

CRYSTAL SHEEN – HIGH GLOSS FINISH

DANGER:

CONTACT WITH HARDENER MAY CAUSE PERMANENT EYE DAMAGE. MAY BE HARMFUL BY SKIN CONTACT OR BREATHING VAPORS OR MISTS. CONTACT WITH RESIN MAY PRODUCE ALLERGIC REACTION BY INGESTION, INHALATION OR SKIN CONTACT. CONTACT MAY CAUSE EYE/SKIN IRRITATION. PRECAUTIONS: Avoid inhalation, ingestion, eye and skin contact. Wear protective gloves and goggles. Use window exhaust fan or other suitable equipment for a well ventilated work area. Keep container tightly closed when not in use. KEEP OUT OF THE REACH OF CHILDREN.

Hardener Contains: Nonyl Phenol, Polyoxayalkyleneamines and N-Aminoethylpiperazine.

Resin Contains: A/epichlorohydrin resin and aliphatic and aromatic glycidyl ethers.

Contact a poison control center for more health information.

FIRST AID: ORAL: If resin is swallowed, induce vomiting. If hardener is swallowed, do not induce vomiting. CALL PHYSICIAN IMMEDIATELY! EYES: Severe irritant to eyes. In case of eye contact, flush thoroughly with water for 15 minutes and get prompt medical attention. SKIN: Wash immediately with soap and rinse thoroughly with water. Do not use solvents or alcohol to remove product from skin. INHALATION: Move to fresh air. If not breathing, administer CPR. If breathing is difficult, get medical attention.

PREPARATION. Some things to know before using Crystal Sheen®: IT IS MOST IMPORTANT THAT BOTH RESIN AND HARDENER ARE THOROUGHLY "WHIPPED" TOGETHER IN A FLAT WALLED AND FLAT BOTTOMED CONTAINER WITH A FLAT SIDED STIR STICK. SIDES AND BOTTOM OF CONTAINER MUST BE SCRAPED WHILE MIXING. PRODUCT WILL NOT CURE PROPERLY AND WILL BE SOFT OR STICKY IF MIXING DIRECTIONS ARE NOT CAREFULLY FOLLOWED-READ DIRECTIONS CAREFULLY.

Crystal Sheen is a reactive polymer compound. It cures to a thick, glossy coating in about 8 hours at 70 degrees F, and reaches full strength and toughness in about 72 hours. This durable, resilient material requires no polishing to produce a high gloss. One coat is all that is usually required for a deep attractive finish; however, two or more coats may be applied one over the other by simply wiping the surface with alcohol prior to recoating.

CRYSTAL SHEEN IS NOT RECOMMENDED FOR EXTERIOR USE. TO COAT OVER POLYURETHANE FINISHES, SCUFF SAND AND WIPE CLEAN PRIOR TO COATING.

Tools Required.

Envirotex graduated cups, stir sticks and brushes are available. The mixing containers must have smooth, flat walls and a flat bottom. The stir stick must have a straight edge (like a paint paddle) to allow the user to scrape sides and bottom of mixing container thoroughly while mixing. The brush is used to coat edges and to pick up drips from the

work surface covering to brush on areas at the edges missed during pouring.

Surface:

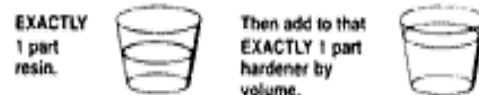
Coverage will vary according to surface and method of application. The surface to which Crystal Sheen is to be applied should be dry and free from dust, grease, wax or oil. Level the surface. The surface should be up off the work area about 2 inches to allow the coating to drip freely off the sides of the item being coated. Put plastic sheeting, wax paper or multiple layers of newspaper underneath the item being coated to catch drips. See "Seal Coats" on back. The unique self-leveling qualities of Crystal Sheen can be attained only by using enough material to flood the surface. It is better to mix a little too much, rather than too little. Mix only as much Crystal Sheen as you can pour and spread at one time. Unmixed components should remain in original containers. After pouring you have about 25 minutes working time before Crystal Sheen begins to harden.

