



# PolySeal Coupler data sheet

## Chemical Resistant PolySeal

MarMac's Chemical Resistant PolySeal (PolySeal CR) is specified for stormwater and sanitary sewer gravity-flow applications. When installed in contaminated soils (principally hydrocarbon-based), PolySeal CR will prevent inflow/infiltration and exfiltration into the joint in which it is installed. It is designed to maintain the joint integrity, including in less than perfect bedding conditions.



### Applications

- Sanitary sewer
- Elevated hydrocarbon environments
- Contaminated soil

### Availability

- Pipe sizes: 4-60"
- Standard or Double-Wide

### Specifications

The structure of PolySeal CR includes a proprietary, co-extruded, multi-layer barrier film which is laminated to the exterior of the coupler. This film has been tested per ASTM F 739 against a battery of chemicals at 95% concentration for permeation resistance with excellent results, including benzene, toluene, and other hydrocarbon-based solvents.

PolySeal CR is certified to meet the properties of chemical resistance. A summary list of ASTM F 739 test results is as follows:

### POLYSEAL CR TEST RESULTS - ASTM F 739

CHEMICAL	RESULT	CHEMICAL	RESULT
1,1,1-Trichloroethane 71-55-6	Pass	2-Butanone 78-93-3	Pass
1,2,-Dichlorobenzene 95-50-1	Pass	2-Chloropropylene Oxide 106-89-8	Pass
1,2-Dichloroethane 107-06-2	Pass	2-Mercaptoethanol 60-24-2	Pass
1,2-Dihydroxyethane 107-21-1	Pass	4-Aminodiphenyl 92-67-1	Pass
1,3 Butadiene 106-99-0	Pass	4-Phenylaniline 92-67-1	Pass
1,3-Dimethylbenzene 108-38-3	Pass	A-Methyl Styrene 98-83-9	Pass
1,4-Diaminobenzene 106-50-3	Pass	Acetic Acid 64-19-7	Pass
1-Butanol 71-36-3	Pass	Acetic Anhydride 108-24-7	Pass
1-Vinyl-2 pyrrolidinone 88-12-0	Pass	Acetone 67-64-1	Pass
2-Aminodiphenylamine {2-ADP} 534-85-0	Pass	Acetonitrile 75-05-8	Pass
2-Aminoethanol 141-43-5	Pass	Acrolein 107-02-8	Pass



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## MACWRAP CR TEST RESULTS - ASTM F 739

CHEMICAL	RESULT	CHEMICAL	RESULT
Acrylic Acid 79-10-7	Pass	Dibutyl phthalate 84-74-2	Pass
Acrylonitrile 107-13-1	Pass	Dichloromethane 75-09-2	Pass
Alkylate Mixture	Pass	Diethylamine 109-89-7	Pass
Allyl Alcohol 107-18-6	Pass	Diethylene Oxide 109-99-9	Pass
Allyl Chloride 107-05-1	Pass	Diethylethanolamine 100-37-8	Pass
Aluminium Potassium Sulfate 12 Hydrate 7784-24-9	Pass	Dimethyl Ketone 67-64-1	Pass
Ammonia Gas 7664-41-7	Pass	Dimethyl Sulfate 77-78-1	Pass
Ammonium Hydroxide 1336-21-6	Fail	Dimethyl Sulfide 75-18-3	Pass
Aniline 62-53-3	Pass	Dimethyl-Acetamide 127-19-5	Pass
Aqua Fortis 7697-37-2	Pass	Dimethylamine 124-40-3	Pass
Azabenzene 110-86-1	Pass	Dimethylene Oxide 75-21-8	Pass
Battery Acid 7664-93-9	Pass	Dimethylformamide 68-12-2	Pass
Benzene 71-43-2	Pass	Epichlorohydrin 106-89-8	Pass
Benzyl Chloride 100-44-7	Pass	Ethanamine 121-44-8	Pass
Biethylene 106-99-0	Pass	Ethanoic Acid 64-19-7	Pass
Bis (2-chloroethyl) Sulfide 505-60-2	Pass	Ethanolamine 141-43-5	Pass
Black Liquor Mixture	Pass	Ethenyl Benzene 100-41-4	Pass
Blood and Body Fluids	Pass	Ethyl Acetate 141-78-6	Pass
Butyl Alcohol 71-36-3	Pass	Ethyl Benzene 100-41-4	Pass
Butyl Methyl Ether 1634-04-4	Pass	Ethyl Chloroformate 541-41-3	Pass
Carbolic Acid 108-95-2	Pass	Ethyl Ethanoate 141-78-6	Pass
Carbon Bisulfide 75-15-0	Pass	Ethyl-S-Dimethylaminoethyl Methylphosphonothiolate 50782-69-9	Pass
Carbon Disulfide 75-15-0	Pass	Ethylene Dichloride 107-06-2	Pass
Carbon Oxychloride 75-44-5	Pass	Ethylene Glycol 107-21-1	Pass
Caustic Soda 1310-73-2	Pass	Ethylene Oxide 75-21-8	Pass
Chlorine Gas 7782-50-5	Pass	Ferric Chloride 7705-8-0	Pass
Chlorobenzene 108-90-7	Pass	Formaldehyde 50-00-0	Pass
Chloroform 67-66-3	Pass	Formonitrile 74-90-8	Pass
Chloromethane 74-87-3	Pass	Gasoline 8006-61-9	Pass
Chlorosulfonic Acid 7790-94-5	Pass	Glutaric Dialdehyde 111-30-8	Pass
Chlorovinylarsine Dichloride 541-25-3	Pass	Gluteraldehyde 111-30-8	Pass
Chromic Acid 1333-82-0	Pass	Hexahydrobenzene 110-82-7	Pass
Cumene 98-82-8	Pass	Hexamethylene Diisocyanate 822-06-0	Pass
Cumene Hydroperoxide 80-15-9	Pass	Hexamethylene diamine 124-09-4	Pass
Cyanoethylene 107-13-1	Pass	Hexane 110-54-3	Pass
Cyanomethane 75-05-8	Pass	Hydrochloric Acid 7647-01-0	Pass
DMAC 127-19-5	Pass	Hydrofluoric Acid 48% 7664-39-3	Pass
Denatured Ethanol Mixture	Pass	Hydrogen Chloride 7647-01-0	Pass



