

Chemical Compatibility Guide - Molded Polyethylene

For UltraTech Spill Containment Products

This listing was prepared to provide guidance to the chemical compatibility of UltraTech Spill Containment Products which are manufactured and constructed of a molded polyethylene.

Polyethylene is susceptible to attack by some chemicals which may cause stress cracking, swelling, oxidation or may permeate the polyethylene. These reactions may reduce the physical properties of polyethylene.

A = Suitable for long term storage at 100 degrees Fahrenheit or less.

B = Suitable for short term storage less than one year.

C = Do NOT store these chemicals in UltraTech containment products.

User testing may prove some of these chemicals are suitable for secondary containment applications with an exposure time of one week or less.

Acetaldehyde (40%)	A	Aqua Regia	C	Carbon Bisulfide	C
Acetamide	A	Aqueous Alkalies (NaOH).....	A	Carbon Disulfide	C
Acetic Acid (50%).....	A	Arsenic Acid	A	Carbon Monoxide	A
Acetic Acid Anhydride	B	Barium Carbonate	A	Carbon Tetrachloride	C
Acetic Ether	B	Barium Chloride	A	Carbonic Acid (Aq. CO2)	A
Acetone	A	Barium Cyanide	A	Caustic (Aqueous).....	A
Acetylene Tetrabromide.....	B	Barium Hydroxide	A	Caustic Potash Sol. (50%)	A
Acrylic Emulsions	B	Barium Nitrate.....	A	Caustic Soda Sol. (10%).....	A
Acrylonitrile	A	Barium Salts	A	Chloroacetic Acid	A
Adipic Acid	A	Barium Sulfate	A	Chlorobenzene.....	A
Aliphatic Hydrocarbons	A	Barium Sulfide.....	A	Chloroform	C
Alkaline.....	A	Battery Fluid, Acid.....	B	Chloromethane.....	C
Allyl Alcohol (96%)	A	Benzaldehyde	A	Chlorsulfonic Acid (100%)	C
Aluminum Chloride (20%)	A	Benzene Sulfonic Acid	B	Chrome Alum Sat'd.....	A
Aluminum Fluoride	A	Benzene.....	B	Chromic Acid (50%).....	B
Aluminum Hydrogen Solution (10%)	A	Benzoic Acid.....	A	Clycolic Acid (All Conc.)	A
Aluminum Hydroxide	A	Benzyl Alcohol	A	Copper Cyanide.....	A
Alums (All Types).....	A	Benzyl Chloroformate.....	A	Cresylic Acid	A
Ammonia (Aqueous).....	A	Boric Acid Conc	A	Crotonic Aldehyde	A
Ammonium Acetate.....	A	Boric Acid Dilute	A	Cuprous Chloride Sat'd.....	A
Ammonium Bifluoride.....	A	Borzx Cold Sat'd	A	Cyclohexanone.....	B
Ammonium Carbonate (50%)	A	Bromine, Liquid	C	Cyclohexane	A
Ammonium Chloride.....	A	Bromine, Water	C	Cyclohexanol.....	A
Ammonium Hydrogen Fluoride (50%)	A	Bromobenzene.....	C	Dextrin Sat'd	A
Ammonium Hydroxide	A	Bromoform	C	Dextrose Sat'd	A
Ammonium Metaphosphate Sat'd	A	Butadiene.....	A	Di Isobutyl Ketone	B
Ammonium Nitrate Sat'd.....	A	Butanediol (100%).....	A	Dibutyl Ether	C
Ammonium Persulfate Sat'd.....	A	Butanol	A	Dibutyl Sebacate	B
Ammonium Phosphate.....	A	Butyl Acetate	A	Dibutylphthalate	B
Ammonium Salts	A	Butyl Alcohol (100%)	A	Dichloroacetic Acid	B
Ammonium Sulfate Sat'd	A	Butyl Phenol.....	C	Dichlorobenzene, Liquid	C
Ammonium Sulfide, Sat'd.....	A	Butylene Glycol	A	Dichloroethylene.....	C
Ammonium Thiocyanate Sat'd.....	A	Butylene Liquid	C	Diesel Fuel	B
Amyl Acetate	A	Butylene.....	C	Diesel Oil.....	B
Amyl Alcohol (100%).....	A	Butyric Acid	A	Diethanolamine.....	B
Amyl Chloride.....	C	Calcium Carbonate.....	A	Diethyl Carbonate	A
Aniline (100%)	B	Calcium Chloride	A	Diethylene Glycol	A
Aniline Hydrochloride.....	B	Calcium Hydroxide	A	Diglycolic Acid (30%)	A
Anti Freeze	A	Calcium Hypochlorite	A	Dimethyl Formamide	B
Antimony Salts	A	Calcium Nitrate (50%).....	A	Dimethylamine.....	B
Antimony Trichloride (90%).....	A	Calcium Sulfate	A	Dinonyl Phthalate	C

When considering an UltraTech polyethylene product for use in secondary containment applications, it is important to note that most secondary containment products are designed to hold leaked chemicals for only hours, a day, at most a week.

These secondary containment units would then be cleaned of any chemical. In these short term applications, a greater variety of chemicals may be used with the polyethylene since the exposure time of the chemical to the polyethylene is limited.

