

## 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

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.

polyethylene is limited.

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



Benzene (<1%)  Benzene (25%)  C  Benzene (100%)  A  Borix Solutions  A  Borix Acid  A  Bromic Acid (10%)  Buth A  Bromic Acid (10%)  Butyl Acetate  C  Butyl Alcohol  Butyric Acid  C  Calcium Carbonate  Calcium Carbonate  A  Calcium Hydroxide  A  Calcium Hydroxide  A  Calcium Nitrate (50%)  A  Calcium Nitrate (50%)  A  Calcium Sulphate  Carbon Disulfide  C  Carbon Tetrachloride  C  Carbonic Acid  Castor Oil  B  Chlorine Gas  C  Chlorobenzene  C  Chlorobenzene  C  Chlorosulfonic Acid  C  Chrome Alum  Chromic Acid (30%)  A  Corpper Chloride  C  Copper Sulphate  A  Corn Oil  A  Cottonseed Oil  B  Cyclohexanol  C  Dibutyl Phthalate  Dibutyl Phthalate  Dibutyl Phthalate  Ciethousetic Acytevane  C  Cottonsetic Newtone	Material	Rating
Benzene (25%)         C           Benzene (100%)         C           Benzoic Acid         A           Borax Solutions         A           Boric Acid         A           Bromic Acid (10%)         A           Bromic, Anhydrous         C           Butyl Acetate         C           Butyl Alcohol         B           Butyric Acid         C           Calcium Carbonate         A           Calcium Chloride         A           Calcium Hydroxide         A           Calcium Hypochlorite         A           Calcium Sulphate         A           Carbon Disulfide         C           Carbon Disulfide         C           Carbon Tetrachloride         C           Carbonic Acid         A           Castor Oil         B           Chlorine Gas         C           Chlorocetic Acid         A           Chloroform         C           Chlorosulfonic Acid         C           Chlorosulfonic Acid         C           Chrome Alum         A           Chrome Alum         A           Chromic Acid (30%)         A           Citric Acid         B </td <td>Benzene (&lt;1%)</td> <td>B*</td>	Benzene (<1%)	B*
Benzene (100%)         C           Benzene (100%)         C           Benzoic Acid         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           Chloracetic Acid         A           Chlorosulfonic Acid         C           Chlorosulfonic Acid         C           Chrome Alum         A           Chrome Alum         A           Chromic Acid (30%)         A           Citric Acid         B           Copper Nitrate         A           Copper Sulphate         A<		
Benzene (100%)         C           Benzoic Acid         A           Borax Solutions         A           Boric Acid         A           Bromic Acid (10%)         A           Bromine; Anhydrous         C           Butyl Acetate         C           Butyl Aclohol         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 Disulfide         C           Carbon Tetrachloride         C           Carbonic Acid         A           Castor Oil         B           Chlorine Gas         C           Chloracetic Acid         A           Chlorosetic Acid         A           Chlorosulfonic Acid         C           Chlorosulfonic Acid         C           Chrome Alum         A           Chromic Acid (30%)         A           Citric Acid         B           Copper Nitrate		
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 Hydroxide A Calcium Hydroxide A Calcium Sulphate A Carbon Disulfide C Carbonic Acid A Castor Oil B Chlorosulfonic Acid C Chrome Alum A Chromic Acid (30%) A Copper Sulphate A Copper Sulphate A Copper Sulphate A Corn Oil B Cyclohexanol B Cyclohexanone C C Carbonic Acid A Copper Sulphate A Copper Sulph		
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 Hydroxide         A           Calcium Nitrate (50%)         A           Calcium Sulphate         A           Calcium Sulphate         A           Carbon Disulfide         C           Carbon Tetrachloride         C           Carbonic Acid         A           Castor Oil         B           Chlorine Gas         C           Chloracetic Acid         A           Chlorosetic Acid         A           Chlorosulfonic Acid         C           Chlorosulfonic Acid         C           Chrome Alum         A           Chrome Alum         A           Chrome Alum         A           Copper Chloride         A           Copper Sulphate         A           Copper Sulphate		С
Boric Acid		Α Α
