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CASTING NEWS NETWORK

Trade Show Spot



Carl Aune, Don Hay, Sam Bodor, and Jim Novak prepare for ACS's first day of the International Boat Exhibition (IBEX). IBEX was the first showing of the Crystic Crestomer product line in the United States.

Visit ACS at one of the upcoming shows!

Polycon 2005
 Booth number 208
 February 17-19, 2005
 Nashville Convention Center
 Nashville, Tennessee USA



Solid Surface International Expo 2005
 Booth number 1227
 March 4-5
 Las Vegas Convention Center
 Las Vegas, Nevada USA

CASTING NEWS NETWORK

Fall 2004

Inside this Issue:

- Cold Weather, pg. 3
- New Market, pg. 2
- Product Release, pg. 2
- Spraying Poly Stone, pg. 1
- Trade Shows, pg. 4

Happy Holidays!



From the ACS Team!

All of us at ACS International would like to wish you a happy and safe holiday season. Our office and manufacturing facility will be closed on December 24th as part of our holiday break.

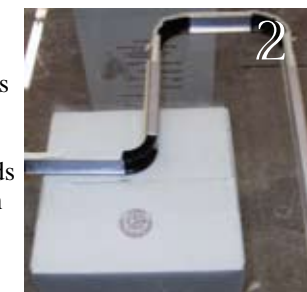
Spraying Poly Stone™

One of the things that makes Poly Stone an attractive product, is its versatility. Poly Stone can be sprayed on a variety of surfaces, making it easy-to-use while producing exceptional looking results. The following will briefly outline the step-by-step process of spraying Poly Stone using a cup gun—a basic and inexpensive option.



Mold Assembly

- Measure and number mold bars to ensure proper placement.
- A variety of molds may be used with Poly Stone.



Secure Mold

- Once mold sections are in order, use double sided tape & tempered glass to set-up mold bars.
- Apply mold release on level, secure glass for even material distribution.

Continued on page 3...

Q & A

Q: Question: I am confused about the way catalyst is added to resin. Some data sheets say to catalyze base material by resin weight and others say to catalyze by volume. Who is right?

A: Both are right, but one is more accurate. If you look at the specific gravity of a general purpose resin its specific gravity can average around 1.10 depending on the styrene level. The initiators have a specific gravity of around 1.00 for TXIB and 1.15 for DMP solvent systems. Right in the middle.

For some operations it is not possible to use weight as a measure due to volume dependent Equipment. Some shops don't have a scale that is accurate at low weights and must use either a low cost beaker or graduate cylinders. Of course, using weight is more accurate because as the temperature changes the volume to weight ratio changes.

Q: Is there a way to avoid COD fees when I'm ordering ACS product?

A: To avoid COD fees, you can pay using a credit card. All major cards are taken; AMEX, Discover, Master Card, and Visa.

ACS Opens New Markets

ACS International, Inc. has become the exclusive distributor for the Crystic® Crestomer® structural adhesives. These adhesives were developed by Scott Bader, Ltd., headquartered in the United Kingdom, for use on mine sweepers belonging to the British Royal Navy over 20 years ago. Today, Crestomer adhesives are regarded as one of the foremost structural adhesives for FRP (fiber reinforced polyester) composites bonding applications.

For ACS International, Inc. the transition into the Crestomer product line was simple. On one hand, Scott Bader is the exclusive distributor of Poly Stone and Dura Stone in Western Europe, and has an exceptional business relationship with ACS. On the other hand, ACS manufacturers and packages adhesive for the solid surface and stone products, thus giving our staff a 5-year history of knowledge in handling adhesives.

The Crystic Crestomer line is composed of the; 1152 high performance structural adhesive; the 1181 & 1186 multi purpose structural adhesives; and the 1196 core bonding adhesives. These are each available in bulk packaging. In addition, ACS also distributes the highly sought after Crestomer Advantage adhesives. The Advantage line is a high performance structural adhesive, pre-packed in 380 mL cartridges. This adhesive is available in a 10 minute or 30 minute gel time.

