

VFI®-270 70 A POLYUREA SPRAY COATING

VFI-270 70 A Polyurea Spray Coating is a flexible spray-applied coating that creates a smooth, durable film on flexible surfaces. The two-component material is 100% solids and has fast-setting capabilities to achieve high builds on vertical surfaces without sagging. As a polyurea, it has resistance to impact and thermocycling as well as low moisture sensitivity for use in all environments. VFI-270 provides an elastomeric surface without adding too much structure or weight.

- Excellent abrasion, chemical, and scratch resistance
- Creates a flexible, smooth surface that is durable against impact
- Great resistance to thermocycling for outdoor use
- Extremely fast setting for a quick turnaround on projects
- Effective bonding to properly prepared surfaces
- Low viscosity for easy mixing and spraying

| PHYSICAL PROPERTIES | TEST METHOD | TEST RESULTS |
|---------------------|-------------|--------------|
| Hardness Shore A | ASTM D2240 | 72 A |
| Tensile Strength | ASTM D412 | 1,050 psi |
| Elongation | ASTM D412 | 600% |
| Tear Strength | ASTM D624 | 175 pli |

| LIQUID PROPERTIES | TEST METHOD | TEST RESULTS |
|-------------------------|-------------|--------------|
| Solids by Weight | ASTM D1644 | 100% |
| Solids by Volume | ASTM D2697 | 100% |
| Liquid Density A Side | ASTM D2939 | 8.88 lbs/gal |
| Liquid Density B Side | ASTM D2939 | 8.36 lbs/gal |
| Mixed Liquid Density | ASTM D2939 | 8.62 lbs/gal |
| Specific Gravity A Side | N/A | 1.06 g/mL |
| Specific Gravity B Side | N/A | 1.00 g/mL |
| Mixed Specific Gravity | N/A | 1.03 g/mL |
| Ratio by Volume (A:B) | N/A | 1A:1B |
| Ratio by Weight (A:B) | N/A | 112A:100B |
| Viscosity A Side | ASTM D2196 | 550 cps |
| Viscosity B Side | ASTM D2196 | 400 cps |
| Gel Time | N/A | 5 seconds |
| Place into Service | N/A | 4 hours |
| VOC | N/A | 0 |

MANUFACTURER OF HIGH PERFORMANCE POLYMERS

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THICKNESS REQUIREMENTS

We typically recommend spraying between 40 and 80 mils for the best coverage. More coats can be applied for improved impact resistance.

POST CURE

Projects can be put into service in as little as 4 hours, depending on application thickness, but full cure occurs in 3 days.

STORAGE/SHELF LIFE

The material shelf life is 12 months from the date of manufacture. Store in a dry, temperature-controlled space in sealed and unopened containers between 60°F - 90°F. Once open, use it immediately. Opened containers can be resealed with a nitrogen purge, but the material shelf life will ultimately shorten.

MIXING

Before spraying, the B side (Poly) material must be mixed until uniform. Mixing time will vary based on the volume of material used and the mixing method. Bring the material to a minimum temperature of 65°F.

SURFACE PREPARATION

Clean all surfaces of contaminants such as oils, dirt, or debris for ensured adhesion. The surface must be sealed with a release agent, especially if it is porous and you plan on demolding. Some surfaces may require sanding and a primer, so an adhesion test should be performed before coating. VFI's recommended primers include VFI-#11 and VFI-1007. When applying over foam, allow the foam to age for at least 30 days so any gas can escape.

EQUIPMENT

VFI-270 should be sprayed using a high-pressure, high-temperature two-component spray rig. The spray equipment should be capable of heating the product and providing at least 2300-2500 psi of constant pressure.

CLEANUP

VFI recommends using xylene or MEK as a cleanup solvent. When flushing through spray lines, VFI-8005 Pump Flush can be used to remove the material from the hoses.

PRECAUTIONS

VFI-270 is not UV color-stable and has no long-term UV testing. The surface temperature will need to remain between 40°F - 100°F for the best results. The A side of this product contains isocyanate, which may cause skin irritation and inhalation can be toxic. Avoid prolonged breathing of vapors and repeated skin contact. When spraying, use a supplied air respirator or respirator with forced air ventilation in a chemically approved spray booth. Do not thin or add foreign material to the product. See the Safety Data Sheet for all safety information.