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CHEMICAL	RESULT	CHEMICAL	RESULT
Hydrogen Floride Gas 99% 7664-39-3	Pass	N,N-Dimethylformamide 68-12-2	Pass
Hydrogen Phosphide 7803-51-2	Pass	N-Butyl Acetate 123-86-4	Pass
Hydrogen Sulfide 100% Vapor 7783-06-4	Pass	N-Ethylethanamine 109-89-7	Pass
Iodomethane 74-88-4	Pass	N-Hexane 110-54-3	Pass
Isophorone Diamine {IPDA} 2855-13-2	Pass	N-Methyl-2Pyrrolidone 872-50-4	Pass
Isopropenyl Benzene 98-83-9	Pass	N-Pentane 109-66-0	Pass
Isopropyl Alcohol 67-63-0	Pass	Naphtha Mixture	Pass
Isopropyl Benzene 98-82-8	Pass	Nerve agent (VX) 50782-69-9	Pass
Isopropyl Methanefluorophosphonate 107-44-8	Pass	Nitric Acid 7697-37-2	Pass
Isopropylamine 75-31-0	Pass	Nitrobenzene 98-95-3	Pass
JP 5 Jet Fuel 8008-20-6	Pass	Nitrobenzol 98-95-3	Pass
JP 8 Jet Fuel 84742-47-8	Pass	O-Cresol 95-48-7	Pass
Kerosene Mixture	Pass	O-Xylene 95-47-6	Pass
Lewisite (L) 541-25-3	Pass	Oleum 8014-95-7	Pass
M- Xylene 108-38-3	Pass	Orthophosphoric Acid 7664-38-2	Pass
Methanol 67-56-1	Pass	P-Phenylenediamine {PPDA} 106-50-3	Pass
Methyl Acetate 79-20-9	Pass	P-Xylene 106-42-3	Pass
Methyl Alcohol 67-56-1	Pass	Pentane 109-66-0	Pass
Methyl Benzene 108-88-3	Pass	Perchloroethylene 127-18-4	Pass
Methyl Chloride 74-87-3	Pass	Phenol @43 C 108-95-2	Pass
Methyl Chloroform 71-55-6	Pass	Phenyl Hydride 71-43-2	Pass
Methyl Chloroformate 79-22-1	Pass	Phenylamine 62-53-3	Pass
Methyl Ethyl Ketone 78-93-3	Pass	Phosphoric Acid 7664-38-2	Pass
Methyl Iodide 74-88-4	Pass	Phosphorous Oxychloride 10025-87-3	Pass
Methyl Isobutyl Ketone 108-10-1	Pass	Phosphorus Trichloride 7719-12-2	Pass
Methyl Methacrylate 80-62-6	Pass	Picoline 108-99-6	Pass
Methyl Pyrrilidone 872-50-4	Pass	Potassium Hydroxide 1310-58-3	Pass
Methyl Sulfate 77-78-1	Pass	Propylene carbonate 108-32-7	Pass
Methyl tert Butyl Ether 1634-04-4	Pass	Pyridine 110-86-1	Pass
Methylamine 40% 74-89-5	Pass	Reformate Naphtha Mixture Sarin (GB) 107-44-8	Pass
Methylene Dichloride 75-09-2	Pass	Sodium Chlorate 7775-09-9	Pass
Methylene Oxide 50-00-0	Pass	Sodium Chromate Tetrahydrate 10034-82-9	Pass
Monochloroacetic Acid 79-11-8	Pass	Sodium Hydroxide 1310-73-2	Pass
Monochloroethylene 75-01-04	Pass	Styrene Monomer 100-42-5	Pass
Monochlorosulfuric Acid 7790-94-5	Pass	Sulfur Dioxide 7446-09-5	Pass
Motor Fuel 8006-61-9	Pass	Sulfur Trioxide 99% 7446-11-9	Pass
Muriatic Acid 7647-01-0	Pass	Sulfuric Acid 7664-93-9	Pass
Mustard (HD) 505-60-2	Pass	Tetraboro Lam 2052-49-5	Pass



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CHEMICAL	RESULT	CHEMICAL	RESULT
Tetrachloroethylene 127-18-4	Pass	Toluene diisocyanate 584-84-9	Pass
Tetrachlorotitanium 7550-45-0	Pass	Trichloroethylene 79-01-6	Pass
Tetrahydrofuran 109-99-9	Pass	Triethylamine 121-44-8	Pass
Tetramethylammonium Hydroxide 75-59-2	Pass	Trifluoroacetic Acid 76-05-1	Pass
Titanium Tetrachloride 7550-45-0	Pass	Vinyl Acetate 108-05-4	Pass
Toluene 108-88-3	Pass	Vinyl Chloride 75-01-04	Pass

For more information, additional instructions, or questions regarding PolySeal Couplers, visit [marmac.com/PolySeal](http://marmac.com/PolySeal) or scan the QR code on the first page.

*CAUTION: Prior to use, please read the Manufacturer Warranty & Disclaimer found at [marmac.com/cp/disclaimer](http://marmac.com/cp/disclaimer).*

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