ferric Sulfate,	L
Ferrous Salts,	L
Ferrous Sulfate,	L
Fertilizer Salts,	L
Fish Solubles,	L
Fluoboric Acid,	L
Fluosilicic Acid (All Conc.),	L
Formaldehyde (40%),	L
Formamide,	L
Formic Acid (All Conc.),	L
Fruit Pulp,	L
Fuel Oil,	L
Furfural (100%),	L
Furfuryl Alcohol,	N
Gallic Acid Sat'd,	L
Gasoline,	L
Gasohol,	L
Gelatine,	L
Gin,	L
Gluconic Acid (All Conc.),	L
Glucose,	L
Glycerine,	L
Glycol,	L
Glycol Ethers,	L
Glyocolic Acid (All Conc.),	L
Grape Sugar Sat'd Aq.,	L
Heptane,	L
Hexane,	L
Hexanol Tert,	L
Hydrazine Hydrate,	L
Hydrosulfite (10%),	L
Hydroxylamine Sulfate,	L
Hydrazine (35%),	L
Hydrazine Hydrochloride,	L
Hydroiodic Acid (All Conc.),	L
Hydrobromic Acid (50%),	L
Hydrocyanic Acid Sat'd,	L
Hydrochloric Acid (All Conc.),	L
Hydrofluoric Acid (All Conc.),	L
Hydrofluorisilicic Acid (All Conc.),	L
Hydrogen Bromide (10%),	L
Hydrogen Peroxide (90%),	L
Hydrogen Phosphide 100%,	L
Hydroquinone,	L
Hydrogen Sulfide,	L
Hypochlorous Acid,	L
Inks,	L
Iodine (Alc. Sol.) Conc.,	L
Iron Salts,	L
Iso-Octane,	S
Isopropyl Acetate,	L
Isopropyl Alcohol,	L
Isopropyl Ether,	N
Jetfuel,	S
Kerosene,	S
Lactic Acid (All Conc.),	L
Lanolin,	L
Latex,	L
Lead Salts,	L
Lead Acetate Sat'd,	L
Lime,	L
Linseed Oil,	L
Lithium Salts,	L
Lube Oil,	L
Magnesium Salts,	L
Magnesium Carbonate,	L
Magnesium Hydroxide,	L
Magnesium Nitrate,	L
Magnesium Oxide,	L
Magnesium Sulfate,	L
Maleic Acid,	L
Malic Acid (1%),	L
Mercuric Salts,	L
Mercurous Salts,	L
Mercury,	L
Methanol,	L
Methyl Acetate,	L
Methyl Alcohol (100%),	L
Methyl Amine (32%),	L
Methyl Bromide,	N
Methyl Chloride,	N
Methylene Chloride,	N
Methyl Ethyl Ketone,	S
Methyl Isobutyl Ketone,	S
Methyl Isopropyl ketone,	S
Methyl Sulfate,	L
Methyl Sulfuric Acid (All Conc.),	L
Milk,	L
Mineral Oils,	L
Molasses,	L
Monochloroacetic Acid Ethyl Ester,	L
Monochloroacetic Acid Methyl Ester,	L
Morpholin,	L
Mowilith D,	L
Muriatic Acid	L
Naptha,	S
Napthalene,	S
Nickel Salts,	L
Nicotine, Dilute,	L
Nicotinic Acid,	L
Nitric Acid <50%,	L
Nitrobenzene,	S
Nitrotoluene,	S
Octyl Cresol,	L
Oils and Fats,	L
Oleic Acid (All Conc.),	L
Oleum Conc.,	N
Olive Oil,	L
Orange Extract,	L
Oxalic Acid (All Conc.),	L
Palmitic Acid,	N
Palm Oil,	S
Paraffin Emulsions,	L
Paraffin Oil,	L
Perchloric Acid (50%),	L
Perchloroethylene,	N
Petroleum,	L
Petroleum Ether,	S
Phenol (90%),	N
Phenylhydrazine,	N
Phosphoric Acid All Conc,	L
Phosphorous Chlorides,	S
Phosphorous Yellow (100%),	L
Phosphorous Pentoxide,	L
Photographic Solutions,	L
Phthalic Acid (All Conc.),	L
Phthalic Anhydride,	L
Pickling Baths, Sulfuric Acid, Hydrochloric Acid,	L
Picric Acid (1%),	L
Plating Solutions,	L
Potash,	L
