



VFI-3181 POLYURETHANE RUBBER CASTING SYSTEM

Overview

- **Description**
 VFI-3181 is a unique, moderate viscosity, 2 to 1 mix ratio casting system designed for easy processing and 16 hour de-molding. This system is an 80 Shore A hardness elastomer with excellent rebound properties.
- **Usage**
 VFI-3181 applications include:
 - Potting of mechanical parts to control vibration
 - Poured in place supports for equipment
 - Flexible form liners and concrete molds
 - Low temperature flexible casting molds
- **Color**
 Standard color is green. For information on custom colors, contact Volatile Free, Inc.

Physical Properties

- **Hardness**
 ASTM D-2240
 Shore A 80-82
 Shore D N/A
- **Tensile Properties**
 ASTM D-412
 Strength 1430 psi
 Elongation 690% min
- **Tear Strength**
 ASTM D-624 (Die C) 180 pli
- **Solid Material Density**
 67.55 pcf
- **Dimensional Stability**
 Shrinkage <0.001%
- **Fire Resistance**
 Not rated

Liquid Component Properties

- **Ratio**
 - **By Volume:** 1A:2B
 - **By Weight:** 56 A : 100 B
- **Solids**
 100%
- **Viscosity**
 Mixed 600-1000 cps @ 77°F
- **Liquid Density & Specific Gravity**
 "A" side 9.70 lbs/gal (SG 1.16)
 "B" side 8.65 lbs/gal (SG 1.04)
- **VOC**
 Contains no volatile organic compounds.
- **Toxicity**
 ISO component contains MDI Isocyanate requiring respirator, gloves, eye protection and protective clothing during application.
- **Reactivity**
 - **Pot Life:** 30 minutes at 77°F
 - **De-mold Time:** 16 hours at 77°F
- **Storage Stability or Shelf Life**
"A" side: 12 months in unopened containers @ 60-90°F. The "A" side will chemically react with moisture. Store in tightly sealed containers without exposure to moisture.

"B" side: 12 months in unopened containers @ 60-90° F. The "B" side is moisture absorbent. Keep unused material sealed to prevent moisture absorption.

Application

- **Equipment**

Hand mix, machine mix or injection equipment. For equipment requirements and specific instructions, contact Volatile Free, Inc.

- **Material Preparation**

The product must be over 70°F for proper mixing. The Poly "B" side must be premixed slowly before using at low rpm to minimize air entrapment. Mix just enough to maintain a small vortex.

- **Mixing**

Hand mix thoroughly for 30 seconds minimum. Power mixing or meter mix equipment is mandatory for quantities over 1 gallon. Make sure to mix and scrape the bottom and sides of the container to ensure uniform mix. Do not scrape out material from sides when pouring onto intended surface.

- **Limitations**

To verify this product is appropriate for your specific application, consult with Volatile Free, Inc.'s technical department.

- **Clean-up Solvent**

Xylene, MEK. For reduced fire hazard use glycol ethers or environmentally acceptable chlorinated solvents.

- **Precautions**

See Safety Data Sheet for complete safety data.

- **Thinning**

Do not thin this material with any solvents.

- **Packaging**

- 5 gallon pails
- 15 gallon ponies
- 55 gallon drums
- 270 gallon totes

For more information, contact us today at **800-307-9218**

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