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In 1989 virtually overnight CrystaLac® Waterborne Finishing Products enjoyed immediate success as a waterborne product for the professional and custom finishing markets. Offering a full range of wood, metal, and custom waterborne coatings. CrystaLac® rapidly found its way into finishing shops across the United States. CrystaLac® became identified by its ease of use, optical clarity, and its tough protective qualities. CrystaLac® can now be found worldwide.

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**Informational websites: [www.crystalac.info](http://www.crystalac.info)**

**Where to purchase: [www.thecrystalacstore.com](http://www.thecrystalacstore.com)**

CRYSTALAC® Waterborne Finishing Products are highly developed pure grade of polyurethane and acrylic blends of polymers. Ongoing research and formulation ensure that CrystaLac users will always have the latest waterborne technology available.

CRYSTALAC® Waterborne Finishing Products can be used in place of nitrocellulose lacquer, solvent and oil-based polyurethane and varnishes for use on wood, metal, ceramic, or other selected surfaces that demands a quality protective finish.

CRYSTALAC® Waterborne finishing products not only can be brushed on but are also designed to be HVLP spray compatible as well as traditional conventional spray applications.



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### Technical Data Sheet

#### Product Details:

#### Brite Tone

<b>Sheens:</b>	Gloss, Satin, Matte
<b>Application:</b>	Bristle brush, Foam Brush, Wipe on or Spray in a controlled environment. Recommended temperature is 68F-78F. Recommended humidity level approximately 70%.
<b>Storage:</b>	Store at room temperature. Sealed in an airtight container. Do not freeze.
<b>Recoat:</b>	After 3 to 4 hours. Allow longer time when brushing or when using Viscosity Reducer/Retarder.
<b>Dry Time:</b>	1 Hour. Allow 30 days for a full cure/harden.
<b>Cleanup:</b>	Water
<b>Coverage:</b>	120-150 sq. ft. per Quart per coat 400-500 sq. ft. per Gallon per coat
<b>Coats:</b>	Typical applications, 3 to 5 coats minimum are recommended. Additional coats can be applied to achieve desired build.
<b>Recommended Uses:</b>	High traffic areas such as: furniture, woodwork, doors, cabinets, tumblers, musical instruments, ceramics, turnings, bar tops, and more.



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## **BRITE TONE TOPCOAT USER GUIDE**

### **PRODUCT USE GUIDE**

CrystaLac® Waterborne Finishing Products are carefully formulated to provide the professional and beginning finisher ease of use an excellent quality finish. Before using CrystaLac® Finishing Products, it is important to read the General Product Use Guide. Be totally familiar with the character of CrystaLac® products, and the use of waterborne finishes to achieve the best possible results. DO NOT use tack cloths.

### **FINISHING AREA AND ENVIROMENT**

It is important, no matter how large or small your project, to provide a clean, ventilated, stable temperature environment in which to apply CrystaLac® finish coatings. CrystaLac® is self-leveling and dries rapidly. Hard cure and crystal clarity will occur best at an average temperature of 70° F with a gentle circulation of moving air. This will aid in rapid surface evaporation of water and minimize or eliminate grain raising. Extremes should be avoided. Using below 60° F or above 90°F can affect the performance of the finish coat. After the coating is dry to touch, it will take airtime to cure and harden. The temperature should remain constant through this time. DO NOT apply CrystaLac® finishing products below 60°F. Avoid freezing.

### **WOOD PREPARATION**

Careful sanding and preparation of your project will help ensure a good quality finish. Recommended sanding grade is 220 -600. The finer grades of sandpaper will help keep wood grain tight and minimize or eliminate grain raising. Avoid using steel wool or tack rags, these sometimes contain lubricants and silicones. Avoid any material that might contaminate the surface. If you suspect a problem clean the surface, before re-spraying, with CrystaLac® Surface Conditioner, or a 50/50 blend of denatured alcohol and water. In addition, spraying on cold wood may cause the coating to perform erratically. Be sure that the wood and the coating to be applied are at normal room temperature. For finer finishing read entire technical data sheet.



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#### **PREPARATION of CRYSTALAC® TOPCOATS**

1. Stir product thoroughly to ensure that any settled particles mix through the coating. DO NOT SHAKE. You may want to filter the coating before use. Use a paper cone filter or a “nylon” filter to strain if needed.
2. In most instances CrystaLac® finishes can be sprayed straight from the can. If you use any CrystaLac® additives (Reducer, Retarder) be sure to mix THOROUGHLY through the coating. This will ensure that the additive will have its proper effect upon the coating (enhanced leveling and flow-out).

