

VFI®-201 50 D POLYUREA COATING

VFI-201 50 D Polyurea Coating is a fast setting, two-component, 100% solids, spray-applied coating capable of high builds over prepared metal, concrete, and masonry. It is a general-purpose polyurea that has great adhesion to many surfaces with properties that allow for flexibility when spraying vertically or horizontally. VFI-201 is best used for industrial applications to create a structure over surfaces that need protection from chemicals, abrasion, and impact. Based on application needs, VFI offers different formulas with faster (VFI-202) and slower (VFI-200) setting speeds.

- Low sensitivity when exposed to moisture due to fast-setting abilities
- High tensile strength and elongation increase durability and longevity
- 50 D hardness provides the flexibility needed to resist high impact
- Will not crack or break due to extreme temperature changes
- Protects against chemical corrosion and resists repeated wearing to maintain original structure
- 100% solids content means no VOCs, and it retains 100% of its thickness after curing

PHYSICAL PROPERTIES

TEST RESULTS

| | |
|--|-------------------------|
| Hardness Shore D | 50 |
| Tensile Strength | 2,880 psi |
| Elongation | 448% |
| Tear Strength | 387 pli |
| Solid Material Density | 67 pcf |
| Permeance | 0.69 perm |
| Water Absorption | 1.50% |
| Permanent Set | 35% |
| Adhesion Strength Prepared Steel/Prepared Concrete | 900 lbs/in ² |

LIQUID PROPERTIES

TEST RESULTS

| | |
|-----------------------|----------------------------|
| Solids by Volume | 100% |
| Liquid Density A Side | 9.04 lbs/gal |
| Liquid Density B Side | 8.41 lbs/gal |
| Mixed Liquid Density | 8.73 lbs/gal |
| Ratio by Volume (A:B) | 1A:1B |
| Viscosity A Side | 400 cps |
| Viscosity B Side | 450 cps |
| Gel Time | 13 seconds |
| Recoat Time | 30 minutes |
| Place Into Service | 8 hours, chemical 24 hours |
| Full Cure | 48 hours |
| VOC | 0 |

MANUFACTURER OF HIGH PERFORMANCE POLYMERS

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APPLICATION REQUIREMENTS

The material temperature should be brought to a minimum of 65°F before use. Apply the coating at a minimum of 30 mil passes. When applying additional coats, you must stay within the 30-minute open window. VFI recommends applying a UV-stable topcoat once VFI-201 has fully cured for complete UV stability. Coated surfaces can be placed into service after a minimum cure of 24 hours.

STORAGE/SHELF LIFE

Store between 60°F - 90°F in a clean, dry building. The shelf life of unopened containers is 12 months after the date of manufacture. Once opened, it should be used immediately. If you are storing after opening, the container must be nitrogen purged.

MIXING

Before spraying, premix the Poly (B side) until uniform.

SURFACE PREPARATION

All surfaces should be clean, dry, and free of dirt, dust, and debris. Use a pressure washer on hard-to-clean surfaces to remove grease and oil. Treat mildew, fungus, and algae spots with a concentrated chlorine solution. Sandblast or grind away any loose paint, rust, and scale. Make any needed repairs to the surface to ensure the coating performs to the desired effect. Concrete surfaces must be aged a minimum of 28 days before application.

EQUIPMENT

Apply the material to the prepared surface using a plural component high-pressure spray rig. The spray equipment should be capable of spraying at 2,500 psi and temperatures between 135°F-150°F.

CLEANUP

VFI recommends cleaning application equipment with xylene or MEK. When flushing out spray lines, use VFI-8005 Pump Flush to remove all material from the hoses.

PRECAUTIONS

VFI-201 contains isocyanate, which is irritating to the skin and toxic if inhaled as particulate matter. Avoid prolonged breathing of vapors and repeated skin contact. Do not add foreign material to the product. Use only with adequate ventilation. See Safety Data Sheet for complete safety information.