

VFI®-2538 QS 70 D EPS FORM HARD COAT

VFI-2538 QS 70 D EPS Form Hard Coat is a 100% solids, polyurethane coating using the Qwik Spray System. It is capable of being sprayed over CNC or hot wire foam cut EPS to create a uniform and releasable surface when casting concrete. The Qwik Spray System only requires the VFI-7500 Qwik Spray Gun with an air compressor, allowing for easy equipment startup and low maintenance. It is an alternative to pourable urethane molds or epoxy coatings and allows for faster turnaround times on custom pieces. Its chemical makeup makes it capable of maintaining a smooth finish while providing square corners. Spraying VFI-2538 allows you to create a variety of shapes with less labor.

- Great for custom mold-making of a variety of shapes
- Flat, glass-like texture with reduced need for sanding
- Cures to handle in 5 minutes for faster mold turnaround time
- Saves time by eliminating the need to make a master and a mold box
- Comes in an alternative industrial-ready high-pressure spray system

Some usages of this product are to provide a hard shell for casting concrete and to replace existing fiberglass systems. Additionally, it works as a smooth, sandable, and paintable form for signs or small projects.

PHYSICAL PROPERTIES

Hardness Shore D	70
Tensile Strength	5,500 psi
Elongation	20%
Tear Strength	545 pli
Elastic Modulus	26,450 psi
Impact Resistance (Falling Dart)	8 ft*lbs/in @ 40 mils

LIQUID PROPERTIES

Solids by Weight	100%
Solids by Volume	100%
Liquid Density A Side	9.8 lbs/gal
Liquid Density B Side	8.4 lbs/gal
Mixed Liquid Density	9.1 lbs/gal
Specific Gravity A Side	1.18 g/mL
Specific Gravity B Side	1.01 g/mL
Specific Gravity Mixed	1.09 g/mL
Ratio by Volume (A:B)	1A:1B
Viscosity A Side	500 cps
Viscosity B Side	1,200 cps
Cure to Touch	80 seconds
Cure to Handle	5-7 minutes
Recoat Window	20 minutes

MANUFACTURER OF HIGH PERFORMANCE POLYMERS

Toll-Free 800-307-9218 | volatilefree.com | info@volatilefree.com

VFI®-2538 QS 70 D EPS FORM HARD COAT

THICKNESS REQUIREMENTS

We recommend spraying at a minimum rate of 60 mils or greater to create the best film properties. Multiple passes can be done to increase thickness but must stay within the open window of 30 minutes. If you exceed the open window, we recommend using VFI-1007 Solvent Based Polyurethane Primer to create adhesion between layers.

STORAGE/SHELF LIFE

The shelf life of unopened containers is 6 months after the date of manufacture. Store the product between 60°F - 90°F in a clean, dry building.

EQUIPMENT

VFI-2538 QS must be used in conjunction with the VFI-7500 Qwik Spray Gun and an air compressor that can provide dry air and a minimum of 10 CFM at 100 PSI of constant pressure. We recommend that you heat the material up to room temperature (77°F) while spraying. Do not heat the material in a microwave. Once you begin spraying, you cannot stop until the cartridge is empty without switching tips.

SURFACE PREPARATION

- EPS - Ensure that the EPS has been aged at least 30 days. Anything between 1 and 3 PCF is acceptable, but for an optimal cost-to-quality ratio, we recommend using 2 PCF foam. Once clean and dry, VFI-2538 can be applied directly to the EPS.
- Wood - The wood should be dry and contain less than 11% moisture; otherwise, it should be primed or mist-coated (a light dusting of the coating followed by the main application of the coating).
- Urethane or Plastic – First, sand the urethane or plastic and then apply a general urethane primer to ensure good adhesion to the substrate.

MIXING

As a cartridge system, mixing is not required unless the material is visibly separated. If there is visible separation, shake the cartridge until a uniform mix is achieved.

POST-CURE

The material will need at least 3 hours to cure before heavy movement is allowed, but it is sandable within an hour. Light movement is acceptable sooner than 3 hours if needed. If spraying in thinner passes, it may require a longer post-cure time. Allow a minimum of 24 hours at 77°F for VFI-2538 to cure before casting onto the product. A release agent should be used for easy demolding.

CLEANUP

One of the great features of the Qwik Spray System is that cleanup is easy. You'll disconnect the cartridge from the air-atomizing tip, remove it from the applicator frame, and throw it away. If there is residue on the gun, xylene or MEK can be used before it has time to set. Never soak the gun in any cleaning solvent.

PRECAUTIONS

See Safety Data Sheet for complete safety data.