Bromic Acid (10%) Bromine; Anhydrous C Butyl Acetate C Butyl Alcohol B B Butyric Acid C Calcium Carbonate C Calcium Chloride C Calcium Hydroxide C Calcium Hydroxide C Calcium Nitrate (50%) C Carbon Disulfide C Carbon Tetrachloride C Carbonic Acid C Castor Oil C Chlorosulfonic Acid C Chrome Alum C Chrome Alum C Copper Nitrate C Corn Oil C C Corn Oil C C Corn Oil C C C C C C C C C C C C C C C C C C C	Borax Solutions	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           Chlorine Gas         C           Chlorobenzene         C           Chloroform         C           Chlorosulfonic Acid         C           Chrome Alum         A           Chrome Alum         A           Chromic Acid (30%)         A           Citric Acid         B           Copper Chloride         A           Copper Nitrate         A           Copper Sulphate         A           Corn Oil         B           Cyclohexanol         B           Cyclohexanone         C	Boric Acid	Α
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           Carbon Tetrachloride         C           Carbonic Acid         A           Castor Oil         B           Chlorine Gas         C           Chlorine Gas         C           Chlorine Gas         C           Chlorobenzene         C           Chloroform         C           Chloroform         C           Chlorosulfonic Acid         C           Chrome Alum         A           Chrome Alum         A           Chromic Acid (30%)         A           Citric Acid         B           Copper Nitrate         A           Copper Sulphate         A           Cortonseed Oil         B           Cyclohexanol         B	Bromic Acid (10%)	A
Butyl Alcohol B Butyric Acid C Calcium Carbonate A Calcium Chloride A Calcium Hydroxide A Calcium Hypochlorite A Calcium Sulphate A Carbon Disulfide C Carbon Tetrachloride C Carbonic Acid A Castor Oil B Chlorine Gas C Chloracetic Acid A Chlorobenzene C Chlorosulfonic Acid C Chrome Alum A Chromic Acid (30%) A Citric Acid B Copper Chloride A Corn Oil A Corn Oil B Chlorise A Chlorosulfonic Acid C C Chrome Alum A Chromic Acid B Copper Sulphate A Corn Oil A Cottonseed Oil B Cyclohexanol C C Chextrin A Dibutyl Phthalate	Bromine; Anhydrous	С
Butyric Acid C Calcium Carbonate A Calcium Hydroxide A Calcium Hypochlorite A Calcium Nitrate (50%) A Calcium Sulphate A Carbon Disulfide C Carbon Tetrachloride C Carbonic Acid A Chloracetic Acid A Chlorobenzene C Chlorosulfonic Acid C Chrome Alum A Chromic Acid (30%) A Citric Acid B Copper Chloride A Copper Sulphate A Corn Oil A Cottonseed Oil B Cyclohexanone C C Calcium Nitrate (50%) A A Calcium Hypochlorite A A Carbon Disulfide C C Carbon Tetrachloride A C C Chlorine Gas C C Chlorine Gas C C Chlorosulfonic Acid C C C Chrome Alum A C C C C C C C C C C C C C C C C C C C	Butyl Acetate	С
Calcium Carbonate Calcium Chloride Calcium Hydroxide Calcium Hypochlorite A Calcium Nitrate (50%) A Calcium Nitrate (50%) A Calcium Sulphate A Carbon Disulfide C Carbon Tetrachloride C Carbonic Acid A Castor Oil B Chlorine Gas C Chloracetic Acid A Chlorobenzene C Chloroform C Chlorosulfonic Acid Chrome Alum A Chromic Acid (30%) Citric Acid B Copper Chloride Copper Nitrate A Copper Sulphate A Corn Oil B Cyclohexanone C C Chextin C C C Chextin C C C C C C C C C C C C C C C C C C C	Butyl Alcohol	В
Calcium Chloride Calcium Hydroxide Calcium Hypochlorite A Calcium Nitrate (50%) A Calcium Sulphate A Carbon Disulfide Carbon Tetrachloride Carbonic Acid A Castor Oil B Chlorine Gas C Chloracetic Acid A Chlorobenzene C Chlorosulfonic Acid Chrome Alum A Chromic Acid (30%) Citric Acid B Copper Chloride Copper Sulphate A Corn Oil A Cottonseed Oil B Cyclohexanone C C Chloroxetic Acid B Coppet Chloride Coppet Chloride Coppet Chloride Coppet Sulphate Coppet Chloride C C Chome Alum Cottonseed Oil B Cyclohexanone C C Chloroxetic Acid B Coppet Chloride Chloride Chloride Chlorid	Butyric Acid	С
Calcium Hydroxide Calcium Hypochlorite Calcium Nitrate (50%) A Calcium Sulphate A Carbon Disulfide Carbon Tetrachloride Carbonic Acid A Castor Oil B Chlorine Gas C Chloracetic Acid A Chlorobenzene C Chlorosulfonic Acid Chrome Alum A Chromic Acid (30%) Citric Acid B Copper Chloride A Copper Sulphate Corn Oil A Cottonseed Oil B Cyclohexanone C C Chlorosulfonic Acid Coppextrin A Cottonsextrin A Coppextrin A Cobbox A Coppextrin Cop	Calcium Carbonate	A
Calcium HypochloriteACalcium Nitrate (50%)ACalcium SulphateACarbon DisulfideCCarbon TetrachlorideCCarbonic AcidACastor OilBChlorine GasCChloracetic AcidAChlorobenzeneCChlorosulfonic AcidCChrome AlumAChromic Acid (30%)ACitric AcidBCopper ChlorideACopper NitrateACorn OilACottonseed OilBCyclohexanolBCyclohexanoneCDextrinADibutyl PhthalateB	Calcium Chloride	А
