

www.crystalac.info 423-727-6425

Brite Tone Technical Data Sheet

Contents:

CrystaLac®'s History

Description of CrystaLac® products

Brite Tone® Description

Application and Use

CrystaLac's Company History

In 1989 CrystaLac® waterborne finishing products enjoyed immediate success as a waterborne product. As far back as 1995 CrystaLac® received top ratings above 35 other waterborne products in a comparison study, and still continues to stay on top. Offering a full range of wood, metal, and custom waterborne coatings, CrystaLac® rapidly found its way into finishing shops and homes across the United States. CrystaLac® quickly became identified by its ease of use, optical clarity and its tough protective qualities. Today, CrystaLac® can now be found worldwide.

What is CrystaLac®?

CRYSTALAC® Waterborne Finishing Products are highly developed pure grade "acrylothaneTM" resins. Ongoing research and formulation insure that all CrystaLac® users will always have the latest waterborne technology available.

CRYSTALAC® Waterborne Finishing Products are a safe alternative that can be used in place of nitrocellulose lacquer, oil-based polyurethane, or varnishes. CrystaLac® is great on most anything that demands a quality protective finish. It is specialized for use on wood, but can be used on metal, ceramic or other selected surfaces.

CRYSTALAC® Waterborne Finishing Products are designed to be HVLP spray compatible as well as applied with traditional conventional spray applications.

CrystaLac® Brite Tone Instrument Finish

• Brite Tone Instrument Finish is a high solids, super hard, scratch resistant, clear finish with exceptional clarity. It is by far CrystaLac®'s hardest and clearest top coat. Brite Tone will build to a high depth very quickly due to its high solids content and will not leave a blue cast on dark exotic wood. It can adhere to wood, metal and glass and is household chemical resistant. Brite Tone is environmentally friendly with a low V.O.C. and has no toxic chemicals or obnoxious odors. It is easy to use. Brite Tone self-levels and is water cleanup. It dries quickly in only 1-2 hours.

Application and Use

Basic Guide

Technical Data Sheet

Product Details:	Brite Tone
Sheens:	Gloss, Satin, Matte
Application Tool:	Bristle brush, Foam Brush, Wipe on or Spray
Location:	Interior wood surfaces, musical instruments
Recoat:	after 2 to 3 hours
Dry Time:	2 to 3 hours / Full cure up to 30 days
Cleanup:	Water
Coverage:	120-150 sq. ft. per quart
Coats:	3 to 5 coats are recommended.
Recommended Uses:	Furniture, woodwork, doors, cabinets, musical instruments, accessories, turnings

BRITE TONE PRODUCT USE GUIDE

CrystaLac® Waterborne Finishing Products are carefully formulated to provide the professional and beginning finisher with ease of use an excellent quality finish. Before using CrystaLac® Extreme Protection, it is important to read the General Product Use Guide and 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 or stearated sandpaper.

PRODUCT PREP:

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. 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 affect upon the coating (enhanced leveling and flow-out).

FINISHING AREA AND ENVIROMENT:

It is important to provide a clean, ventilated, stable temperature environment in which to apply CrystaLac® finishing products. CrystaLac® is self-leveling and dries rapidly. A 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 80°F can affect the performance of the finished coat. After the coating is dry to touch, it will take airtime to cure and harden. The temperature should remain constant through this time period. DO NOT store 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. CAUTION: USE OF COATED OR STEARATED SANDPAPERS can leave residue on the surface. This can cause the coating not to bond property to the surface. This would be evident if the coating suddenly separated into a series of small clear crater like circles. (Sometimes called fish eye). Lack of adhesion can also occur if any oils or silicones are left on the surface to be coated. DO NOT USE steel wool or tack rags as 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. 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.

PREP: USE OVER OTHER FINISHES:

CrystaLac® Brite Tone 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 COMPLETELY evaporated and "gassed off" for proper bonding and adhesion to occur. Premature application will result in bubbling, foaming, and non-adhesion of CrystaLac® to the surface. 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. 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.

Applying Brite Tone Gloss®

Brush Application:

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

Spray Application:

An HVLP spray gun is recommended with a 1mm needle.

Make sure the surface is clean. Remove dust with a vacuum and/or compressed air. 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.

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.

Apply Brite Tone in a clean, dust-free area where the temperature is 65° to 75°F (18°C to 24°C) Each coat should be applied as thin as possible in order to reduce sags, runs and drips.

Allow each coat of Brite Tone to dry at least 2 hours before applying the next coat.

Before applying the next coat of Brite Tone, lightly scuff sand the surface with 320 grit non-stearated sandpaper and clean the surface as described in the first step.

