

Product Information (PI) Sheet

Product: POLARION X Exterior Clear Topcoat

Code(s) :	C38572 Dull	C38574 Satin	C38578 Gloss
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Description: POLARION X is a two component acrylic polyurethane that offers exceptional high build and clarity, excellent chemical and mar resistance, true non-yellowing performance, and fast dry times. The POLARION X formula was specifically designed for Exterior wood surfaces.

Uses: POLARION X can be used for doors, trim, gates, garage doors, patio furniture and other wood surfaces exposed to exterior environments. POLARION X can be used interior for superior UV protection.

Other Products: POLARION X is designed to be catalyzed using the C35677 POLARION Interior/Exterior Catalyst. Do not use any other catalyst!

POLARION X should be applied over C38579 POLARION X Sealer or C38179 POLARION Isolante Interior/Exterior Sealer. POLARION X can also be applied over W35579 POLARION Primer if a basecoat/clear coat system is desired. Consult the C38579 POLARION X Sealer, C38179 POLARION Isolante Interior/Exterior Sealer or W35579 POLARION Primer Product Information (PI) sheet for the proper catalyst and ratio.

Physical Properties		
	Packaged	Blended A:B :: 5:1
Weight per Gallon	7.8-8.2 ± 0.2 lbs	7.9-8.3 ± 0.2 lbs
Viscosity - Ford #4 at 77°F/25°C	28 ± 3 seconds	28 ± 3 seconds
% Solids - by Weight	36.0 ± 2.0	42.0 ± 2.0
% Solids - by Volume	29.0 ± 2.0	35.0 ± 2.0
Theoretical Coverage at 1 Mil Dry <i>(Coverage figures DO NOT INCLUDE spray loss. Also allow for surface irregularities and porosity of wood surface to be finished.)</i>	N/A	530 ± 25 sq. ft. per gallon
Flash Point (PMCC)	29°F	84°F
Color	Clear	
Sheen (60° Glossmeter)	Dull 15 ±3 / Satin 30 ±5 / Full Gloss 90+	
Packaged less exempt VOC	600 ± 10 g/l (5.03 lbs/gallon)	577 ± 10 g/l (4.80 lbs/gallon)
Photochemically Reactive	No	No

Surface Preparation	
New Work:	Remove any dirt, grease, glue or other construction contaminants and sand wood as required.
Old Work:	Strip old finishes completely and remove all contaminants from the surface. Make sure surface is dry, sand as required. Finish as new work. If cratering develops on work, Fish Eye Killer WR5 may remedy this problem (if the contaminant is not too severe).

Reduction
No reduction is required for spray application. However, given the wide variety of application equipment, tip sizes and atmospheric conditions, these finishes can be reduced with the PS series of solvent blends to achieve optimal flow and leveling. Consult your local VOC regulations before purchasing and applying these products.

Mixing
POLARION X has been developed to crosslink with C35677 POLARION Interior/Exterior Catalyst. Mixing ratio by volume is 5:1 or 100 parts of Exterior Clear to 20 parts of C35677 POLARION Catalyst. Always mix before using. No waiting/induction time after mixing is required. Reduce as indicated in previous section. Pot life is up to four (4) hours and will be affected by temperature and humidity (higher temperatures and humidity levels will decrease pot life times). Product viscosity will rise as pot life expires. Do not attempt to extend pot life.

Application Procedure

An excellent, very durable, exceptional build finish can be developed following a range of schedules. Listed below is the recommended system. Apply each coat of POLARION X Clear at 5-6 wet mils with sufficient dry times in between. For best POLARION X UV protection, total dry film thickness should be between 5-7 mils dry. Do not exceed 8 dry mils. Allow 48 hours drying time before installation

Sealer for Most Wood Species: Use C38579 POLARION X Sealer. If staining is desired, use M.L. Campbell WoodSong Stain and/or Microton Dye (NGR) Stain Base. Excess stain **MUST** be wiped off thoroughly. Allow stain to dry for 90 minutes, then wipe again before applying sealer. Stain must be sealed with POLARION Exterior Clear Sealer or POLARION Isolante Interior/Exterior Sealer before application of POLARION X Exterior Clear topcoat.

Sealer for Oily Exotic Wood Species: Use POLARION Isolante Interior/Exterior Sealer C38179 over bare unstained oily exotic woods. Oily exotic woods **MUST** be sealed with POLARION Isolante Interior/Exterior Sealer C38179 before application of POLARION X topcoats (refer to POLARION Isolante Interior/Exterior Sealer C38179 PI sheet for further details).

Recommended System: Sand wood with 180 grit sandpaper. Reduce and apply appropriate POLARION X Sealer at 3-4 mils wet. Allow 2-3 hours dry time. Apply second coat of appropriate POLARION X Sealer at 3-4 mils wet. Allow 4 hour minimum dry time. Sand using 280 to 320 grit sandpaper. Apply first coat of POLARION X Clear at 5-6 mils wet. Allow 4 hour minimum dry time and sand with 280 to 320 grit sandpaper. Apply required second coat of POLARION X Clear at 5-6 mils wet.

For cleanup use PS3 Reducer or PS1 Fast Reducer. For retarder use PS5 Retarder. Do not use other solvents.

Sanding is always recommended between coats. Wet on tack applications are acceptable within 2 hours of initial application. If any POLARION X topcoat has been allowed to dry for more than 2 hours, allow to dry 4 hours and sand before applying next coat. Do not exceed 8 dry mils. Before application, material, surface and air temperature should be a minimum of 68⁰F or 20⁰C.

For maximum life: Be sure to coat ALL sides and edges. If the project is cut or planed at jobsite, the installer should re-coat any bare edges with brushable waterborne Euro X Maintenance Coat (see Euro X Maintenance Coat EU33006 PI Sheet for details).

Maintenance Program: The ML Campbell exterior product line includes a maintenance product. All exterior coatings will eventually degrade due to natural conditions. Euro X Maintenance Coat is a brushable water borne coating that can extend the service life of POLARION X Clear.

Equipment Clean Up

- Use PS3 Reducer or PS1 Fast Reducer to clean up all equipment.
- Dispose of dirty solvent and cleaning rags in a safe and approved manner.

Drying Times (at 77° F or 25° C)

Dry to Touch:	30-45 Minutes
Sanding Dry:	1 Hour
Stacking Dry:	6 Hours

Note: These times are directly affected by heat and humidity and caution must be taken to guarantee that the product is thoroughly cured before stacking.

Packaging/Shipping

Available Units	Gallons and Pails.
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Shelf Life and Storage

- Package life is (3) three years - Store in a cool dry area in the original sealed containers.
- Do not store around any source of flames or sparks.
- Spills should be cleaned up with non-sparking tools and inert absorbent material.

DOT Classification

Flammable Liquid	Red Label	UN 1263	
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B/L Description

Paint	UN 1263	3	PG II
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Caution

- **THESE PRODUCTS ARE DESIGNED FOR SHOP APPLICATION AND PROFESSIONAL USE ONLY.**
- Use only after all safety information is understood.
- Refer to the Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS) for additional information.

Testing

Due to the wide variety of substrates, surface preparation methods, application methods, and environments, customers should test the complete system for adhesion and compatibility under their conditions prior to full-scale application.

Notes

The information, rating, and options stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in customer handling and methods of application that are not known or under our control, M.L. Campbell cannot make any warranties as to the end result. *Thank you for using M.L. Campbell Wood Finishing products.*