

Maclac Product line Information Sheet

R. J. MCGLENNON CO. INC.
198 UTAH STREET
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201 SERIES 275 PRECATALYZED LACQUERS

Description

The 201 series 275 Lacquers are a compliance system wherein the lacquers have to meet 275 G/L VOC. The topcoats are companion products to SX-2004 275 Precatalyzed Sanding Sealer. These lacquers are recommended for use on all commonly used wood surfaces. Most lacquers in this product line are also available with Ultraviolet Light Blocker.

Available in the following sheens:

GX-2000	Gloss	GX-2005	Gloss / U.V.
FX-2001	Semi-Gloss	FX-2006	Semi-Gloss / U.V.
FX-2002	Rubbed Effect	FX-2007	Rubbed Effect / U.V.
FX-2003	Satin Flat	FX-2008	Satin Flat / U.V.

Specifications

Note: below represent typical values only - see specific Product Data Sheets for exact values.

Weight per Gallon: 7.5 - 7.7	Coating VOC: 275 G/L (2.29 Lb/gal)
Solids by Weight %: 19 - 25	Material VOC: 75 - 85 G/L (0.62 - 0.71 Lb/gal)
Solids by Volume %: 18 - 19	VOC Weight Ratio = 0.33 - 0.35 Lb VOC/Lb Solid (Avg.)
Coverage @ 1 mil = 285 - 298 SqFt./Gal.	
Viscosity: 18 - 20 Seconds Zahn 2	

Surface Preparation

Apply over properly sanded wood surfaces. Ensure that any stains used are compatible with this system. These products have been tested with Maclac 15 and 19 series stains. Surfaces must be clean and free of dirt, grease and water. Remove any wax or old finish. No Maclac paint product has ever contained any lead. But if you are preparing previously painted surfaces with unknown paints please observe the following precautions. Warning! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-2010-424-LEAD or log on to www.epa.gov/lead.

Mixing & Thinning

201 Series are all supplied at ready to spray viscosity. Normally, no further thinning is required. However, under certain application conditions The applicator may wish to add thinner. A VOC exempt solvent such as acetone or Oxsol (PCBTF) may be used in those districts where you cannot change the VOC. Non-exempt thinners may be used in areas where the VOC may be higher.

NOTE: some California air quality district regulations allow additional thinning during adverse environmental conditions, while others do not - this varies by regulation and by the district - check with your local district first.

Note: R.J. McGlennon Company does not recommend the addition of any outside additives. We have not tested the compatibility of many of these additives with our lacquers so we cannot state whether or not they will be of benefit.

We have determined that you cannot use Smoothie I (1) in our 275 lacquers as it is incompatible.

For improved flow and leveling we recommend you use our LVAD-1 flow enhancer.

Application & Dry

201 Series Lacquers are designed for spray application only. They may be applied with conventional, airless, air-assist airless or HVLP spray equipment. It is vital that the first coat of lacquer applied to the wood (either stained or natural) be applied so as to achieve thorough penetration of the lacquer into the wood. The first coat must penetrate the grain and the pores in order to achieve adhesion and moisture resistance. Note: See "Maclac Lacquers for Wood, Then and Now" article for further discussion of this concept. Also see individual product data sheets for these two items.

LIMITED WARRANTY

The information contained herein is offered to assist customers in determining whether our products are suitable for their applications. We request that customers examine our products before use and satisfy themselves as to their suitability. We warrant that our products will meet our written specifications. Since application circumstances, substrate condition and product intermix are beyond our control, we cannot guarantee results under all possible situations. R.J. McGlennon Co. Inc. makes no representation as to the results the user will achieve. Technical advice furnished by seller or any seller's agents shall not constitute a warranty. Any liability arising out of any condition resulting from the use of any R.J. McGlennon Co. Inc. product shall be limited to replacement of such product.

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Note: laboratory testing has indicated that this product does not have precise re-coat limitations. However because of the great variety of application conditions - we offer the following information to help the applicator make informed decisions regarding a specific coating operation.

For trouble free application R.J. McGlennon Company recommends that all coats be applied within 48 hours. The reasons follow:

All pre-catalyzed lacquers dry through a two step process:

1. The lacquer thinner (solvents) evaporate from the coating.
2. A chemical reaction takes place within the drying coating.

The drying action starts at the surface of the applied coating and proceeds down through the film. In a partially cured coating the surface will be cured, but the remaining coating underneath will not yet be cured, and may still have some solvent trapped within. Then, if another coat is applied, the strong lacquer thinner on the top will begin to re-dissolve the partially cured coating underneath, and this will cause the first coat to swell and lift (or wrinkle). Heavy application of the 1st. (or prior) coat combined with forceful drying conditions (strong, warm air flow) will especially aggravate the tendency to self-lift upon application of the next coat.