#### **USE OVER OTHER FINISHES**

CrystaLac® Coatings can be successfully applied over oil-based stains, previously coated surfaces with lacquer, urethanes, shellacs, varnishes etc. It is critical that the surface to which CrystaLac® is applied be free of oil, wax, dust, and polish. Newly applied oil-based stains and solvent finishes must be thoroughly dry, and solvents totally evaporated (gassed off) for proper bonding and adhesion to occur. Premature application will result in bubbling, foaming, and non-adhesion of CrystaLac® to the surface.

1. When applying CrystaLac® Coatings over a surface that has had paint remover applied, be sure that the surface has been thoroughly cleaned, and no waxy residue remains on the surface or in the wood grain. We recommend a 50/50 mix of denatured alcohol and water.
2. It is advisable to test for proper adhesion over all oil-based stains, non-waterborne coatings, or stripped surfaces before continuing with the entire job.

#### **PRODUCT APPLICATION**

##### **Direction for applying CrystaLac Brite Tone Topcoat Gloss**

##### **Brush Application:**

1. Apply Brite Tone with a high-quality bristle brush. Foam brushes tend to introduce air bubbles into the finish.
2. Do not shake the can to mix. Rather stir the product.
3. If applying with a brush (foam or bristle) do not wipe on can. Just dip and drip. Then using exceptionally light pressure apply a thin coat.



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4. Allow to dry 4 hours.

#### **Spray Application:**

1. \*Always apply on a test piece before applying to main project to get familiar with how the products work with your equipment and to reduce errors on main project.
2. An HVLP spray gun is recommended with a 1-2 mm needle with 40-60 pressure.

#### **Application Instructions:**

1. Make sure the surface is clean. Remove dust with a vacuum and/or compressed air.
2. DO NOT use a tack cloth. Instead, use a clean cloth lightly dampened with a 50/50 mix of water and denatured alcohol to wipe down the surface.
3. Gently stir Brite Tone with a clean stir stick and be careful not aerate. DO NOT shake prior to use. Stirring air into the product will result in the formation of air bubbles in the applied clear coat.
4. Apply Brite Tone in a clean, dust-free area where the temperature is 65° to 75°F (18°C to 24°C)
5. Each coat should be applied as thin as possible to reduce sags, runs and drips.
6. Allow each coat of Brite Tone to dry at least 3 hours before applying the next coat.
7. Before applying the next coat of Brite Tone, lightly scuff sand the surface with 320 grit sandpaper and clean the surface as described in step 1.
8. The last 2-3 coats should be applied without scuff sanding between coats to ensure a smooth surface.
9. The number of coats you apply will depend on your ability to level sand the finish without sanding through. A minimum of six and a maximum of twelve coats is recommended.

#### **Level Sanding:**

1. Allow one, 24-hour day per coat to achieve a proper cure before level sanding (6 coats = 6 days of curing time).
2. To achieve a mirror-like, high gloss shine, it is best to dry sand Brite Tone after allowing for the proper curing time.
3. Use P-grade, waterproof, silicon carbide sandpaper wrapped around a waterproof, rubber sanding block.
4. Start sanding with P800 grit sandpaper.
5. Dry sand in a small, manageable areas. Do not try to sand the entire surface all at once. Sand very carefully near the edges to prevent sand through.
6. Check your progress by wiping off the area with a clean, lint-free cloth. The surface should



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begin to develop a matte sheen.

7. If there are any shiny spots remaining, continue to sand until the surface is a uniform matte sheen before moving to the next area.
8. Once the entire surface is a uniform matte sheen, clean the surface with a clean, damp cloth.

### **Buffing (Optional)**

\*Keep In mind that Brite Tone Gloss will produce a mirror-like shine naturally without the need of buffing.

### **Buffing By Hand:**

(You can either buff entirely by hand or use an electric drill with foam polishing pads).

1. Start with a high quality, silicon-free, rubbing compound and a clean buffing cloth/pad. Follow the manufacturer's instructions for using the rubbing compound.
2. Continue with a high quality, silicon-free, fine polishing compound, and a clean buffing cloth/pad. Do not use the same cloth/pad used in the previous step. Follow the manufacturer's instructions for using the polishing compound.
3. Finish with a high quality, silicon-free, swirl remover and a clean buffing cloth/pad. Do not use the same cloth/pad used in the previous step. Follow the manufacturer's instructions for using the swirl remover.

### **Using A Buffing Machine:**

1. Use an electric buffing machine fitted with 12" diameter or larger buffing wheels. The ideal buffing speed of the machine should be 700 to 900 rpm. Three buffing compounds will be used, and each compound should have its own dedicated buffing wheel. Do not use the same wheel with all three compounds.
2. Start with a coarse solid buffing compound and a firm cotton buffing wheel. Take care not to linger in any one spot for too long and be especially careful along the edges of the surface to avoid burning the finish.
3. After buffing with the coarse compound, let the surface cool for 30 minutes and clean off any residue with a clean, soft cloth.
4. Continue buffing with a fine solid compound and another firm cotton buffing wheel. Take care not to linger in any one spot for too long and be especially careful along the edges of the surface



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to avoid burning the finish.

