

Product Information (PI) Sheet

Product: Resistant Post-Catalyzed Pigmented Varnish

Code(s) :	W358 14 White Satin	W371 16 White Semi-Gloss	W375 18 White Gloss
	W358 211 Opaque Satin	W371 211 Opaque Semi-Gloss	W375 211 Opaque Gloss
	W358 222 Clear Satin	W371 222 Clear Semi-Gloss	W375 222 Clear Gloss

Description: Resistant Post-catalyzed Pigmented Varnish is a two-component pigmented enamel (amino-alkyd). Provides an excellent full body (high solids) finish that is scratch and mar resistant and provides excellent moisture resistance. Resistant's quick drying formula is suitable for automatic drying production line. Formulated with no HAPS solvent and ultra low formaldehyde release. M.L. Campbell Resistant Finishes meet World E-1 Standards.

Uses : Furniture, kitchen and Bathroom cabinets, dormitory, household, display and office furniture.

Other Products: C16036 M.L. Campbell Lacquer Thinner or C1611 M.L. Campbell Care Retarder. For yellowing resistance on whites or light off white colors use Stealth Conversion Varnish.

Physical Properties (packaged)	
Weight per Gallon:	9 – 11 lbs.
Viscosity – Ford #4 @ 77°F/25°C:	120 – 140 seconds
% Solids - by Weight:	47 – 52 Depending on the Base
% Solids - by Volume:	39 – 43 Depending on the Base
Flash Point (PMCC):	78 ° F (26°C)
Sheen (60° Glossmeter):	35 – 85 ± 2
Packaged VOC:	496 – 526 g/l (4.14 – 4.39 lbs./gal.)
Addition 10% catalyst C1491:	524 – 544 g/l (4.37 – 4.54 lbs./gal.)
10% Reduced C16036:	561 – 572 g/l (4.68 – 4.77 lbs./gal.)
Photo-chemically Reactive:	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).

Mixing
Resistant MUST be catalyzed using 10% (12.8 ounces) of M.L. Campbell C1491 Care Catalyst per gallon of unreduced product prior to use. Product can be used immediately after catalyzation. No sweating in period is required. Always add catalyst to the coating before reduction.

Reduction

Resistant Catalyzed Pigmented Varnish should be reduced to spray viscosity by using M.L. Campbell C16036 Lacquer Thinner 5-10%. Recommended spray viscosity is 28-30 seconds in a #4 Ford. If Resistant coatings are drying too fast, the use of M.L. Campbell Care Retarder C1611 will result in moderate slowing down in drying time. The addition of 10% lacquer thinner will not cause the coatings to exceed the VOC limits established by New York City / New Jersey environmental regulations.

Tinting

White bases can be tinted with up to 8 ounces of Huls 844 Colorant, and Clear bases can be tinted with up to 10 ounces of Huls 844 Colorant. The use of excessive colorant will weaken the film integrity. **DO NOT** tint with colorants that contain Glycol.

Application Procedure

Resistant Coatings have been developed to start cross-linking (drying) with the addition of 12.8 ounces of C1491 Care Catalyst per gallon. Always mix the catalyst thoroughly before application (sweating time) is not necessary before using this product. After catalyzation, Resistant has a pot life (usable time) of 8 hours. Sanding between coats using Fre-cut (no-fill) type of sand paper is always recommended. Sand new wood before applying finish using 120-140 grit paper; the surface to be finished should be prepared by applying up to 2 well sanded coats of W3709 Clawlock Under-coater Primer. The use of conventional stated nitrocellulose sealer is not recommended. When the surface is properly prepared and smooth, applying just 1 coat of Resistant Catalyzed Varnish can develop an excellent finish (apply no more than 2 coats).

Catalyzed (cross-linked) type coatings develop extremely durable finishes but require controlled application procedures. Don not apply material in too heavy of a film (4-5 mils wet are recommended). Too much coating weight can cause recoating and durability problems. Always scuff sand between coats using 220 – 320 grit sandpaper. Use care not to sand through the base coat before recoating. Total recommended dry film thickness after sanding should not exceed 5-6 mils dry.

Refer to spray equipment supplier recommendations for fine lacquer atomizing spray guns, air caps and fluid needles.

Note: Hot spray is not recommended. If hot spray equipment is used, temperature settings should never be over 110°F or 3°C.

Equipment Clean Up

- Use lacquer thinner to clean all equipment.
- Dispose of dirty solvent and cleaning rags in a safe and approved manner.
- Solvent or lacquer soaked rags should be stored in water-filled closed containers prior to disposal.

Drying Times (at 77°F or 25°C)

Dry to Touch:	15 – 30 minutes
Sanding Dry:	25 – 30 minutes
Stacking Dry:	16 hours +

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

B/L Description			
Paint	UN 1263	3	PG II

Caution
<ul style="list-style-type: none"> • 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) for additional information.

Testing
<p>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.</p>

Notes
<p>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. <i>Thank you for using M.L. Campbell Wood Finishing products.</i></p>