



Chemical Resistance Chart

Crown Polymers Floor and Secondary Containment Systems

Products: CrownShield covers the following five (4) formulas:

CrownShield 50,	Product No. 320	CrownCote,	Product No. 401
CrownShield 40-2,	Product No. 323	CrownShield 28,	Product No. 322
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CrownPro AcidShield,	Product No. 350	CrownCote AcidShield,	Product No. 430
CrownPro SolventShield,	Product No. 351	CrownCote SolventShield,	Product No. 440

This chart shows chemical resistance of Crown Polymers foundational floor and secondary containment product line that would be exposed to chemical spill or immersion conditions. The chart was designed to provide general product information. For specific applications, contact your local Crown Polymers Floor and Secondary Containment Representative or call direct to the factory.

- ☑ Resistant to chemical immersion up to 7 days followed by wash down with water
- Spillage environments that will be cleaned up within 72 hours after initial exposure.
- ⊗ Not Recommended

Chemical	CrownShield	SolventShield	AcidShield
1, 4-Dichloro-2-butene	⊗	●	●
1, 4-Dioxane	⊗	●	●
1-1-1 Trichloroethane	⊗	☑	☑
2, 4-Pentanedione	●	☑	●
3, 4-Dichloro-1-butene	●	●	●
4-Picoline (0-50%)	⊗	●	●
Acetic Acid (0-15%)	⊗	●	●
Acetone (0-20%)	●	☑	●
Acetone (20-30%)	⊗	☑	●
Acetone (30-50%)	⊗	☑	⊗
Acetone (50-100%)	⊗	☑	⊗
Acetonitrile	☑	☑	☑
Acrylamide (0-50%)	☑	☑	☑
Adipic Acid Solution	☑	☑	☑
Alcohol, Ethyl	●	☑	☑
Alcohol, Isopropyl	☑	☑	☑
Alcohol, Methyl	⊗	☑	☑
Allyl Chloride	⊗	☑	☑
Allylamine (0-20%)	⊗	☑	☑
Allylamine (20-30%)	⊗	☑	☑
Allylamine (30-50%)	⊗	●	●

Chemical	CrownShield	SolventShield	AcidShield
Aluminum Bromate	☑	☑	☑
Aluminum Bromide	☑	☑	☑
Aluminum Chloride	☑	☑	☑
Aluminum Fluoride (25%)	☑	☑	☑
Aluminum Hydroxide	☑	☑	☑
Aluminum Iodine	☑	☑	☑
Aluminum Nitrate	☑	☑	☑
Aluminum Sodium Chloride	☑	☑	☑
Aluminum Sulfate	☑	☑	☑
Alums	☑	☑	☑
Ammonia – Wet	☑	☑	☑
Ammonium Benzoate	☑	☑	☑
Ammonium Chloride	☑	☑	☑
Ammonium Chlorostanate	☑	☑	☑
Ammonium Fluoride (25%)	☑	☑	☑
Ammonium Hydroxide	☑	☑	☑
Ammonium Iodate	☑	☑	☑
Ammonium Iodine	☑	☑	☑
Ammonium Nitrate	☑	☑	☑
Ammonium Oxalate	☑	☑	☑
Ammonium Phosphate	☑	☑	☑



