

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. Its chemical makeup makes it capable of maintaining a smooth finish while providing square corners. Spraying VFI-2538 QS 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 will work as a smooth, sandable, and paintable form for signs or small projects.

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Shore Hardness	ASTM D2240	70 D
Tensile Strength	ASTM D412	3,600 psi
Tensile Modulus	ASTM D638	240,000 psi
Elongation	ASTM D412	8%
Flexural Strength	ASTM D790	8,700 psi
Flexural Modulus	ASTM D790	230,000 psi
Abrasion Resistance	ASTM D4060	N/A
Impact Resistance (Notched)	ASTM D256-10	.605 ft-lb
Weathering	N/A	Not UV Stable
Linear Shrinkage	N/A	N/A
Heat Deflection Temperature	ASTM D648	N/A
Color	N/A	Neutral
Class A Fire Testing	ASTM E84	No

LIQUID PROPERTIES	TEST METHOD	TEST RESULTS
Solids by Volume	ASTM D2697	100%
Mix Ratio by Volume	N/A	1A:1B
Weight per Gallon A Side	ASTM D1475	9.78 lb/gal
Weight per Gallon B Side	ASTM D1475	8.65 lb/gal
Viscosity A Side	ASTM D2196	500 cps
Viscosity B Side	ASTM D2196	1,200 cps
Gel Time	N/A	N/A
Tack Free Time	N/A	80 seconds
Cure to Handle	N/A	5-7 minutes
Recoat Window	N/A	20 minutes
Full Cure Time	N/A	3 days
Volatile Organic Compounds	N/A	0

MANUFACTURER OF HIGH-PERFORMANCE POLYMERS
Toll-Free 800-307-9218 | www.volatilefree.com | info@volatilefree.com

VFI®-2538 QS 70 D EPS FORM HARD

THICKNESS REQUIREMENTS

We recommend spraying at a minimum rate of 60 mils or greater to create the best film properties. If subsequent coats are needed, you must stay within the 20-minute open window. If you exceed the open window, we recommend using a primer to create adhesion between layers.

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.

APPLICATION & CLEANUP

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 QS to cure before casting onto the product. A release agent should be used for easy demolding.

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.

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.

STORAGE/SHELF LIFE

See the Safety Data Sheet for all information regarding safety.