The sales pitch for this product line is that the proprietary formulation is based on an incredibly strong Urethane Acrylate resin. One of the main advantages of the Crestomer line over MMA(methyl methacrylate adhesive) products is the low exotherm. Most MMA adhesives have a high exotherm causing "heat imprinting" on FRP parts, thus adversely affecting the aesthetics of the finished product.

For more information and samples of the Crystic Crestomer product line, please contact your ACS sales representative or the main office at 800-669-9214 or direct at 520-889-1933. Additional information may be found on our web site at www.acstone.com.

Carl Aune
International Sales Manager
Western Sales Representative

New Product Release

If you're looking for the look of natural stone—without the cost—Artistone™ is the answer. Artistone mimics the seemingly effortless look of nature's natural stone, in a cultured marble product. Intended for use behind a gel coat, Artistone uses color controlled chips for superior performance and quality in an array of colors to choose from.

As resin prices soar, costs associated with solid surface materials have unavoidably increased as well. To help off-set resin costs, Artistone has a low resin demand using a standard cultured marble resin at 27% by weight. To reduce the product cost even more, Artistone uses calcium carbonate as the base filler material.

Color samples are now available for any of the twenty-four Artistone colors. In addition, ACS is developing a full color brochure and sample board. The entire Artistone line will debut at the Polycon 2005 show in order to give the attendees a hands-on demonstration of this exciting new product line.

For more information please contact us at 800-669-9214 or visit the web at www.acstone.com.

Spraying Poly Stone continued



External Mold Bar Taping

- Tape corners of mold bars to avoid bar separation caused by weight of matrix (left).



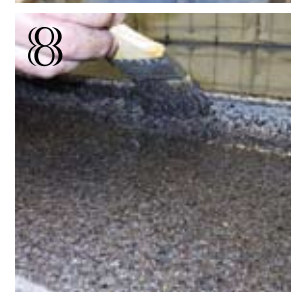
Mixing Equipment

- Image to left shows a basic electric mixer. A variety of other mixers are available, such as hand-drill mixers.



Spray Application

- Apply several spray passes (below), instead of one overlapping pass as done with gel coat.
- Use a mil gauge to measure.



Technique Tip

- For best results, allow Poly Stone and gel coat mix to become tacky to touch before proceeding to next step (back fill pour).



Back Coat Mixture

- After mixing matrix (catalyst, pigment, base material), pour back fill mixture into mold immediately after catalyst is thoroughly mixed in.



Completion

- After cure is complete, remove part from mold.



Measurement

- Gel coat: Measure by weight, pouring resin first filler second.
- Typical ratio is 25% Poly Stone, 75% gel coat.



Spray Methods

- Image to the right shows Poly Stone sprayed with a cup gun (other systems are available).
- Hold gun at 45° angle while triggering air before directing towards mold (below).



Back Coat Mixture

- Use back coat color that matches Poly Stone color
- Depending on fabrication requirements, ATH, cultured marble or Featherlite may be used for backfills.



Curing Tip

- Cure temperature should not exceed 180° F or 82.2° C.

More detailed information may be found in ACS's Poly Stone spray manual located on our web site: www.acstone.com, or a hard copy may be obtained from your local distributor or sales representative.

Don Hay
Central Sales Representative

Cold Weather

The cold weather season is upon us and as all fabricators know, the indoor temperatures drop as well. Due to these lower shop temperatures, special considerations should be taken into account when using solid surface adhesives.

In all reactive adhesives high temperatures increase the cure rates while lower temperatures slow the cure. This is true for all families of urethanes, epoxies, silicones and acrylics.

Our data shows that Acrybond™ with an open time (the amount of time available before adhesive begins to react) of twelve minutes and fixture time of thirty minutes at room temperature (standard room temperature being 77° F), is retarded to an open time of approximately twenty-five minutes and fixture time of an hour at 65–67° F. Below 60° F the curing time is increased—to as much as several hours—and may cause undesirable results, such as incomplete cure.

John Emadipour
Director of Technology