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## ***Repair***                      **Marine Gel Coat**

**Products—Duratec® Polyester Hi-Gloss Additive (904-001 Clear), Duratec® Thinner (39LAC-1), Aqua-Buff®Tuff-Stuff® Fast Cut Compound, Aqua-Buff® GlossMaster® Polish**

Duratec Hi-Gloss Additive makes repairing damaged gelcoat fast and easy. The product will reduce subsurface porosity and orange peel, increase impact resistance, improve gloss retention and elevate heat distortion temperatures as well as provide an air cure surface for you to start sanding. The repaired area will duplicate the weathering and properties of un-repaired gelcoat. No wax or added styrene is necessary.

Blending Duratec Hi-Gloss Additive with gelcoat will thin-out the mixture, resulting in easier spraying and flat lay-down. Blending the two with catalyst creates an air-cure coating, which will dry hard, even on the thin edges of the repair. Using Duratec Hi-Gloss Additive eliminates the troublesome “donut” effect often seen with unmodified gelcoat. Sanding time and sandpaper are reduced. The end result is a low porosity, smooth, high-gloss, hard surface that is similar in appearance to the original gelcoat surface.

The Duratec Hi-Gloss Additive is a great choice for above-the-waterline repairs, or for boats that are stored on land. We do not recommend the additive for gelcoat repairs below the waterline on boats that are slip berthed.

**1 Application Conditions**—The surface should be clean, dry and free from oil, grease, wax or other contaminants. Ambient temperature should be in excess of 60°F, 16°C to ensure a rapid and complete cure. Time calculations are based on temperatures of 77°F, 25°C.

**2 Surface and Product Preparation**—Thoroughly wash surface with a degreasing soap and then dry, or wash with a solvent such as acetone. Sand the area to be repaired to a 120-grit or similar finish. Blend and mix 2 separate batches of mixture. In the first mixture blend 20 to 25 percent Duratec Additive into your gel coat, this will provide better hide. In the next mix, blend equal parts of Duratec Polyester Hi-Gloss Additive and gelcoat. Catalyze at 2 percent with mekP catalyst (20 cc per quart). Thinning is not recommended; however, you may thin 5-10 percent to a desired spray viscosity with Duratec Thinner or Methyl Ethyl Ketone solvent.

**3 Using the 25/75 mixture**, spray the entire surface to be repaired with a fine mist coat and wait 2 minutes for the solvents to flash off. Follow with wet coats, overlapping the surrounding area to ensure complete coverage. When re-spraying large areas, keep a wet edge as go to eliminate dry spray. Apply at least 10 mils on this coat to achieve hide.

**4 Using the 50/50 mixture apply another** 10 to 15 mils, making sure that you completely cover the first repair to achieve full cure. After coating cures, 1 to 4 hours, sand entire surface with 400 grit sandpaper and let the surface “breathe” for 8 hours to release trapped solvents.



**5** After 8 hours, finish sanding to desired grit, 1000 or finer, now you will be ready to compound and polish. Using an automotive style buffer with a speed of 2200 rpm, with a wool or wool blend pad, compound entire surface with Aqua Buff Tuff Stuff. After compounding is finished, polish entire surface with Aqua Buff GlossMaster and a polishing cotton pad. An rpm of 2400 works well with the GlossMaster polish. For a swirl free finish, an egg crate foam pad and GlossMaster along with a mist of water will help. Wash surface again with soap and water and then wax.

**Notes:**

- Spray pressures should be 35-50 psi. If a pressure pot is used, provide 10-15 psi pot pressure. Make sure that the atomizing air is high enough to break up particles enough to ensure proper laydown. Too much orange peel may suggest that you are putting it on too heavy and may see trapped solvents
- **Do not inhibit the cure by adding wax surfacing agents.** The combined and catalyzed gelcoat and Duratec Polyester Hi-Gloss Additive will air cure to a hard, glossy finish in approximately 1-4 hours. (Apply forced-air heat for a 30-minute cure time.)

**SAFETY PRECAUTIONS:** Duratec Polyester Hi-Gloss Additive and Duratec Thinner are extremely flammable. Do not apply near sparks, open flame or heat. Keep area ventilated. Do not smoke. Avoid continuous breathing of vapor. Do not take internally.

9-24-2010