



Chemical Compatibility Guide For Reinforced Polyethylene (RPE) Berms

This listing was prepared to provide guidance to the chemical compatibility of UltraTech's Berms which are manufactured and constructed of reinforced 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 RPE berm 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 berms 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 = Fluid has little to no effect.

B = Fluid has minor to moderate effect.

C = Do NOT store these chemicals in RPE berms.

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

Material	Rating
Acetic Acid (5%)	A
Acetic Acid (50%)	B
Acetic Acid (Gla.)	C
Acetic Anhydride	C
Acetone	C
Aluminum Chloride	A
Aluminum Flouride	A
Aluminum Sulfate	A
Ammonium Carbonate	A
Ammonium Chloride	A
Ammonium Fluoride (20%)	A
Ammonium Hydroxide (30%)	A
Ammonium Nitrate	A
Ammonium Sulphate	A
Ammonium Sulphide	A
Amyl Acetate	C
Amyl Alcohol	B
Amyl Chloride	C
Aniline	B
Antimony Chloride	A
Aqua Regia	C
Barium Carbonate	A
Barium Hydroxide	A
Barium Sulphate	A



Material	Rating
Benzene (<1%)	B* (Estimated. Testing required to confirm.)
Benzene (25%)	C
Benzene (100%)	C
Benzoic Acid	A
Borax Solutions	A
Boric Acid	A
Bromic Acid (10%)	A
Bromine; Anhydrous	C
Butyl Acetate	C
Butyl Alcohol	B
Butyric Acid	C
Calcium Carbonate	A
Calcium Chloride	A
Calcium Hydroxide	A
Calcium Hypochlorite	A
Calcium Nitrate (50%)	A
Calcium Sulphate	A
Carbon Disulfide	C
Carbon Tetrachloride	C
Carbonic Acid	A
Castor Oil	B
Chlorine Gas	C
Chloroacetic Acid	A
Chlorobenzene	C
Chloroform	C
Chlorosulfonic Acid	C
Chrome Alum	A
Chromic Acid (30%)	A
Citric Acid	B
Copper Chloride	A
Copper Nitrate	A
Copper Sulphate	A
Corn Oil	A
Cottonseed Oil	B
Cyclohexanol	B
Cyclohexanone	C
Dextrin	A
Dibutyl Phthalate	B
Diesel Fuel	B

Material	Rating
Diethyl Keytone	C
Dimethylamine	C
Dioctyl Phthalate	B
Disodium Phosphate	A
Ethyl Acetate	C
Ethyl Alcohol	B
Ethyl Chloride	C
Ethylene Dichloride	C
Ethylene Glycol	B
Ferric Chloride	A
Ferric Nitrate	A
Ferrous Chloride	A
Ferrous Sulfate	A
Formaldehyde (40%)	B
Formic Acid	A
Furfural	C
Gallic Acid	B
Gasoline (<25 BTX)	C
Gasoline (>25 BTX)	C
Glucose	A
Glycerine	B
Hydrochloric Acid (20%)	A
Hydrochloric Acid (37%)	A
Hydrocyanic Acid	A
Hydrofluoric Acid (20%)	A
Hydrofluoric Acid (75%)	A
Hydrogen Peroxide (3%)	A
Hydrogen Peroxide (10%)	A
Hydrogen Sulfide	A
Hydroquinone	A
Lactic Acid	B
Lead Acetate	A
Linseed Oil	B
Lubricating Oil	C
Magnesium Carbonate	A
Magnesium Chloride	A
Magnesium Hyroxide	A
Magnesium Nitrate	A
Magnesium Sulphate	A
Malic Acid	A

Material	Rating
Mercuric Chloride	A
Methyl Alcohol	B
Methyl Ethyl Keytone	C
Mineral Oil	B
Naptha	C
Napthalene	C
Nitric Acid (10%)	A
Nitric Acid (50%)	A
Nitric Acid (70%)	B
Nitro Benzene	C
Oleic Acid	C
Oleum (25%)	C
Oxalic Acid	A
Perchloroethylene (100%)	C
Phosphoric Acid (50%)	A
Phosphoric Acid (75%)	A
Photographic Solutions	A
Pickling Solutions	B
Potassium Bicarbonate	A
Potassium Carbonate	A
Potassium Chromate (40%)	A
Potassium Cyanide	A
Potassium Hydroxide	A
Potassium Nitrate	A
Potassium Perchlorate (10%)	A
Potassium Sulfate	A
Pyradine	A
Salt Water	A
Silver Nitrate	A
Soap Solutions	A
Sodium Acetate	A
Sodium Bicarbonate	A
Sodium Bisulphite	A
Sodium Borate	A
Sodium Carbonate	A
Sodium Chlorate	A
Sodium Chloride	A
Sodium Dichromate (20%)	A
Sodium Ferrocyanide	A
Sodium Fluoride	A

Material	Rating
Sodium Hydroxide (25%)	A
Sodium Hydroxide (60%)	A
Sodium Hypochlorite	A
Sodium Nitrate	A
Sodium Sulphate	A
Stannous Chloride	A
Stearic Acid	B
Styrene	C
Sulphuric Acid (10%)	A
Sulphuric Acid (40%)	A
Sulphuric Acid (98%)	C
Tannic Acid	B
Tetrahydrofuran	C
Toluene (100%)	C
Transformer Oil	B
Triethanolamine	A
Trisodium Phosphate	A
Turpentine	C
Urea	A
Water	A
Xylene (100%)	C
Zinc Chloride	A
Zinc Sulphate	A