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Chemical	CrownShield	SolventShield	AcidShield
Ammonium Silicate	☑	☑	☑
Ammonium Sulfate	☑	☑	☑
Ammonium Sulfide	☑	☑	☑
Ammonium Trichloride	☑	☑	☑
Aniline	●	●	●
Aniline Hydrochloride	●	☑	☑
Arsenic Acid (0-75%)	●	●	●
Barium Bromide	☑	☑	☑
Barium Chlorate	☑	☑	☑
Barium Chloride	☑	☑	☑
Barium Citate	☑	☑	☑
Barium Dichromate	☑	☑	☑
Barium Hydroxide (0-10%)	☑	☑	☑
Barium Iodate	☑	☑	☑
Barium Iodine	☑	☑	☑
Barium Nitrate	☑	☑	☑
Barium Nitrite	☑	☑	☑
Barium Oxalate	☑	☑	☑
Barium Sulfate	☑	☑	☑
Barium Sulfide	☑	☑	☑
Barium Sulfite	☑	☑	☑
Barium Iodate	☑	☑	☑
Beer	☑	☑	☑
Benzene	●	☑	☑
Benzene (5% in Kerosene)	●	☑	☑
Benzene Sulfonic Acid	☑	☑	☑
Benzoic Acid	☑	☑	☑
Benzyl Alcohol	●	●	☑
Beverages – Carbonated	☑	☑	☑
Bismuth Oxichloride	●	☑	☑
Black Liquor	☑	☑	☑
Bleach (0-6%)	☑	☑	☑
Bleach Liquor	☑	☑	☑
Blood	☑	☑	☑
Borax	☑	☑	☑
Boric Acid	☑	☑	☑
Bromic Acid	☑	☑	☑
Bromine Water	☑	☑	☑
Butadiene	☑	☑	☑
Butanol	☑	☑	☑
Butyl Acetate	⊗	☑	☑
Butyl Benzoate	●	☑	☑
Butyl Cellosolve	●	☑	☑
Butyl Mercaptan	☑	●	●
Cadmium Bromate	☑	☑	☑
Cadmium Bromide	☑	☑	☑
Calcium Bisulfate	☑	☑	☑
Calcium Bromate	☑	☑	☑
Calcium Bromide	☑	☑	☑
Calcium Carbonate	☑	☑	☑
Calcium Chlorate	☑	☑	☑
Calcium Chloride	☑	☑	☑
Calcium Citrate	☑	☑	☑
Calcium Hydroxide (0-50%)	☑	☑	☑
Calcium Hypochlorite (0-20%)	☑	☑	☑

Chemical	CrownShield	SolventShield	AcidShield
Calcium Phosphate	☑	☑	☑
Calcium Sulfate	☑	☑	☑
Calcium Thiosulfate	☑	☑	☑
Caprolactam	⊗	●	●
Carbon Disulfide	●	☑	☑
Carbon Tetrachloride	☑	☑	☑
Carbonic Acid	☑	☑	☑
Castor Oil	☑	☑	☑
Chlorine Water – All	☑	☑	☑
Chlorine, Dry Gas	☑	☑	☑
Chlorine, Wet Gas	☑	☑	☑
Chlorobenzene	⊗	☑	☑
Chlorostannic Acid	☑	☑	☑
Chromated Copper Arsenate (CCA) 50%	●	☑	☑
Chrome Plating (Hard)	☑	☑	☑
Chromic Acid (0-10%)	☑	☑	☑
Chromic Acid, 66%	⊗	●	☑
Chromic Sulfate	☑	☑	☑
Chromous Chloride	☑	☑	☑
Chromous Iodine	☑	☑	☑
Citric Acid	☑	☑	☑
Copper Chloride	☑	☑	☑
Copper Fluoride	☑	☑	☑
Copper Nitrate	☑	☑	☑
Copper Sulfate	☑	☑	☑
Creosote	☑	☑	☑
Crude Oil – Sour	☑	☑	☑
Crude Oil - Sweet	☑	☑	☑
Cupric Bromate	☑	☑	☑
Cupric Bromide	☑	☑	☑
Cupric Sulfate	☑	☑	☑
Cuprous Sulfite	☑	☑	☑
Cuprous Thiocyanate	☑	☑	☑
Cyclohexane	☑	☑	☑
Cyclohexylamine	⊗	●	●
Cyclopentane	☑	☑	☑
Deionized Water	☑	☑	☑
Detergents, All	☑	☑	☑
Di-tert-Butyl Peroxide	☑	☑	☑
Diacetone Alcohol	☑	☑	☑
Diallylamine	⊗	●	●
Dichlorobenzene, Ortho	⊗	●	●
Dicyclopentadiene	●	●	●
Diesel Fuel	☑	☑	☑
Dimethylsulfate	☑	☑	☑
Diocetyl Phthalate	☑	☑	☑
Dursban	☑	☑	☑
Ethanolamine	●	●	●
Ether	☑	☑	☑
Ethyl Acetate	⊗	☑	☑
Ethyl Acrylate (100%)	●	☑	☑
Ethyl Cellosolve	⊗	☑	☑
Ethyl Hexanoate	⊗	☑	☑
Ethyl Hexanol	⊗	☑	☑
Ethylene Glycol	☑	☑	☑