5. After buffing with the fine compound, let the surface cool for 30 minutes and clean off any residue with a clean, soft cloth.
6. Finish buffing with a fine solid compound and a soft flannel buffing wheel. Take care not to linger in any one spot for too long and be especially careful along the edges of the surface to avoid burning the finish.
7. After buffing with the fine compound, let the surface cool for 30 minutes and clean off any residue with a clean, soft cloth.

#### **Direction for applying CrystaLac Brite Tone Topcoat Satin/Matte**

##### **Brush Application:**

1. Apply Brite Tone with a high-quality bristle brush. Foam brushes tend to introduce air bubbles into the finish. Do not shake the can to mix. Rather stir the product. If applying with a brush (foam or bristle) do not wipe on can. Just dip and drip. Then using exceptionally light pressure apply a thin coat. Allow to dry.

##### **Spray Application:**

An HVLP spray gun is recommended with a 1-2mm needle and 40-60 psi.

##### **Application Instructions:**

1. Make sure the surface is clean. Remove dust with a vacuum and/or compressed air.
2. DO NOT use a tack cloth. Instead, use a clean cloth lightly dampened with a 50/50 mix of water and denatured alcohol to wipe down the surface.
3. Brite Tone Satin/Matte should be limited to no more than 5 coats. Applying more than 5 coats may result in reduced clarity. If more than 5 coats are desired to achieve a thicker topcoat, it is recommended to apply several coats of a CrystaLac Sanding Sealer or Brite Tone Gloss first before applying the final satin/matte coats.
4. Gently stir Brite Tone Satin/Matte with a clean stir stick and be careful not aerate. DO NOT shake prior to use. Stirring air into the product will result in the formation of air bubbles in the applied clear coat.
5. Apply Brite Tone Satin/Matte in a clean, dust-free area where the temperature is 68° to 78°F.
6. Each coat should be applied as thin as possible to reduce sags, runs and drips.
7. Allow each coat of Brite Tone Satin/Matte to dry at least 3 hours before applying the next coat.
8. Before applying the next coat of Brite Tone Satin/Matte, lightly scuff sand the surface with 320





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grit sandpaper and clean the surface as described in step 1 if dust or contamination have occurred during the drying process.

9. The last 2-3 coats of Brite Tone Satin/Matte should be applied without scuff sanding between coats to ensure a smooth surface.
10. Allow one, 24-hour day per coat to achieve a proper cure (6 coats = 6 days of curing time).
11. It is not necessary to level sand or buff Brite Tone Satin/Matte. If there are any dust or lint spots on the surface, lightly dry sand them out with P1500 grit silicon carbide dry sandpaper and gently rub the surface with an extra fine synthetic steel wool pad.

#### **How many coats need to be applied?**

The answer to this question depends on what you are trying to achieve for a finished appearance. Usually 3 or 4 coats (sanding with 320 - 400 paper between coats if necessary due to contamination, or dust) will provide excellent depth of finish. For a heavier appearing finish, (more than four coats), allow additional time between each application (at least a few hours or more). This will permit internal additives to evaporate and not become trapped by the multiple coats. This will ensure proper curing, hardening and print resistance.

#### **Re-Coating**

When applied properly, CrystaLac® Brite Tone will usually be dry to touch in 1 to 2 hours. Thicker applications (which should be avoided) will take slightly longer. Under normal conditions 24 hours should be sufficient to sand (if necessary) and re-coat. Re-coating too soon can sometimes cause an orange peel effect and may extend the final cure time of the product.

1. BE PATIENT!!!! Wait at least 3-4 hours before applying the next coat. NOTE: Cold or wet days may extend dry time. CrystaLac® can be dried in the sun, however, do not apply additional coats on a hot surface.

#### **Clean-Up**

1. When cleaning spray guns, wash, and rinse spray gun with warm water. It is sometimes possible to hold your spray gun under a running faucet let warm water flow through the material pick-up tube while pulling back the trigger permitting the water to float through the spray jet to flush out any of the remaining coating.
2. If waterborne coating dries on any of the spray equipment it will need to be softened and soaked with CrystaLac® Organic Spray Gun Cleaner or acetone, then brushed and thoroughly rinsed off.



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3. Use appropriate cautions using any solvent-based products to clean spray guns as they are hazardous materials and can cause contamination of water-based products as they are being sprayed.
4. Additionally, the use and storage of many solvents is restricted or prohibited in some locations. Check local codes before use of solvent-based products.