Hawkeye Industries

Mold Making with Duratec

APPLICATION GUIDE

PRODUCTS

Duratec Vinyl Ester Hi-Gloss Topcoat - Black - 1902-045, Clear - 1904-045, Orange - 1908-045
Duratec Black Pattern Surfacing Coating - 902-046
Duratec Vinyl Ester Primer - Grey - 1799-006, Black - 1702-006, Untinted - 1704-006
Duratec Surface Primer - Grey - 707-002, Light Grey - 707-082, Black - 707-003

The Duratec Topcoats and Primers provide an outstanding, hi-gloss, distortion free surface for molds that will experience high heat levels (up to 300° F). These air-cure products are easy to apply and lay down flat without porosity for 400 grit initial sanding.

Application Conditions

The plug/pattern should be prepared with a smooth glossy surface. A mold sealer and release wax should be applied.

Thoroughly stir products before use. A pain shaker or drill-mounted mixer is necessary - a stir stick is not enough.

Shop and pattern temperature should be above 68° F and below 90°

POLYESTERS

- Cost-effective option
- Easy to sand & work with
- HDT of 200°F

Which product chemistry is right for you?

VINYL ESTERS

- Ultimate strength & durability
- Chemical resistance
- HDT of 300°F

Mold Making with Hi-Gloss Topcoat

 # 1902-045, #1904-045, #1908-045 or #902-046

Application Process

**Guides for each specific product are available on our website. This guide walks you through the mold making application process.*

Thoroughly stir your topcoat of choice, as outlined above.

Catalyze Topcoat at 2% by weight – but only the amount of Duratec that will be used in 10 minutes at 77°F. We recommend Norox 925 for polyester topcoat and Norox 925H for vinyl ester. Please note that higher temperatures yield a shorter potlife. Mix well. Transfer to an HVLP cup gun or pressure pot.

Make the first spray pass at dust coat. It is necessary to make this coat so light that the surface looks dusty not a continuous film of Duratec. Wait at least two minutes then proceed with a build coat. The dust coat creates thousands of tiny drops of Duratec. As the solvent evaporates these drops become high-viscosity and anchor the next build coat, preventing fish eyes.

Mold Making with Hi-Gloss Topcoat CONTINUED

Make build passes, adding 4-5 mils with each. Each pass should be in a 90° opposed direction to the last (up and down, then back and forth). Build up at least 20 wet mils of the Topcoat.

The Duratec Topcoat should cure until it is tacky, and does not easily transfer onto a fingertip. While waiting for it to cure, you can prepare the Duratec Primer for the next step.

If you are experiencing significant fisheyes on the surface, we advocate the use of mold release wax on the plug/pattern to improve surface tension and allow material to level.

Applying Duratec Primer

#1799-006, #1702-006, #1704-006 or #707-002, #707-082, #707-003

Stir the Vinyl Ester or Polyester Duratec Primer as outlined in Application Conditions.

Catalyze Primer at 2% by weight - we recommend Norox 925 for Polyester Primers and Norox 925H for Vinyl Ester Primers. Mix well.

Only catalyze the amount of Duratec that will be used in 10-15 minutes at 77°F. Please note that higher temperatures yield a shorter potlife. Transfer to an HVLP cup gun or pressure pot. Depending on tool size, a 2.0-2.5mm tip is suggested for smooth, easy spray

Once topcoat surface is cured to tacky, apply the Duratec Primer of choice. Build 15-20 mils. Once the primer has cured enough not to transfer to a fingertip proceed to apply the first laminate. If the primer cures tack-free it must be sanded with 180 grit paper before the laminate is applied.

NOTE: If working with Epoxy Laminates, allow primer to cure completely, sand with 180 or an aggressive scotch brite, and then lay epoxy laminate.

Check the material safety data sheet of your product for recommendations on protective equipment. Each product has a corrosponding Technical Data Sheet available on our website, which includes a troubleshooting guide, general use instructions and other helpful information.

Limited/ warranty statement: Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, expressed or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special, incidental or consequential damages.

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