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Chemical	CrownShield	SolventShield	AcidShield
Ethylmorpholine	☑	☑	☑
Fat	☑	☑	☑
Fatty Acids	☑	☑	☑
Ferric Bromide	☑	☑	☑
Ferric Chloride	☑	☑	☑
Ferric Formate	☑	☑	☑
Ferric Nitrate	☑	☑	☑
Ferric Oxalate	☑	☑	☑
Ferric Sulfate	☑	☑	☑
Ferric Sulfide	☑	☑	☑
Ferric Thiocyanate	☑	☑	☑
Ferrous Chloride	☑	☑	☑
Ferrous Chloroplatinate	☑	☑	☑
Ferrous Ferricyanide	☑	☑	☑
Ferrous Fluoride	☑	☑	☑
Ferrous Formate	☑	☑	☑
Ferrous Iodide	☑	☑	☑
Ferrous Perchlorate	☑	☑	☑
Ferrous Potassium Oxalate	☑	☑	☑
Ferrous Sulfate	☑	☑	☑
Ferrous Thiocyanate	☑	☑	☑
Ferrous Thiosulfate	☑	☑	☑
Fluoboric Acid (0-50%)	☑	☑	☑
Fluosilicic Acid (0-32%)	☑	☑	☑
Foam Chemical – AFFF	☑	☑	☑
Formaldehyde (0-40%)	●	☑	☑
Formic Acid (0-10%)	⊗	●	☑
Freon	☑	☑	☑
Fumaric Acid (0-5.5%)	⊗	☑	☑
Funginex	☑	☑	☑
Gasoline Refine, All	☑	☑	☑
Glucose	☑	☑	☑
Glycerine	☑	☑	☑
Glycol Ether PM	☑	●	☑
Glycol Ether PM Acetate	☑	☑	☑
Glycol, Ethylene	☑	☑	☑
Glyol, Propylene	☑	☑	☑
Glyoxal	☑	☑	☑
Heptane	☑	☑	☑
Hydraulic Fluid	☑	☑	☑
Hydrazine, 35%, Catalyzed	☑	☑	☑
Hydrobomic Acid (-50%)	⊗	●	●
Hydrochloric Acid (0-37%)	⊗	●	☑
Hydrofluoric Acid (0-20%)	⊗	●	●
Hydrogen Peroxide (10-35%)	☑	☑	☑
Hydrogen Sulfide, Aqueous	☑	☑	☑
Hypochlorous Acid (0-10%)	☑	☑	☑
Hydroquinone (0-7%)	☑	☑	☑
Isophorone	☑	☑	☑
Isopropyl Biphenyl	☑	☑	☑
Jet Fuel	☑	☑	☑
Kerosene	☑	☑	☑
Lactic Acid (0-10%)	●	●	☑
Lactic Acid (10-20%)	●	●	☑
Lactic Acid (40-88%)	⊗	●	☑

