

Polyethylene Chemical Compatibility Guide

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.

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.

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 exposure time of one week or less.

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|---|---------------------------------------|--|--|--|
| Acetaldehyde (40%)A | Bromine, WaterC | Disodium PhosphateA | Magnesium SaltsA | Potassium PerchlorateA |
| AcetamideA | BromobenzeneC | ElectrolyteA | Magnesium SulfateA | Potassium PhosphatesA |
| AcetoneA | BromoformC | EthanolA | Maleic AcidA | Potassium SulfateA |
| Acetylene TetrabromideB | ButadieneA | EtherC | MethanolA | PropanolA |
| Acrylic EmulsionsB | Butanediol (100%)A | Ethyl Acetate (100%)B | Methyl AcetateA | Propargyl Alcohol (7%)A |
| AcrylonitrileA | ButanolA | Ethyl AlcoholA | Methyl Alcohol (100%)A | Propionic Acid (50%)A |
| Adipic AcidA | Butyl AcetateA | Ethyl ButyrateB | Methyl Isopropyl KetoneB | Propyl AlcoholA |
| Aliphatic HydrocarbonsA | Butyl Alcohol (100%)A | Ethyl ChlorideC | Methyl BromideC | Propylene Dichloride (100%)A |
| AlkalineA | Butyl PhenolC | Ethyl EtherC | Methyl ChlorideC | Propylene GlycolA |
| Allyl Alcohol (96%)A | Butylene GlycolA | Ethylene ChlorideC | Methyl Ethyl KetoneB | Propylene OxideA |
| Aluminum Chloride (20%)A | Butylene LiquidC | Ethylene ChlorohydrinA | Methyl Isobutyl KetoneB | PyridineB |
| Aluminum FluorideA | ButyleneC | Ethylene DiamineA | Methyl Isopropyl KetoneB | Selenic AcidA |
| Aluminum Hydrogen Solution (10%)A | Butyric AcidA | Ethylene DichlorideC | Methyl SulfateA | SewageA |
| Aluminum HydroxideA | Calcium CarbonateA | Ethylene GlycolA | Methyl Sulfuric Acid (All Conc.)A | Silicic AcidA |
| Alums (All Types)A | Calcium ChlorideA | Ethylene OxideC | Methylene ChlorideC | Silver NitrateA |
| Ammonia (Aqueous)A | Calcium HydroxideA | Fatty AcidsA | Mineral OilsA | Soda AshA |
| Ammonium AcetateA | Calcium HypochloriteA | Ferric SulfateA | Monochloroacetic Acid Ethyl EsterA | Sodium Acetate Sat'dA |
| Ammonium BifluorideA | Calcium Nitrate (50%)A | Ferrous SaltsA | Monochloroacetic Acid Methyl EsterA | Sodium BenzoateA |
| Ammonium Carbonate (50%)A | Calcium SulfateA | Ferrous SulfateA | Mowliith DA | Sodium Bisulfate (10%)A |
| Ammonium ChlorideA | Carbon BisulfideC | Fluoboric AcidA | NapthaB | Sodium BisulfiteA |
| Ammonium Hydrogen Fluoride (50%)A | Carbon DisulfideC | Fluosilicic Acid (All Conc.)A | NapthaleneB | Sodium BromateB |
| Ammonium HydroxideA | Carbon MonoxideA | Formaldehyde (40%)A | Nicotine DiluteA | Sodium ChlorideA |
| Ammonium Metaphosphate Sat'dA | Carbon TetrachlorideC | FormamideA | Nicotinic AcidA | Sodium ChloriteA |
| Ammonium Nitrate Sat'dA | Carbolic Acid (Aq. CO2)A | Formic Acid (All Conc.)A | Nitric Acid (50%)A | Sodium ChromateA |
| Ammonium Persulfate Sat'dA | Caustic (Aqueous)A | Fuel OilA | NitrobenzeneB | Sodium DisulfiteA |
| Ammonium PhosphateA | Caustic Potash Sol. (50%)A | Furfural (100%)A | NitrotolueneB | Sodium Dithionite (10%)A |
| Ammonium SaltsA | Caustic Soda Sol. (10%)A | Furfuryl AlcoholC | Octyl CresolA | Sodium Fluoride Sat'dA |
| Ammonium Sulfate Sat'dA | Chloroacetic AcidA | Gallic Acid Sat'dA | Oleic Acid (All Conc.)A | Sodium Hydroxide Conc.A |
| Ammonium Sulfide, Sat'dA | ChlorobenzeneA | GasolineC | Oleum Conc.C | Sodium HypochloriteA |
| Ammonium Thiocyanate Sat'dA | ChloroformC | Gluconic Acid (All Conc.)A | Oxalic Acid (All Conc.)A | Sodium NitrateA |