Diocetyl Phthalate	C	Magnesium Hydroxide	A	Potassium Hydroxide	A
Dioxane	A	Magnesium Nitrate	A	Potassium Nitrate Sat'd	A
Diphenyl Oxide	C	Magnesium Oxide	A	Potassium Perborate Sat'd	A
Disodium Phosphate	A	Magnesium Salts	A	Potassium Perchlorate	A
Electrolyte	A	Magnesium Sulfate	A	Potassium Phosphates	A
Ethanol	A	Maleic Acid	A	Potassium Sulfate	A
Ether	C	Methanol	A	Propanol	A
Ethyl Acetate (100%)	B	Methyl Acetate	A	Propargyl Alcohol (7%)	A
Ethyl Alcohol	A	Methyl Alcohol (100%)	A	Propionic Acid (50%)	A
Ethyl Butyrate	B	Methyl Amine (32%)	A	Propyl Alcohol	A
Ethyl Chloride	C	Methyl Bromide	C	Propylene Dichloride (100%)	A
Ethyl Ether	C	Methyl Chloride	C	Propylene Glycol	A
Ethylene Chloride	C	Methyl Ethyl Ketone	B	Propylene Oxide	A
Ethylene Chlorohydrin	A	Methyl Isobutyl Ketone	B	Pyridine	B
Ethylene Diamine	A	Methyl Isopropyl Ketone	B	Selenic Acid	A
Ethylene Dichloride	C	Methyl Sulfate	A	Sewage	A
Ethylene Glycol	A	Methyl Sulfuric Acid (All Conc.)	A	Silicic Acid	A
Ethylene Oxide	C	Methylene Chloride	C	Silver Nitrate	A
Fatty Acids	A	Mineral Oils	A	Soda Ash	A
Ferric Sulfate	A	Monochloroacetic Acid Ethyl Ester	A	Sodium Acetate Sat'd	A
Ferrous Salts	A	Monochloroacetic Acid Methyl Ester	A	Sodium Benzoate	A
Ferrous Sulfate	A	Mowilith D	A	Sodium Bisulfate (10%)	A
Fluoboric Acid	A	Naptha	B	Sodium Bisulfite	A
Fluosilicic Acid (All Conc.)	A	Napthalene	B	Sodium Bromate	B
Formaldehyde (40%)	A	Nicotine Dilute	A	Sodium Chloride	A
Formamide	A	Nicotinic Acid	A	Sodium Chlorite	A
Formic Acid (All Conc.)	A	Nitric Acid (50%)	A	Sodium Chromate	A
Fuel Oil	A	Nitrobenzene	B	Sodium Disulfite	A
Furfural (100%)	A	Nitrotoluene	B	Sodium Dithionite (10%)	A
Furfuryl Alcohol	C	Octyl Cresol	A	Sodium Fluoride Sat'd	A
Gallic Acid Sat'd	A	Oleic Acid (All Conc.)	A	Sodium Hydroxide Conc	A
Gasoline	A	Oleum Conc	C	Sodium Hypochlorite	A
Gluconic Acid (All Conc.)	A	Oxalic Acid (All Conc.)	C	Sodium Nitrate	A
Glycerine	A	Palmitic Acid	C	Sodium Oxalate	A
Glycol	A	Paraffin Emulsions	A	Sodium Persulfate	A
Heptane	A	Perchloric Acid (50%)	A	Sodium Phosphate	A
Hexane	A	Perchloroethylene	B	Sodium Sulfonates	A
Hydrazone Hydrate	A	Petroleum Ether	B	Stearic Acid (All Conc.)	A
Hydrobromic Acid (50%)	A	Petroleum	A	Succinic Acid	A
Hydrochloric Acid (All Conc.)	A	Phenylhydrazine	C	Sulfuric Acid (98%)	B
Hydrocyanic Acid Sat'd	A	Phosphoric Acid (All Conc.)	A	Sulfuric Acid, Fuming	C
Hydrofluoric Acid (All Conc.)	A	Phosphorous (Yellow 100%)	A	Sulfurous Acid	A
Hydrofluorosilicic Acid (All Conc.)	A	Phosphorous Chlorides	B	Sulfuryl Chloride	C
Hydrogen Bromide (10%)	A	Phosphorous Pentoxide	A	Tartaric Acid Sat'd	A
Hydrogen Peroxide (90%)	A	Photographic Solutions	A	Tetrachlorethylene	C
Hydrogen Phosphide (100%)	A	Phthalic Acid (All Conc.)	A	Tetrachloroethane	C
Hydrogen Sulfide	A	Phthalic Anhydride	A	Tetrahydrofuran	C
Hydroiodic Acid (All Conc.)	A	• Sulfuric Acid	A	Tetrahydronaphthalene	C
Hydroquinone	A	• Hydrochloric Acid	A	Thionyl Chloride	C
Hydro sulfite (10%)	A	Picric Acid (1%)	A	Titanium Salts	B
Hydroxylamine Sulfate	A	Plating Solutions	A	Toluene Sulfonic Acid (All Conc.)	B
Hydrozine (35%)	A	Potassium Aluminum Sulfates (50%)	A	Toluene	B
Hydrozine Hydrochloride	A	Potassium Bichromate	A	Transformer Oil	A
Hypochlorous Acid	A	Potassium Borate (10%)	A	Tributylphosphate	A
Iso Octane	B	Potassium Bromide	A	Trichloroacetic Acid	B
Isopropyl Acetate	A	Potassium Chlorate	A	Trichloroethane	C
Isopropyl Alcohol	A	Potassium Chloride	A	Trichloroethylene	C
Isopropyl Ether	C	Potassium Chromate	A	Tricresyl Phosphate	A
Jet Fuel	B	Potassium Cyanide	A	Triethanolamine	A
Kerosene	B	Potassium Dichromate (40%)	A	Trioctyl Phosphate	C
Lactic Acid (All Conc.)	A	Potassium Ferri Ferro Cyanide Sat'd	A	Trisodium Phosphate Sat'd	A
Lead Acetate Sat'd	A	Potassium Fluoride	A	Turpentine Oil	C
Magnesium Carbonate	A			Xylene	C