Chemical	CrownShield	SolventShield	AcidShield
Lard	☑	☑	☑
Lauric Acid	☑	☑	☑
Lead Acetate	☑	☑	☑
Lead Fluobate (0-48%)	☑	☑	☑
Lead Persulfate	☑	☑	☑
Lithium Acetate	☑	☑	☑
Lithium Sulfide	☑	☑	☑
Lix 84 (Henkel)	☑	☑	☑
Magnesium Acetate	☑	☑	☑
Magnesium Bromide	☑	☑	☑
Magnesium Carbonate	☑	☑	☑
Magnesium Chloride	☑	☑	☑
Magnesium Hydroxide	☑	☑	☑
Magnesium Nitrate	☑	☑	☑
Magnesium Perchlorate	☑	☑	☑
Magnesium Sulfate	☑	☑	☑
Magnesium Thiosulfate	☑	☑	☑
Maleic Acid (100%)	☑	☑	☑
Manganese Chloride	☑	☑	☑
Manganese Iodine	☑	☑	☑
Manganese Lactate	☑	☑	☑
Manganese Sulfate	☑	☑	☑
Mercurous Nitrate	☑	☑	☑
Mercury	☑	☑	☑
Methacrylic Acid	⊗	●	●
Methyl Ethyl Ketone	⊗	●	●
Methyl Formate	⊗	☑	☑
Methyl Isobutyl Ketone	☑	☑	☑
Methyl Methacrylate	⊗	☑	☑
Mineral Oils	☑	☑	☑
Molasses	☑	☑	☑
Molybdenum Oxybromide	☑	☑	☑
Molybdenum Oxychloride	☑	☑	☑
Molybdenum Tetrabromide	☑	☑	☑
Morpholine (0-50%)	●	☑	☑
Morpholine (50-100%)	⊗	●	●
Naphthas	☑	☑	☑
Naphthalene	☑	☑	☑
Nickel Bromide	☑	☑	☑
Nickel Chloride	☑	☑	☑
Nickel Formate	☑	☑	☑
Nickel Nitrate	☑	☑	☑
Nickel Potassium Cyanide	☑	☑	☑
Nitric Acid (0-15%)	☑	☑	☑
Nitric Acid (15-30%)	⊗	●	●
Nitric Acid (30-45%)	⊗	⊗	●
Nitrobenzene	⊗	●	●
Oakite Cleaning Solutions	☑	☑	☑
Oleic Acid	☑	☑	☑
Oleyl Alcohol	☑	☑	☑
Oxalic Acid, 12.5%	●	●	●
Palladium Chloride	☑	☑	☑
Pentachlorophenol	☑	☑	☑
Perchlorethylene	☑	☑	☑
Phenol Sulfonic Acid	☑	☑	☑

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Chemical	CrownShield	SolventShield	AcidShield
Phosphoric Acid (0-40%)	☐	☑	☑
Phosphoric Acid (40-80%)	⊗	☐	☐
Pickling Acids, Sulfuric & HCl	☐	☑	☑
Picric Acid	☐	☑	☑
Potassium Aluminum Silicate	☑	☑	☑
Plating Solutions (All)	☑	☐	☑
Platinic Acid	☑	☑	☑
Platinum Chloride	☑	☑	☑
Platinum Sulfate	☑	☑	☑
Potassium Bromide	☑	☑	☑
Potassium Arsenate	☑	☑	☑
Potassium Arsenate Acid	☐	☑	☑
Potassium Bicarbonate	☑	☑	☑
Potassium Borate	☑	☑	☑
Potassium Bromide	☑	☑	☑
Potassium Carbonate	☑	☑	☑
Potassium Chloride	☑	☑	☑
Potassium Cyanide	☑	☑	☑
Potassium Dichromate	☑	☑	☑
Potassium Fluoride	☑	☑	☑
Potassium Hydrosulfide	☑	☑	☑
Potassium Hydroxide	☑	☑	☑
Potassium Hypochlorite	☑	☑	☑
Potassium hypophosphite	☑	☑	☑
Potassium Iodine	☑	☑	☑
Potassium Nitrate	☑	☑	☑
Potassium Phosphate, Hydrogen	☑	☑	☑
Potassium Phosphate, Pyro	☑	☑	☑
Potassium Phosphite	☑	☑	☑
Potassium Silicate	☑	☑	☑
Potassium Sulfate	☑	☑	☑
Potassium Sulfide	☑	☑	☑
Potassium Sulfite	☑	☑	☑
Potassium Thiocarbonate	☑	☑	☑
Pryfon	☑	☑	☑
Pulp Mill Liquors	☑	☑	☑
Rhodium Chloride	☑	☑	☑
Rhodium Sulfate	☑	☑	☑
Salicylic Acid	☑	☑	☑
Selenic Acid	☑	☑	☑
Silicic Acid	☑	☑	☑
Silicon Fluoride	☑	☑	☑
Silver Nitrate	☑	☑	☑
Silver Perchlorate	☑	☑	☑
Silver Permanganate	☑	☑	☑
Silver Thiosulfate	☑	☑	☑
Skydrol	☑	☑	☑
Soaps	☑	☑	☑
Sodium Ferrocyanide	☑	☑	☑
Sodium Acetate	☑	☑	☑
Sodium Benzoate	☑	☑	☑
Sodium Bicarbonate	☑	☑	☑
Sodium Bisulfate	☑	☑	☑
Sodium Bromide	☑	☑	☑