| Amyl AcetateA | ChloromethaneC | GlycerineA | Palmitic AcidC | Sodium OxalateA |
| Amyl Alcohol (100%)A | Chlorosulfonic Acid (100%)C | GlycolA | Paraffin EmulsionsA | Sodium SulfateA |
| Amyl ChlorideC | Chrome Alum Sat'dA | HexaneA | Perchloric Acid (50%)A | Sodium PhosphateA |
| Aniline (100%)B | Chromic Acid (50%)B | HexaneA | PerchloroethyleneB | Sodium SulfonatesA |
| Aniline HydrochlorideB | Cycloic Acid (All Conc.)A | Hydrazone HydrateA | Petroleum EtherB | Stearic Acid (All Conc.)A |
| Anti FreezeA | Copper CyanideA | Hydrobromic Acid (50%)A | PetroleumA | Succinic AcidA |
| Antimony SaltsA | Cresylic AcidA | Hydrochloric Acid (All Conc.)A | PhenyldiazineC | Sulfuric Acid (98%)B |
| Antimony Trichloride (90%)A | Crotonic AldehydeA | Hydrocyanic Acid Sat'dA | Phosphoric Acid (All Conc.)A | Sulfuric Acid, FumingC |
| Aqua RegiaC | Cuprous Chloride Sat'dA | Hydrofluoric Acid (All Conc.)A | Phosphorous (Yellow 100%)A | Sulfurous AcidA |
| Aqueous Alkalies (NaOH)A | CyclohexanoneB | Hydrofluorosilicic Acid (All Conc.)A | Phosphorous ChloridesB | Sulfuryl ChlorideC |
| Arsenic AcidA | CyclohexaneA | Hydrogen Bromide (10%)A | Phosphorous PentoxideA | Tartaric Acid Sat'dA |
| Asctetic Acid (50%)A | CyclohexanolA | Hydrogen Peroxide (90%)A | Photographic SolutionsA | TetrachlorethyleneC |
| Asctetic Acid AnhydrideB | Dextrin Sat'dA | Hydrogen Phosphide (100%)A | Phthalic Acid (All Conc.)A | TetrachloroethaneC |
| Asctetic EtherB | Dextrose Sat'dA | Hydrogen SulfideA | Phthalic AnhydrideA | TetrahydrofuranC |
| Barium CarbonateA | Di Isobutyl KetoneB | Hydroiodic Acid (All Conc.)A | Pickling BathsA | TetrahydronaphthaleneC |
| Barium ChlorideA | Dibutyl EtherC | HydroquinoneA | • Sulfuric AcidA | Thionyl ChlorideC |
| Barium CyanideA | Dibutyl SebacateB | Hydro sulfite (10%)A | • Hydrochloric AcidA | Titanium SaltsB |
| Barium HydroxideA | DibutylphthalateB | Hydroxylamine SulfateA | Picric Acid (1%)A | Toluene Sulfonic Acid (All Conc.)B |
| Barium NitrateA | Dichloroacetic AcidB | Hydrozine (35%)A | Plating SolutionsA | TolueneB |
| Barium SaltsA | Dichlorobenzene, LiquidC | Hydrozine HydrochlorideA | Potassium Aluminum Sulfates (50%)A | Transformer OilA |
| Barium SulfateA | DichloroethyleneC | Hypochlorous AcidA | Potassium BichromateA | TributylphosphateA |
| Barium SulfideA | Diesel FuelB | Iso OctaneB | Potassium Borate (10%)A | Trichloroacetic AcidB |
| Battery Fluid, AcidB | Diesel OilB | Isopropyl AcetateA | Potassium BromideA | TrichloroethaneC |
| BenzaldehydeA | DiethanolamineB | Isopropyl AlcoholA | Potassium ChlorateA | TrichloroethyleneC |
| Benzene Sulfonic AcidB | Diethyl CarbonateA | Isopropyl EtherC | Potassium ChlorideA | Tricresyl PhosphateA |
| BenzeneB | Diethylene GlycolA | Jet FuelB | Potassium ChromateA | TriethanolamineA |
| Benzoic AcidA | Digycolic Acid (30%)A | KeroseneB | Potassium CyanideA | Triethyl PhosphateC |
| Benzyl AlcoholA | Dimethyl FormamideB | Lactic Acid (All Conc.)A | Potassium Dichromate (40%)A | Trisodium Phosphate Sat'dA |
| Benzyl ChloroformateA | DimethylamineB | Lead Acetate Sat'dA | Potassium Ferri Ferro Cyanide Sat'dA | Turpentine OilC |
| Boric Acid Conc.A | Dinonyl PhthalateC | Magnesium CarbonateA | Potassium FluorideA | XyleneC |
| Boric Acid DiluteA | Diocetyl PhthalateC | Magnesium HydroxideA | Potassium HydroxideA | |
| Borz Cold Sat'dA | DioxaneA | Magnesium NitrateA | Potassium Nitrate Sat'dA | |
| Bromine, LiquidC | Diphenyl OxideC | Magnesium OxideA | Potassium Perborate Sat'dA | |