Coverage. (surface sealed prior to coating)

4 oz Kit	1 square foot
8 oz Kit	2 square feet
Pint Kit	4 square feet
Quart Kit	8 square feet
½ Gallon Kit	16 square feet
Gallon Kit	32 square feet

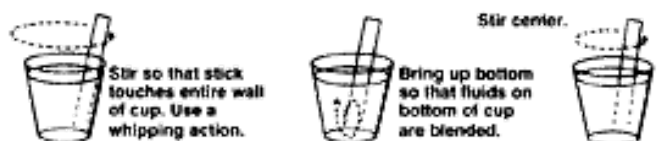
APPLICATION: Before starting projects, see additional information under Creative Ideas and Techniques

1. Measure.



2. Mix. Mix the measured resin and hardener in a clean container. Stir until the material is thoroughly blended. Mixing should be completed after 2 minutes of vigorous mixing. The importance of thorough mixing cannot be over-emphasized. The two components must be whipped much like mixing a cake batter. If bubbles get whipped into the mixture, do not be concerned; the bubbles can be easily removed later. Improper mixing can result in soft or sticky spots.

To prevent problems with improper mixing, we suggest using a "double-cup" method of mixing: have two mixing



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containers ready. Begin mixing in the first clean mixing container. After one minute of mixing, transfer the Crystal Sheen into the second container and continue mixing for one minute. Mixing should be completed after two minutes of *vigorous* mixing.

3. Pour, Do Not Wait!

Pour as soon as thoroughly mixed. Carefully pour over the surface in an even pattern. Spread where necessary using a piece of stiff paper to help liquid flow together. Caution: If Crystal Sheen is left in mixing container, it will become hot and set up rapidly.



4. De-gas.

After about 5 minutes, the air bubbles created while stirring will rise to the surface. They can be easily and effectively broken by GENTLY exhaling on them until they disappear (avoid inhaling fumes). A propane torch can be used as an aid in removing bubbles from a freshly coated surface. Hold the torch about 6 inches away and sweep smoothly across the surface until the bubbles are gone. Use low flame. This process may be repeated as often as is necessary while material is liquid. Brush edges until material has set" firm enough not to "sag." NOTE: It is carbon dioxide, not heat, which breaks up the bubbles

5. Cure.

For best results, coat at temperatures between 70° F and 80° F. Allow the coated item to cure in a warm dust free room. Curing time will vary with humidity and temperature. Humidity below 50% is recommended for proper hardness of film. Placing a clean cardboard box over the item is effective in keeping dust off the surface during the cure cycle.

Temperature	Dust Free	Hard Cure
70° F	4-7 hours	72 hours
80° F	3-6 hours	48 hours
90° F	2-5 hours	36 hours

6. Clean-up.

While liquid, the material can be cleaned up with alcohol. After it has cured, it can only be removed by long exposure to epoxy stripper, sanding or infrared paint peeler.

Surface Care.

Furniture polish will prolong the life of the surface and clean smudges, etc. If scratches occur that cannot be polished out, clean with acetone, then recoat with Crystal Sheen. This additional coat will remove all surface blemishes. Crystal Sheen is heat resistant, however, it should not be intentionally subjected to high temperatures such as

cigarettes, cooking utensils, etc. Crystal Sheen is water and alcohol proof. Objects, when left on the surface for a period of time, may leave impressions on an Crystal Sheen surface (the coating is made tough, yet flexible so as to not be brittle and prone to shattering from impact). Impressions usually disappear in a few hours at normal 72° - 75° room temperatures. The warmer the environment, the more quickly impressions will appear and after items are removed, will disappear. This characteristic, coupled with outstanding moisture and chemical resistance, makes Crystal Sheen an ideal coating for bar tops, coffee tables and dining tables.

Creative Ideas:

General Surface Coating.

Crystal Sheen may be applied over most surfaces including - Wood, Metal, Glass, Sea Shells, Painted Surfaces, Decals, Dried Flowers, Oil Paint, Pine Cones, Bread Dough, Seeds, Rocks, Straw Flowers, Figurines, Bisque, Styrofoam, Paper, Models, Plaster, Fabric.

Tables / Bar Tops / Large Objects.

We recommend a helper to speed the mixing process for large areas. Large or small, preparation is important. Table must be dry, sanded, level, free from sawdust, dirt or loose charred wood. Most raw wood is porous and should be sealed to prevent air bubbles from escaping into the final coat (see 'seal coats'). After seal coat—flood generously with Crystal Sheen. Insure that the fluid is well distributed, covering all dry spots (follow steps under "bubbles"), and then leave it alone! Elevate a plastic drop cloth above the table as a dust cover. Give your table 2-3 days to cure undisturbed in a warm room before putting it into service.

Decoupage/Photographs/Newspaper Clippings.

