

# 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 Bifluoride, 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%), N  
 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, L  
 Detergents, General, S  
 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, N  
 Diesel Oil, L  
 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  
 Diocyl Phthalate, N  
 Dioxane, L  
 Diphenyl Oxide, N  
 Electrolyte, N  
 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, L  
 Ethylene Chlorohydrin, N  
 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, N  
 Fluosilicic Acid (All Conc.), L  
 Formaldehyde (40%), N  
 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, N  
 Gin, L  
 Gluconic Acid (All Conc.), L  
 Glucose, L  
 Glycerine, L  
 Glycol, L  
 Glycol Ethers, L  
 Glycolic Acid (All Conc.), L  
 Grape Sugar Sat'd Aq., L  
 Heptane, L  
 Hexane, L  
 Hexanol Tert, L  
 Hydrazine Hydrate, L  
 Hydroform, N  
 Hydroxylamine Sulfate, N  
 Hydrozine (35%), N  
 Hydrazine Hydrochloride, L  
 Hydroiodic Acid (All Conc.), S  
 Hydrobromic Acid (50%), L  
 Hydrocyanic Acid Sat'd, L  
 Hydrochloric Acid (All Conc.), L  
 Hydrofluoric Acid (All Conc.), L  
 Hydrofluorosilicic 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, S  
 Linseed Oil, L  
 Lithium Salts, S  
 Lube Oil, L  
 Magnesium Salts, L  
 Magnesium Carbonate, S  
 Magnesium Hydroxide, S  
 Magnesium Nitrate, L  
 Magnesium Oxide, L  
 Magnesium Sulfate, L  
 Malic Acid, L  
 Malic Acid (1%), S  
 Mercuric Salts, L  
 Mercurous Salts, S  
 Mercury, S  
 Methanol, S  
 Methyl Acetate, L  
 Methyl Alcohol (100%), N  
 Methyl Amine (32%) L, 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

Naphthalene, 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, L  
 Hydrochloric Acid, L  
 Plic 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 Persulfate Sat'd, L  
 Potassium Phosphates, S  
 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, N  
 Sodium Bromate, S  
 Sodium Bromide, L  
 Sodium Bromide Dilute Sol., S  
 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

## IMPORTANT USER NOTICE

This data is a compilation of existing data obtained from leading chemical companies and independent reports and does not represent actual testing conducted by ENPAC Corporation.

This report is offered as a guide and was developed from information which, to the best of ENPAC's knowledge, was reliable and accurate. Due to variables and conditions of application beyond ENPAC's control, none of the data shown in this guide is to be construed as a guarantee, expressed or implied. ENPAC Corporation assumes no responsibility, obligation, or liability in conjunction with the use or misuse of the information herein.

**CUSTOMER SERVICE:**  
**1-800-936-7229**  
**TOLL FREE FAX:**  
**1-800-993-6722**