800-307-9218



# VFI®-202 50 D FAST POLYUREA COATING

VFI-202 50 D Fast Polyurea Coating is a fast-setting, two-component, spray-applied coating that excels at lowbuild, thinner passes on prepared metal, concrete, and masonry surfaces. It is best used for industrial applications when spraying vertically or overhead and won't drip. It creates structure over the surface to provide protection from chemicals, abrasion, and impact. The coating is perfect when a faster setting time is needed, and selftexturing is desired. VFI offers different polyurea formulas in slow (VFI-200) and medium (VFI-201) setting speeds based on application needs.

- Low moisture sensitivity due to setting speed
- High tensile strength and elongation increase durability and longevity
- Fast speed allows you to spray overhead without dripping
- Will not crack or break from 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 METHOD	<b>TEST RESULTS</b>
Shore Hardness	ASTM D2240	50 D
Tensile Strength	ASTM D412	2,000 psi
Elongation	ASTM D412	200%
Tear Strength (Die C)	ASTM D624	400 pli
Abrasion Resistance	ASTM D4060	N/A
Impact Resistance	ASTM D256	N/A
Water Absorption	ASTM D471	1.50%
Weathering	N/A	Not UV Stable
Linear Shrinkage	N/A	N/A
Permeance	N/A	0.69 perm
Adhesion Strength (prepared concrete/steel)	N/A	N/A
Color	N/A	Black

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	9.12 lb/gal
Weight per Gallon B Side	ASTM D1475	8.43 lb/gal
Viscosity A Side	ASTM D2196	200 cps
Viscosity B Side	ASTM D2196	600 cps
Gel Time	N/A	5 seconds
Tack Free Time	N/A	N/A
Cure to Handle	N/A	8-24 hours
Recoat Window	N/A	15 minutes
Full Cure Time	N/A	48 hours
Volatile Organic Compounds	N/A	0

## MANUFACTURER OF HIGH-PERFORMANCE POLYMERS

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## **APPLICATION REQUIREMENTS**

The material should be brought to a minimum temperature of 65°F before use. Apply the coating at a minimum of 30 mil passes. When spraying over 100 mils, you must do multiple passes to avoid excessive amounts of heat. When applying additional coats, you must stay within the 15-minute open window. VFI recommends applying a UV-stable topcoat once VFI-202 has fully cured for complete UV stability. Coated surfaces can be placed into service after a minimum cure of 24 hours.

#### **EQUIPMENT**

Apply the material to the prepared surface using a plural-component high-pressure spray rig capable of spraying at 2,500 psi and temperatures between 135°F-150°F. Gun tips will vary by the project and will need to be adjusted on-site. The following machines are capable of meeting these specifications:

- Graco A-XPI air sprayer provides up to 3,500 psi of constant pressure and 170°F with a 1.5 gal/min output and 210 ft hoses. Use with any Probler P2 or Fusion gun.
- Graco Reactor 2 E-XP2 electric sprayer provides up to 3,500 psi of constant pressure and 190°F with a 2 gal/min output and 310 ft hoses. Use with any Probler P2 or Fusion gun.
- Graco Reactor 2 H-XP2/XP3 hydraulic sprayers provide up to 3,500 psi of constant pressure and 190°F with 1.5 or 2.8 gal/min outputs and 310 or 410 ft hoses. Use with any Probler P2 or Fusion gun.
- PMC PHX-2 or 25 hydraulic sprayers, ideal for small or medium-scale applications, provide up to 3,000 psi of constant pressure and 190°F with outputs just under 2 gal/min and 210-410 ft hoses. Use with the AP-2 Air Purge, PX-7 Mechanical Purge, or Xtreme Spray Gun.

#### **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.

# **MIXING**

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

#### **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.

# 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.

#### **PRECAUTIONS**

VFI-202 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.