The last 2-3 coats should be applied WITHOUT scuff sanding between coats to ensure a smooth surface.

The number of coats you apply will depend on your ability to level sand the finish without sanding through. A minimum of 6 and a maximum of 12 coats is recommended.

Allow one, 24-hour day per coat to achieve a proper cure before level sanding (6 coats = 6 days of curing time).

Level Sanding:

To achieve a mirror-like, high gloss shine, it is best to wet sand Brite Tone after allowing for the proper curing time.

Use P-grade, waterproof, silicon carbide sandpaper wrapped around a waterproof, rubber sanding block.

Fill a clean 1-quart container with distilled water and drop of liquid dish soap.

Start wet sanding with P800 grit sandpaper.

Wet sand in a small, manageable areas. Don't try to wet sand the entire surface all at once. Wet sand very carefully near the edges to prevent sand through.

Check your progress by drying off the area with a clean, lint-free cloth. The surface should begin to develop a matte sheen. If there are any shiny spots remaining, continue to wet sand until the surface is a uniform matte sheen before moving to the next area.

Once the entire surface is a uniform matte sheen, clean the surface with a clean, damp cloth.

Polish Sanding:

After level sanding is complete, start polish sanding in small, manageable areas with P1000 grit sandpaper and fresh distilled water/liquid dish soap.

Check your progress by drying off the area with a clean, lint-free cloth. The area wet sanded with P1000 should appear slightly more reflective than the areas that were level sanded with P800 grit when viewed at a low angle. Continue wet sanding with the P1000 grit until the sheen left by the P800 grit is replaced with a P1000 grit sheen.

After wet sanding the entire surface with P1000 grit sandpaper, clean the surface with a clean,

damp cloth.

Repeat polish sanding steps 1-3 with P1200 grit sandpaper.

Repeat polish sanding steps 1-3 with P1500 grit sandpaper.

Repeat polish sanding steps 1-3 with P2000 grit sandpaper.

Buffing by Hand:

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

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.

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.

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.

<u>Using A Buffing Machine (Recommended):</u>

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.

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 in order to avoid burning the finish.

After buffing with the coarse compound, let the surface cool for 30 minutes and clean off any residue with a clean, soft cloth.

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 in

order to avoid burning the finish.

After buffing with the fine compound, let the surface cool for 30 minutes and clean off any residue with a clean, soft cloth.

Finish buffing with a very 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 in order to avoid burning the finish.

After buffing with the very fine compound, let the surface cool for 30 minutes and clean off any residue with a clean, soft cloth.

Applying Brite Tone® Top Coat Satin/Matte

Brush Application:

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

Spray Application:

An HVLP spray gun is recommended with a 1mm needle.

Make sure the surface is clean. Remove dust with a vacuum and/or compressed air. 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.

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 top coat, it is recommended to apply several coats of a CrystaLac Sanding Sealer or Brite Tone Gloss first before applying the final satin/matte coats.

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.

Apply Brite Tone Satin/Matte in a clean, dust-free area where the temperature is 65° to 75°F (18°C to 24°C)

Each coat should be applied as thin as possible in order to reduce sags, runs and drips.

Allow each coat of Brite Tone Satin/Matte to dry at least 2 hours before applying the next coat.

Before applying the next coat of Brite Tone Satin/Matte, lightly scuff sand the surface with 320 grit non-stearated sandpaper and clean the surface as described in step 1 if dust or contamination have occurred during the drying process.

The last 2-3 coats of Brite Tone Satin/Matte should be applied without scuff sanding between coats to ensure a smooth surface.

Allow one, 24-hour day per coat to achieve a proper cure (6 coats = 6 days of curing time).

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 wet/dry sandpaper and gently rub the surface with an extra fine synthetic steel wool pad.

HOW MANY COATS SHOULD 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. Extremely wet applications (which should be avoided) will take slightly longer. Under normal conditions 2 to 4 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. BE PATIENT!!!! Wait at least 1 to 2 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

CrystaLac® is easy to use with water clean-up!

Cleaning Spray Gun:

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 spay jet to flush out any of the remaining coating. 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. Use appropriate cautions using any solvent based products to clean spray guns as they are hazardous materials and can cause contamination of waterbased products as they are being sprayed. Additionally, the use and storage of many solvents is restricted or prohibited in some locations. Check local codes before use of solvent based products.

The CrystaLac Company Address: 6205 HWY91 N, Mountain City, TN 37683

Phone: (423) 727-6425

Website: www.crystalac.info

BLANK