Chemical	CrownShield	SolventShield	AcidShield
Sodium Carbonate	☑	☑	☑
Sodium Chlorate (0-50%)	☑	☑	☑
Sodium Chloride	☑	☑	☑
Sodium Cyanide	☑	☑	☑
Sodium Dichromate	☑	☑	☑
Sodium Fluoride	☑	☑	☑
Sodium Hydrosulfite	☑	☑	☑
Sodium Hydroxide (0-50%)	☑	☑	☑
Sodium Hypochlorite (0-12.5%)	☑	☑	☑
Sodium Hypochlorite (12.5-15%)	☐	☑	☑
Sodium Metabisulfite (0-40%)	☑	☑	☑
Sodium Methoxide (0-30%)	☐	☑	☑
Sodium Nitrate	☑	☑	☑
Sodium Persulfate (0-55%)	☑	☑	☑
Sodium Phosphate	☑	☑	☑
Sodium Silicate	☑	☑	☑
Sodium Tetraborate	☑	☑	☑
Sodium Sulfate	☑	☑	☑
Sodium Sulfite	☑	☑	☑
Sodium Thiosulfate	☑	☑	☑
Stannic Chloride	☑	☑	☑
Stearic Acid	⊗	☑	☑
Styrene	⊗	☑	☑
Sugars	☑	☑	☑
Sulfamic Acid (0-25%)	☑	☑	☑
Sulfite Liquors	☑	☑	☑
Sulfur Chloride	⊗	☐	☐
Sulfuric Acid (0-40%)	⊗	⊗	☑
Sulfuric Acid (40-75%)	⊗	⊗	☑
Sulfuric Acid (75-98%)	⊗	⊗	☑
Sulfurous Acid (0-7%)	☑	☑	☑
Tannic Acid	☑	☑	☑
Tantalum Fluoride	☑	☑	☑
Tartaric Acid	☑	☑	☑
Tetrachloroethylene	☐	☑	☑
Tetraethyl Lead	☑	☑	☑
Tetrahydrofuran (0-15%)	☑	☑	☑
Tetramethylammonium Hydroxide Penta-hydrate (0-30%)	☑	☑	☑
Tin Fluoborate	☑	☑	☑
Titanium Chloride	⊗	☑	☑
Titanium Fluoride	☑	☑	☑
Titanium Nitrate	☑	☑	☑
Titanium Tetrachloride	☑	☑	☑
Toluene	⊗	☑	☑
Toluidine	⊗	☑	☑
Trichloroethylene	⊗	☑	☑
Trichlorotrifluoroethane	☑	☑	☑
Tricresyl Phosphate	⊗	☑	☑
Triethylenetetramine	☑	☑	☑
Trisodium Phosphate	☑	☑	☑
Tung Oil	☑	☑	☑
Turpentine	☑	☑	☑
Urea, 50%	☑	☑	☑

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Chemical	CrownShield	SolventShield	AcidShield
Vegetable Oils, All	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Vinegar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Vinyl Acetate	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Vinyltrimethoxysilane	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water, Deionized	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water, Distilled	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water, Salt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Chemical	CrownShield	SolventShield	AcidShield
Wine	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Xylene	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Zinc Chloride	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Zinc Fluorosilicate	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Zinc Formate	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Zinc Permanganate	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Zinc Sulfate	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

DATA REQUIRED FOR SELECTING THE APPROPRIATE PROTECTIVE SYSTEM

Describe any special conditions concerning your project:

Chemicals (Full Name)	Concentrations	Temperatures	Immersion	Spillage
_____	_____ %	_____	_____	_____
_____	_____ %	_____	_____	_____
_____	_____ %	_____	_____	_____
_____	_____ %	_____	_____	_____
_____	_____ %	_____	_____	_____
_____	_____ %	_____	_____	_____

Describe Existing wear conditions:

_____ Average depth of wear _____ Describe type of floor and other substrates and existing conditions:

Substrate temperature during application ____° ____ Avg. temperature during system use ____° ____
 High ____° ____ Low ____° ____

Describe moisture condition during application _____

Describe thermal shock _____

Exterior Use ____ Interior Use ____

Will the newly protected areas be exposed to the same environmental conditions? _____

If different, please explain in detail

Comments:

Crown Polymers will test those reagents that do not appear on this chart. Contact your local Crown Polymers Representative or the factory for information on testing.

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