



product  
information

## LUTHIERTHANE

6779-CLE20902  
INSTRUMENT SEALER / FILLER POLYURETHANE

**Cardinal's Luthierthane 6779-CLE20902** is solventborne high build polyurethane sealer designed specifically for the fine musical instrument finishes. This product exhibits a high degree of toughness; ease of application, fast dry, cold checking resistance, long potlife and outstanding buffing properties that result in beautiful clear glossy finishes.

### TYPICAL USES:

- Fine musical instruments

### BENEFITS:

- Toughness
- Cold Checking resistance
- High build, filling properties
- Sandability

### CURED FILM PROPERTIES:

Testing was conducted on a variety of different wood types which had been sealer with 6779-CLE20902. 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
Imprinting	NA	120° F for 1 hour with 1lb weight on cheese cloth	Good

**APPLICATION:** If desired seal with Vinyl Sealer and fill with 4760 or FE02 high build filler

#### SPRAY

1. Seal the wood using Cardinal's 6779-CLE20902 urethane isolante sealer/filler.
2. Scuff sealer lightly with 200 to 400 grit sandpaper if recoating after 24 hours. Apply 2-3 coats to ensure flat surface.
3. Apply finish with a fine finish spray gun setup using the necessary amount of atomizing air pressure to form a fine spray.
4. Recommended spray gun settings would be 6" fan approximately 9"-12" from the substrate.
5. Apply the finish with an overlapping spray technique two times for one coat.  
Avoid getting the gun too close to substrate to prevent air entrapment (bubbles)
6. Apply approximately 2-3 dry mils (5-10 wet mils) each coat.
7. Two to three coats recommended. Allow seven days air dry under standard conditions to fully harden.

#### FINAL FINISH

1. Once the coat has been air dried for seven days the surface needs to be prepped for buffing.
2. Sand the finish with a variety of different fine grit sand papers removing any blemish or contaminant. Start with 600, and then work up the final wet sand of 1000-2000.
3. Buff the finish using a variety of fine finish wheels with the Mezerna 16-18 buffing compound. The speed on the wheel should be between 750-1000 rpm.
4. For final finish use a fine polishing cloth with a water based polish compound.

#### 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.

**TYPE:** Acrylic Modified Polyurethane.

**COMPONENTS:** Two.

**COLORS:** Clear

**GLOSS:** High

**MIXING:** 5 parts 6779-CLE20902 to 1 part  
67HP-CLE20902

**MINIMUM ORDER:** 1 gal. of 6779-CLE20902.

**COVERAGE:** At 1.0 mil DFT, 65% transfer efficiency(TE)  
Is 250 ft<sup>2</sup>/gal.

Calculation: 1604 ft<sup>2</sup>/gal x % volume solids x TE ÷ DFT

**VOC MIXED:** 688 grams/liter = 5.68 lbs/gal minimum.

**VISCOSITY:** 20-25 seconds in Zahn 2

**SPRAY-able Pot Life:** 8 hours @ 78° f, 50%RH

**RECOMMENDED DFT:** 2.0 – 3.0 mils  
(depending on required finish)

**CURE:** Air Dry

Tack free 10 min.

Dry to handle 30 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!

(Continued on page 2)

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NO WARRANTY EXPRESSED OR IMPLIED, ACCEPTABILITY TO BE DETERMINED BY USER, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

**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 the

**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.

**SEALER SELECTION:**

PRODUCT NO.	DESCRIPTION	FUNCTION
2059-CLE18773	Urethane Isolante Sealer	Sealing the wood surface to accept a top coat or fillers.
6779-CLE16866		

**RELATED PRODUCTS:**

PRODUCT NO.	DESCRIPTION
4760- Filler	Pore filler. Available in a variety of different wood tone colors
2079-CLE17937	
6779-CLE19661	
1600-02	Medium Urethane thinner
1600-03	Slow Urethane Reducer

**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.

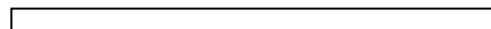
**PRODUCT LIMITATIONS:**

- This 6779-CLE19661 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.

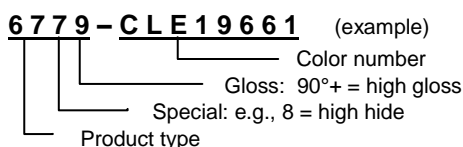
**SAFETY:** Refer to the product's Material Safety Data Sheet (MSDS) for complete safety information. Contains organic solvents. Use with adequate ventilation. Do not breathe vapors or spray mists. If component TLVs are exceeded, a NIOSH approved air supplied respirator is advised. See MSDS for TLV information.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



D12TL

**IMPORTANT: Warranty and Disclaimer —** The performance characteristics of these products vary according to product application, operating conditions, materials applied to or with and use. Since these factors can affect results, we strongly recommend that you make your own test to determine to your satisfaction whether the product is of acceptable quality, has not been affected by storage or transport and is suitable for your particular purpose under your own operation conditions prior to using any product in full scale production. Seller warrants the products to be free from defects in materials and workmanship. SUCH WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. No representative of ours has authority to waive or change this provision, which applies to all sales of these products.