Maclac Product line Information Sheet

R.J. MCGLENNON CO. INC. 198 UTAH STREET SAN FRANCISCO, CA 94103

PHONE (415) 552-0311 FAX (415) 552-8055

209 SERIES 275 HI-SOLIDS CATALYZED LACQUERS

Description

The 209 series 275 Lacquers are a compliance system wherein the lacquers have to meet 275 G/L VOC. This series of lacquers offer enhanced durability and performance over the precatalyzed lacquers. This water white Catalyzed Lacquer system has exceptional build and toughness when applied as recommended. It is recommended for use on all wood surfaces. This is the preferred lacquer for superior performance on hardwoods. All products in this series must be catalyzed with CHX-1 Catalyst Available in the following sheens:

CHX-2000 Gloss CHX-2004 Gloss / U.V. CHX-2001 Semi-Gloss Semi-Gloss / U.V. CHX-2005 CHX-2002 CHX-2006 Rubbed Effect / U.V. Rubbed Effect CHX-2007 CHX-2003 Satin Flat Satin Flat / U.V. CHX-2008 CHX-2009 Sealer / U.V. Sealer

Specifications

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

(2.29 Lb/gal) Weight per Gallon: 8.0 - 8.2 Coating VOC: 275 G/L

Solids by Weight % 32 - 35 Material VOC: 110 – 118 G/L (0.92 – 0.98 Lb/gal) Solids by Volume %: 26.0 - 28.5 VOC Weight Ratio = 0.34 – 0.35 Lb VOC/Lb Solid (Avg.)

Coverage @ 1 mil = 425 - 460 SgFt./Gal. Viscosity: 18 - 22 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 LEÃO DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NOISH-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 1-2090-424-LEAD or log on to www.epa.gov/lead.

Mixing & Thinning

All products in this series must be catalyzed prior to application.

Catalyze at the rate of 4 fluid ounces of Maclac CHX-1 275 Hi-Solids Catalyzed Lacquer Catalyst to each gallon of lacquer. Thoroughly mix the material by stirring or shaking prior to catalyzing and application. Note: adding additional catalyst may lower the sheen.

The pot life after catalyzing is about 6 - 8 hours (at temperatures between 65 Deg F. to 85 Deg F.) NOTE: The best application (appearance) will be achieved within the first 2 hours, however the material may still be successfully applied for approximately 6 - 8 hours - therefore catalyze only the amount of material that you will use within this time frame. Pot life will be shorter at warmer temperatures. Remove all material from application equipment within the applicable time frame.

209 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.

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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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Application & Dry

209 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. Note: laboratory testing has indicated that this product does not have precise re-coat limitations. 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.

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 209 Series 275 Hi-Solids Catalyzed 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. These Conversion Varnishes have passed the following specified tests:

- Shrinkage And Heat Resistance
- Hot and Cold Check Resistance
- Chemical Resistance
- Detergent And Water Resistance

The 203 Series Conversion Varnishes are best cleaned with mild household (waterborne) cleaning agents. We have not found any adverse effects as long as the manufacturer's cleaning directions are followed. A light application followed by drying with a soft cloth is recommended. Do not use any abrasive cleaning products on these lacquer surfaces.

Test a small area first if in there is any doubt.

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 due to excessive water exposure. If Water is allowed to remain on the surface for long enough time it may migrate under the finish and soak 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 coating itself has not been directly damaged by water, but rather the coating has been broken loose due to the swelling action of the wood. It is the wood that has been damaged under the coating.

When Maclac finishes 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

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

Environmental & Safe Handling

Warning: flammable mixture. Do not use near heat, sparks, flames, or any ignition sources. Do not cut empty containers. Use only with adequate ventilation.

Since air quality regulations are not consistent throughout the country, or even within the state of California, always check with your local air quality district prior to using these products.

Soak up spills with inert absorbent. 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. Section 2 of the MSDS contains components considered hazardous in the product as supplied. See the material safety data sheet for more information.

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