Potassium/Aluminum Sulfates (50%),	L
Potassium Bichromate,	L
Potassium Borate (10%),	L
Potassium Bromide,	L
Potassium Chlorate,	L
Potassium Chloride,	L
Potassium Chromate,	L
Potassium Cyanide,	L
Potassium Dichromate 40%,	L
Potassium Ferri/ Ferro Cyanide Sat'd,	L
Potassium Fluoride,	L
Potassium Hydroxide,	L
Potassium Iodide,	L
Potassium Nitrate Sat'd,	L
Potassium Perborate Sat'd,	L
Potassium Perchlorate,	L
Potassium Permanganate,	L
Potassium Persufate Sat'd,	L
Potassium Phosphates,	L
Potassium Sulfate,	L
Propanol,	L
Propargyl Alcohol (7%),	L
Propionic Acid (50%),	L
Propyl Alcohol,	L
Propylene Dichloride (100%),	L
Propylene Glycol,	L
Propylene Oxide,	L
Pyridine,	S
Rayon Coagulation Salts,	L
Rust Inhibitors,	L
Sea Water,	L
Selenic Acid,	L
Sewage,	L
Shortening,	L
Silicic Acid,	L
Silicone Oil,	L
Silver Salts,	L
Silver Nitrate,	L
Soda Solution (All Conc.),	L
Soda Ash,	L
Sodium Salts,	L
Sodium Acetate Sat'd,	L
Sodium Acrylates,	L
Sodium Benzoate,	L
Sodium Bicarbonate,	L
Sodium Bisulfate (10%),	L
Sodium Bisulfite,	L
Sodium Bromate,	S
Sodium Bromide,	L
Sodium Bromide Dilute Sol.,	L
Sodium Carbonate,	L
Sodium Chlorate,	L
Sodium Chloride,	L
Sodium Chlorite,	L
Sodium Chromate,	L
Sodium Disulfite,	L
Sodium Dithionite (10%),	L
Sodium Ferricyanide,	L
Sodium Ferrocyanide Sat'd,	L
Sodium Fluoride Sat'd,	L
Sodium Hydroxide Conc.,	L
Sodium Hypochlorite,	L
Sodium Iodide,	L
Sodium Nitrate,	L
Sodium Oxalate,	L
Sodium Persulfate,	L
Sodium Phosphate,	L
Sodium Silicate,	L
Sodium Sulfate,	L
Sodium Sulfide,	L
Sodium Sulfite,	L
Sodium Sulfonates,	L
Sodium Thiosulfate,	L
Spindle Oil,	L
Stannic Salts,	L
Stannous Salts,	L
Starch Solution Sat'd,	L
Stearic Acid (All Conc.),	L
Succinic Acid,	L
Sugar Solutions, Glucose, Lactose, Sucrose, etc.,	L
Sulfur,	L
Sulfuric Acid (98%),	S
Sulfuric Acid, Fuming,	N
Sulfurous Acid,	L
Sulfuryl Chloride,	N
Tallow,	L
Tannic Acid,	L
Tanning Extracts,	L
Tartaric Acid Sat'd,	L
Tetrachloroethane,	N
Tetrachloroethylene,	N
Tetraethyl Lead,	L
Tetrahydrofuran,	N
Tetrahydronaphthalene,	N
Thionyl Chloride,	N
Tin Salts,	L
Titanium Salts,	S
Toluene,	S
Toluene Sulfonic Acid (All Conc.),	S
Transformer Oil,	L
Tributylphosphate,	L
Trichloroacetic Acid,	S
Trichloroethane,	N
Trichloroethylene,	N
Tricresyl Phosphate,	L
Triethanolamine,	L
Trioctyl Phosphate,	N
Trisodium Phosphate Sat'd,	L
Trichloroethylene,	N
Turpentine Oil,	N
Urea,	L
Urine,	L
Vegetable Oils,	L
Vinegar,	L
Vanilla Extract,	L
Wax Alcohol,	N
Wetting Agents,	L
Whisky,	L
White Acid (75%),	L
Wine,	L
Xylene,	N
Yeast,	L
Zinc Salts,	L
Zinc Sulfate,	L

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