Calcium Nitrate (50%) Calcium Sulphate Carbon Disulfide Carbon Tetrachloride Carbonic Acid A Castor Oil B Chlorine Gas C Chloracetic Acid A Chlorobenzene C Chlorosulfonic Acid Chrome Alum A Chromic Acid (30%) Citric Acid B Copper Chloride A Copper Sulphate Corn Oil A Cyclohexanone C Cyclohexanone C Cyclohexanone C Chlorosulfonic Acid C C Chrome Alum A Chromic Acid (30%) A Citric Acid B Copper Sulphate A Corn Oil A Cottonseed Oil B Cyclohexanone C C Chrome Alum A C C Chrome Alum A C C C C C C C C C C C C C C C C C C	Calcium Hydroxide	A
Calcium Sulphate Carbon Disulfide C Carbon Tetrachloride C Carbonic Acid A Castor Oil B Chlorine Gas C Chloracetic Acid A Chlorobenzene C Chloroform C Chlorosulfonic Acid C Chrome Alum A Chromic Acid (30%) A Citric Acid B Copper Chloride Copper Nitrate A Corn Oil A Cottonseed Oil Cyclohexanone C Cyclohexanone C C Chrome Alum A Coppert Chloride A Copper Sulphate A Corn Oil C Cottonseed Oil C C C C C C C C C C C C C C C C C C C	Calcium Hypochlorite	A
Carbon Disulfide Carbon Tetrachloride Carbonic Acid A Castor Oil B Chlorine Gas C Chloracetic Acid A Chlorobenzene C Chloroform C Chlorosulfonic Acid Chrome Alum A Chromic Acid (30%) A Citric Acid B Copper Chloride A Copper Sulphate Corn Oil A Cottonseed Oil B Cyclohexanone C Chrome Alum A Copper Sulphate Copper Sulp	Calcium Nitrate (50%)	A
Carbon Tetrachloride Carbonic Acid A Castor Oil B Chlorine Gas C Chloracetic Acid A Chlorobenzene C Chloroform C Chlorosulfonic Acid Chrome Alum A Chromic Acid (30%) Citric Acid B Copper Chloride Copper Nitrate A Corn Oil A Cottonseed Oil B Cyclohexanol C C Chrome Alum A Chromic Acid B Copertrin A Copper Sulphate Corn Oil B Cyclohexanol C C C C C C C C C C C C C C C C C C C	Calcium Sulphate	A
Carbonic Acid A Castor Oil B Chlorine Gas C Chloracetic Acid A Chlorobenzene C Chloroform C Chlorosulfonic Acid C Chrome Alum A Chromic Acid (30%) A Citric Acid B Copper Chloride A Copper Sulphate A Corn Oil A Cottonseed Oil B Cyclohexanol B Cyclohexanone C Dextrin A Dibutyl Phthalate	Carbon Disulfide	С
Castor Oil B Chlorine Gas C Chloracetic 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	Carbon Tetrachloride	С
Chlorine Gas Chloracetic Acid A Chlorobenzene C Chloroform C Chlorosulfonic Acid Chrome Alum A Chromic Acid (30%) A Citric Acid B Copper Chloride A Copper Nitrate A Copper Sulphate A Cottonseed Oil B Cyclohexanol B Cyclohexanone C C Chlorosulfonic Acid C C Chrome Alum A A C C C Chrome Alum A A C C C Chrome Alum A A C C C C C C C C C C C C C C C C C	Carbonic Acid	А
Chloracetic 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	Castor Oil	В
Chlorobenzene 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	Chlorine Gas	С
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	Chloracetic Acid	А
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	Chlorobenzene	С
Chrome Alum Chromic Acid (30%) A Citric Acid B Copper Chloride A Copper Nitrate A Copper Sulphate A Corn Oil A Cottonseed Oil B Cyclohexanol Cyclohexanone C Dextrin A Dibutyl Phthalate A A	Chloroform	С
Chromic Acid (30%)  Citric Acid  B  Copper Chloride  A  Copper Nitrate  A  Copper Sulphate  A  Corn Oil  A  Cottonseed Oil  B  Cyclohexanol  Cyclohexanone  C  Dextrin  A  Dibutyl Phthalate	Chlorosulfonic Acid	С
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	Chrome Alum	А
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	Chromic Acid (30%)	Α
Copper Nitrate A Copper Sulphate A Corn Oil A Cottonseed Oil B Cyclohexanol B Cyclohexanone C Dextrin A Dibutyl Phthalate B		В
Copper Nitrate A Copper Sulphate A Corn Oil A Cottonseed Oil B Cyclohexanol B Cyclohexanone C Dextrin A Dibutyl Phthalate B	Copper Chloride	Α
Copper Sulphate         A           Corn Oil         A           Cottonseed Oil         B           Cyclohexanol         B           Cyclohexanone         C           Dextrin         A           Dibutyl Phthalate         B	Copper Nitrate	А
Corn Oil         A           Cottonseed Oil         B           Cyclohexanol         B           Cyclohexanone         C           Dextrin         A           Dibutyl Phthalate         B		A
CyclohexanolBCyclohexanoneCDextrinADibutyl PhthalateB		A
CyclohexanolBCyclohexanoneCDextrinADibutyl PhthalateB		
Cyclohexanone C  Dextrin A  Dibutyl Phthalate B		
Dextrin A Dibutyl Phthalate B		
Dibutyl Phthalate B	-	
		В
DIGGITTI NOTAGITO	Diethyl Keytone	C

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



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



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