Because application conditions vary greatly, it is difficult to give specific recoat times. Always test a small area for acceptance of the next coat prior to recoating the entire part.

Apply a full coat to a small representative area and observe it for at least 15 minutes to see if it has any tendency to lift or wrinkle.

After application of the sanding sealer, allow drying for 20 - 30 minutes prior to sanding.

We recommend total film thickness to be 2 - 5 mils DFT. Less than 2 mils does not afford sufficient protection, and more than 5 mils may be prone to cold check.

Performance & Durability

The 201 Series 275 Precatalyzed Lacquers meet the finish performance specifications required by the Kitchen Cabinet Manufacturers Association (KCMA) under American National Standards Institute ANSI A161.1-1990 Test Protocol. All testing is performed on properly applied finishes.

These lacquers have passed the following specified tests:

9.1 Shrinkage And Heat Resistance

PURPOSE: To test ability of the finish to withstand high heat for long periods, such as inside truck, box car or other transport or storage facility, or in service under normal kitchen conditions.

REQUIRED PERFORMANCE: By visual examination, the door finish shall show no appreciable discoloration and no evidence of Blistering, checks, or other film failure after exposure to 120 Deg F. at 70% RH for 24 hours.

RESULTS: (After 24 Hours test)

Initial Examination - Pass

14 Day Reexamination - Pass

9.2 Hot and Cold Check Resistance

PURPOSE: To test ability of the finish to with stand hot and cold cycles for prolonged periods.

REQUIRED PERFORMANCE: The finish shall show no appreciable discoloration and no evidence of Blistering, cold checking, or other film failure when subjected to temperatures variations of -5 Deg. F. to +120 Deg. F. for 5 complete cycles.

RESULTS: (After 11 cycles) Pass: No Cracking or discoloration

9.3 Chemical Resistance

PURPOSE: To test ability of finish to withstand substances typically found in the Kitchen and Bath.

REQUIRED PERFORMANCE: There shall be no appreciable discoloration, stain, or whitening that will not disperse with ordinary polishing.

Chemical

Exposure Time

Page 2 of 3

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Vinegar	24 Hrs.
Lemon Juice	24 Hrs.
Orange Juice	24 Hrs.
Grape Juice	24 Hrs.
Catsup	24 Hrs.
Coffee	24 Hrs.
Olive Oil	24 Hrs.
Alcohol	24 Hrs.
Mustard	One Hour Slight color but recovers

RESULTS:

Initial Examination - Pass

10 Day Reexamination - Pass

10.0 Detergent And Water Resistance

PURPOSE: To test the door edge for proper application of the finish.

REQUIRED PERFORMANCE: There shall be no Delamination or swelling. The finish shall show no appreciable Discoloration and no evidence of Blistering, checking, whitening or other film failure after the door edge is soaked for 24 hours in an ANSI specified solution of detergent and water.

RESULTS:

Initial Examination - Pass

10 Day Reexamination - Pass

Proper cleaning and maintenance of these finishes is required for good service life. It is imperative that the owners properly maintain the finish in order to achieve expected performance.

The most common problem associated with improper maintenance is water damage. This is where water accumulates under the finish for a period of time and soaks into the wood. Once the water soaks into the wood, the wood swells up and breaks the coating loose. Those areas where the lacquer coating has broken loose will look white or milky. The lacquer itself has not been directly damaged by water, but rather the lacquer has been broken loose due to the swelling action of the wood. It is the wood that has been damaged under the lacquer.

When Maclac lacquers have been properly applied to wood, the wood surface becomes water resistant but NOT WATERPROOF. This means the surface will withstand temporary water exposures, but not long term water soaking. Any drops, puddles or standing water must be removed immediately.

The 201 Series lacquers are best cleaned with mild household (waterborne) cleaning agents. We have not found any adverse effects as long as the recommended cleaning directions are followed. After a light application of cleaning agent it is essential to dry the area with a soft cloth.

We recommend you always test a small area first to make sure the cleaner does not have any adverse effects. Do not use any abrasive cleaning products on these lacquer surfaces

Note: the 201 series products are designed as a water white quality lacquer system. However, since any nitrocellulose lacquer system will yellow with time, R.J. McGlennon Co. recommends using this *water white* system over white stains in order to slow the natural yellowing process.

Environmental & Safe Handling

Since air quality regulations are not consistent around the country, nor are they consistent within the State of California, check local air quality regulations prior to using this product. Since hazardous waste regulations are not consistent throughout the country contact your local hazardous waste agency with information from the MSDS to get instructions for proper disposal. Review the latest material safety data sheet for additional information on environmental & safe handling.

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