800-307-9218

# VFI®-2075 75 A FLEXIBLE POLYURETHANE

VFI-2075 75 A Flexible Polyurethane is a two-component, 10A:1B by weight urethane rubber. It is typically used to coat surfaces that need to a rubber texture, providing good bounce back and flexibility. It works best as a brushable material when mixed in smaller quantities. The flexible urethane has good tensile, tear strength, and elongation for enduring stressful conditions such as impacts. VFI-2075 is a translucent amber color with the ability to see through it, but it can also be tinted.

- Cure can be sped up with a 4-hour oven bake at 150°F to obtain properties faster
- 75 A flexible coating that handles extreme conditions without tearing
- Tintable formula for coating surfaces that require a desired aesthetic
- Good adhesion to EPS foam, fabrics, wood, and braided cable

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Shore Hardness	ASTM D2240	68-73 A
Tensile Strength	ASTM D412	910 PSI
Elongation at Break	ASTM D412	790%
Tear Strength (Die C)	ASTM D624	168 pli
Shrinkage (12" x 1/2" x 1/2")	ASTM D2566	N/A
Standard Color	N/A	Amber

LIQUID PROPERTIES	TEST METHOD	TEST RESULTS
Mix Ratio by Volume	N/A	950.69A:100B
Mix Ratio by Weight	N/A	1000A:100B
Weight per Gallon A Side	ASTM D1475	9.10 lb/gal
Weight per Gallon B Side	ASTM D1475	8.65 lb/gal
Mixed Weight per Gallon	ASTM D1475	9.06 lb/gal
Specific Volume	N/A	N/A
Viscosity A Side (cps @ 77°F)	ASTM D2196	2,840 cps
Viscosity B Side (cps @ 77°F)	ASTM D2196	198 cps
Mixed Viscosity (cps @ 77°F)	ASTM D2196	4,260 cps
Pot Life (150g mass @ 77°F)	N/A	4 minutes
Gel Time (150g mass @ 77°F)	N/A	8 minutes
Demold Time @ 77°F	N/A	16 hours
Full Cure Time	N/A	7 days

## MANUFACTURER OF HIGH-PERFORMANCE POLYMERS

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# VFI®-2075 75 A FLEXIBLE POLYURETHANE

# THICKNESS REQUIREMENTS

To develop a uniform film over the surface, apply the coating at a minimum rate of 60 mils or 1/16th of an inch. If subsequent coats are needed, apply them within the 30-minute recoat window for ensured adhesion.

#### SURFACE PREPARATION

Surfaces should be clean, dry, and free of oils, dirt, debris, or other contaminants. A primer and additional sanding prep may be required depending on the surface. Use sandpaper between 40-120 grit. Ensure the environment and surface temperatures are between 60-90°F during use. As temperatures increase, working time decreases. If it is too cold, your material might not cure properly.

#### **EQUIPMENT**

VFI-2075 can be applied to any prepped surface with a chip paint brush.

#### **MIXING**

Premix the POLY "B" component until uniform before combining it with the ISO "A" component. If you are adding pigments to your mix, you can add them to the "B" component during this step. The material should be at least 65°F before use; otherwise, at lower temperatures, it will become thicker and harder to use.

VFI recommends using a working gram scale to measure the "A" and "B" materials by weight, which is 10A:1B. Pour your measured "A" component into your measured "B" component and mix with a paint or wooden stick until the color is consistent all the way through. Using power or meter mixing equipment may introduce too much air into the mix.

If you are pigmenting the material, pouring the "A" side into the pigmented "B" side will make it easier to tell if you've mixed the material thoroughly. VFI-2075 must be fully mixed and used before the 4-minute pot life expires. Mix only what you believe you can apply to the surface within the pot life. Mix times will vary depending on material volume and mixing method.

# **POST-CURE**

The material will cure after 16 hours at room temperature. If you would like to speed up the curing process, it can also be heated in an oven at 150°F for 4 hours. If the coated project will sit outside for extended periods of time, you may want to apply a compatible UV-stable top coat. The top coat would have to be applied within the 30-minute recoat window.

#### STORAGE/SHELF LIFE

The shelf life of unopened containers is 6 months after the date of manufacture. Store the product between 60-90°F in a clean, dry building. Once open, use it immediately. After opening, it is possible to store unused material by nitrogen purging both sides immediately after use.

### **PRECAUTIONS**

VFI-2075 is not a UV color-stable product and has no long-term UV testing. If it's applied to a project meant for the outdoors, it must be top-coated. It is moisture-sensitive and may bubble if exposed to too much moisture. Isocyanate in the A side may be irritating to the skin and toxic if inhaled. Avoid prolonged breathing of vapors or repeated skin contact. Use only with adequate ventilation. Do not thin or add foreign material to this product. See the Safety Data Sheet for complete safety instructions.