



product
information

LUTHIERLAC
2059-CLE18773
FINE MUSICAL INSTRUMENT SEALER

Cardinal's Luthierlac 2059-CLE18773 is solventborne gloss vinyl nitrocellulose lacquer sealer designed specifically for the fine musical instrument finishes. This product was designed to adhere to a variety of wood types. The product exhibits excellent adhesion, fast dry time, sand properties, lifting resistance, clarity and ease of application.

TYPICAL USES:

- Fine musical instruments

BENEFITS:

- Adhesion
- Lifting resistance
- Clarity
- Fast dry

CURED FILM PROPERTIES:

Testing was conducted on a variety of different wood types which had been sealer with 2059-CLE18773 and then top coated with 2079-CLE17937. The coating was air dried for seven days before testing.

TEST	METHOD	PARAMETERS	RESULT
Adhesion	ASTM D3359	Cross-hatch tape	0% failure
Hardness	ASTM D3363	Pencil	H - 2H
Humidity	ASTM D2247	50 hrs	No effect
Cold Checking	NA	10 cycles from 25°C to -5°C with 8 hr. intervals	No effect

APPLICATION:

SPRAY

1. Sand the wood to desired finish using 180-320 grit sandpaper.
2. Blow any dust or debris from surface.
3. Clean all grease, oil, and contaminants with acetone or naphtha like solvent.
4. Apply finish with a fine finish spray gun setup using the necessary amount of atomizing air pressure to form a fine spray.
5. Recommended spray gun settings would be 6" fan approximately 9"-12" from the substrate.
6. Apply the finish with an overlapping spray technique.
Avoid getting the gun to close to substrate to prevent air entrapment (bubbles)
7. Apply approximately 0.5-1.0 dry mils (5-10 wet mils) each coat.
8. Ensure a wet coat to achieve desired adhesion.

Filling and Recoating

1. Allow 20-30 minutes before fill and recoat with Cardinal Pore Fill and Lacquer.
2. Be sure to seal after filling to ensure topcoat adhesion.

Note:

These recommendations are only a suggestion and do not imply that other products and techniques currently being used won't work. All procedures and materials used must be tested and approved by the applicator.

Woods Tested:

Mahogany, Rosewood, Ebony, Spruce, Maple and Koa.

TYPE: Vinyl Nitro. Lacquer Sealer

COMPONENTS: One.

COLORS: Clear

GLOSS: High

MINIMUM ORDER: 1 gal. of 2059-CLE18773.

COVERAGE: At 1.0 mil DFT, 65% transfer efficiency(TE) is 62 ft²/gal.

Calculation: 1604 ft²/gal x % volume solids x TE ÷ DFT

VOC MIXED: 763 grams/liter = 6.05 lbs/gal minimum.

SOLIDS:

Weight 9%
Volume 6%

VISCOSITY: 15 seconds in Zahn 2

SPRAY-able Pot Life: NA

RECOMMENDED DFT: 0.5 – 1.0 mils
(depending on required finish)

CURE: Air Dry

Tack free 5 min.
Dry to handle 15 min.
Dry hard 24 hours.
(At 1.0 mils dry film thickness, 78° F, 50% RH)

**This coating must be used
only in a well ventilated area!**

**Keep this coating away from
any and all sources of
ignition!**

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SURFACE PREPARATION AND SEALING: The most important steps in a successful coating process are cleaning and sealing. The wood surface should be free of any dust or dirt before application of sealer. If a pore filler is being used the wood should be sealed before and after being filled.

Cleaning the substrate: The surface of wood should be cleaned with either acetone or Mineral spirits to remove any oils, grease or other contaminants. The surface must be thoroughly dry before painting. Air quality regulations have limited the allowable emissions from cleaning operations.

Plastic — Any vinyl or other plastic products that might be coated over with this finish should have the adhesion verified before use.

TOPCOAT SELECTION:

PRODUCT NO.	DESCRIPTION	FUNCTION
2079-CLE17937	Nitrocellulose Lacquer	Gloss clear for final instrument finish
2000 SERIES	Nitrocellulose Lacquer	Lacquer color coats

RELATED PRODUCTS:

PRODUCT NO.	DESCRIPTION
4760- Filler	Pore filler. Available in a variety of different wood tone colors
1200-08	Medium lacquer thinner
1200-11	Blushing resistant lacquer thinner

TROUBLE SHOOTING:

PROBLEM	CAUSE	REMEDY
Blisters, pin holes or solvent pop	Water contamination. Entrapped air. Entrapped solvent	Eliminate water – Check airlines. Increase atomization, decrease film build. Pull gun further away from substrate
Craters	Contaminated ambient air, e.g., silicone mist, dust.	Locate and eliminate source of contamination.
Fish-eyes	Substrate contamination.	Clean and prepare substrate.
Blushing	Humid conditions.	Use Cardinal's 1200-11 lacquer thinner or add anti blushing additive.
Poor adhesion	Improper surface preparation.	See surface preparation section.
Gloss variation	Variation in application, cure schedule and humidity.	Consistent gloss depends upon consistent process.

APPLICATION EQUIPMENT: Most air quality regulations require the paint application transfer efficiency to be 65% or better. This generally means using electrostatic or high volume low pressure (HVLP) spray guns. Otherwise, conventional pressure feed, airless or air assisted airless spray equipment can be used. Air supply lines need water and oil traps.

EQUIPMENT CLEAN-UP: Clean up should be done as soon as possible keeping in mind the pot life of the mixed paint. Air quality regulations have limited the allowable emissions from cleaning operations.

PRODUCT LIMITATIONS:

- This 2059-CLE18773 was design for fine musical instrument and the normal environmental condition that they would be exposed. All precautions should be taken to avoid extreme conditions such as: excessive heat, extended cold temperatures, chemicals which would damage coating or excessive abrading with guitars strap and other abrasive objects.

SAFETY: Refer to the product's Material Safety Data Sheet (MSDS) for complete safety information. Contains organic solvents. Use with adequate ventilation. Do not breathe vapors or spray mists. If component TLVs are exceeded, a NIOSH approved air supplied respirator is advised. See MSDS for TLV information.

Contents are FLAMMABLE. Keep from heat, sparks or open flame.

Allergic reactions are possible. Avoid use by persons with respiratory problems.

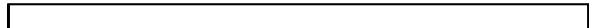
Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

FIRST AID:

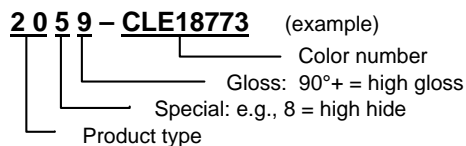
Eye contact: flush immediately with plenty of water for at least 15 min. and get medical attention.

Skin contact: wash thoroughly with soap and water for 5 minutes.

If swallowed, do not induce vomiting and get medical attention immediately.



PRODUCT IDENTIFICATION



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