Envirotex has revolutionized the art of decoupage with its one-coat application. Use white glue to mount the items to be coated. If you are working with thin paper, then avoid "blotching" by sealing first with the white glue solution. Make sure glue is thoroughly dry before coating with Crystal Sheen

TECHNIQUES:

Liquid Storage. For best results, fluids should be stored at 70-75°F prior to use. Both resin and hardener can be left in open containers but should be closed for long storage. The shelf life of this compound is approximately 1 year. All polymer compounds react in some way to the presence of humidity. Crystal Sheen has been developed and formulated in such a way that its reaction to humidity is minimized. Using Crystal Sheen in a room where humidity is under 50% will give best results.

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NOTE: Due to the purity of Crystal Sheen resin, a clouding or settling of the resin may occur in extremely cold conditions. Should this 'clouding occur, place resin container in hot tap water until resin clears. This heating process may need to be repeated several times with severely cloudy resin. Allow resin to cool to room temperature before combining with hardener.

Glueing.

If waiting 3-4 hours is no problem, then Crystal Sheen works very well as a glue. But, if you're in a hurry, white glue works fine. Apply glue to the back of your print, photo, or whatever. Or if you wish, you can brush glue over the entire surface of the plaque and just lay the subject on top. Then use a roller or your hand to push air bubbles out from under the print. Be sure glue is dry before coating with Crystal Sheen.

Seal Coats.

Open grain woods such as oak or walnut require a thin coat of Crystal Sheen prior to flood coating to prevent air from escaping from the wood into the thick fluid. To seal coat something, just mix up about 1/4 the amount you would use to flood coat, and spread it thinly over the entire surface, using a brush or scraper tool. This puts a thin film down over air passages, and seals them off. Occasionally two seal coats are required. Allow the seal coat to cure for at least 5 hours, and you are ready to flood coat the object. Porous fabric or paper should be sealed with one or two coats to white glue prior to flood coating. Envirotex Spray Sealer No. 4013 is available in a 13 oz. spray can. It is very fast drying and provides a quick recoat over paper or wood and "stiffens" soft items such as dry flowers or fabrics

Bubbles.

One of the important signs that you are mixing Crystal Sheen well enough is the appearance of bubbles while you are mixing. This is normal. Crystal Sheen has been specially formulated to de-gas itself, freeing most bubbles, automatically. Occasionally, however, bubbles will become trapped in the surface. They can be easily removed by exhaling your breath gently over the surface, or by carefully sweeping a propane torch across the liquid at a height of approximately 6-8 inches.

Torching.

As mentioned above, torching is a method for releasing bubbles from a pour that may not de-gas itself. Care should be taken to avoid over torching. If wooden objects are not sufficiently seal coated prior to torching, the torching will cause wood to "bleed" air into a fresh coat of Crystal Sheen, and these bubbles are difficult to stop. The torch should

never be held in one place, as this will permanently damage surface and coating. Use a swift, even sweeping motion when torching and never hold torch closer than 6 inches from surface

Satin Finish.

The following method may be used to create a satin finish with Crystal Sheen after applied and completely cured. If after a period of time you decide you would like to change the satin finish back to high gloss, clean the surface thoroughly with acetone (to remove all wax and dirt) and recoat with Envirotex. It will cure once again to a beautiful glossy surface.

- a. To remove the gloss, rub the fully cured surface with wet or dry 0000 steel wool or #600 sandpaper. Rub with the grain of the wood or in small consistent circles.
- b. Wipe the surface clean. Using a soft cloth or felt, apply a paste made of oil (i.e., decoupage "polishing oil", linseed oil, or crude oil) and a carnauba based wax. Decoupage "polishing powder" may be used in place of the wax.
- c. After letting the surface dry, rub off any wax and buff with a carnauba based wax.

Drips.

Excess Crystal Sheen will drip over sides of the plaque or table as if is being poured. Pick up excess drips with a brush and coat the edges you missed when pouring the surface. Drips will harden on the bottom of your project during the curing process. One of the following methods will eliminate the drips.

- a. Scrape them off the bottom while they are still fluid, about 30-40 minutes after pouring
- b. BEFORE POURING, apply a generous coat of paste wax or masking tape to the edges of the back of the project. After the Crystal Sheen is cured, the drips can be popped off.
- c. Drips can be sanded off after Crystal Sheen is cured. A circular sanding attachment on an ordinary hand drill works well

Before Attempting Large Projects:

Crystal Sheen is easy to handle, but before attempting large projects, we recommend doing a small one to "get the feel" of applying Crystal Sheen. We recommend a helper to aid in mixing when coating large objects.