



## VFI®-3181 80 A MDI Molding Rubber

**VFI®-3181 80 A MDI Molding Rubber** is an 80 A hardness urethane rubber that provides high durability and flexibility. With the ability to maintain a thin viscosity long into its pot life, VFI-3181 allows for intricate parts to be poured with consistently thin material and large parts to be poured quickly. Maintaining a low viscosity allows VFI-3181 Molding Rubber to dissipate air bubbles with and without vacuum degassing depending on application.

### → Technical Usage

VFI®-3181 80 A MDI Molding Rubber has been used in the following applications and may be used in many more applications. Contact Volatile Free, Inc. for more information on any specific applications.

- Formliners
- Industrial Part Making
- Molding and Casting
- Precast
- Theming

### → Color

Standard color available is green. A neutral color is available and is called VFI-3183 80 A MDI Molding Rubber. For additional premium colors or color matching services contact Volatile Free, Inc.

### → UV Stability

This product is **NOT** UV color stable and has no long-term UV testing. For additional information contact Volatile Free, Inc.

### → Coverage/Thickness Requirement

Volatile Free, Inc. recommends a minimum of 3/8 of an inch thickness. Contact Volatile Free, Inc. for more thickness requirements and specifications.

### → Storage Stability/Shelf Life

12 month shelf life from date of manufacture when stored and sealed in unopened containers between 40°F - 75°F. Opened containers may be resealed with a nitrogen purge, but shelf life will be significantly shortened. Material should be brought to a minimum temperature of 65°F before use.

### → Equipment

For specific instructions and equipment requirements, contact Volatile Free, Inc.

### → Surface Preparation

All surfaces should be cleaned, prepped and free of any oils, dirt or debris. To demold, material must be non-porous or sealed with a chemical sealant. A release agent should be used on all products intended to be demolded. Contact Volatile Free, Inc. with any additional questions.

### → Mixing

Pre-mixing Poly (B) components until uniform is required before combining Poly (B) and Iso (A). If pouring material by hand pre-weighed Poly (B) must be poured into pre-weighed Iso (A) and then mixed until uniform and transferred to a new container to mix until uniform again before use. Product must be fully mixed and used before the duration of the pot life. Mix times may vary depending on volume and mixing method. Please contact Volatile Free, Inc. for more information on any specific mixing questions and requirements.

### → Material Application

Temperature should be between 50°F - 100°F when the product is being used. The pot life will shorten with any increases in temperature beyond 72°F. Ensure surfaces in contact with the material are properly sealed and released before mixing to prevent any unwanted adhesion. Contact Volatile Free, Inc. for more information on recommended release agents or sealants.

### → Primers

Contact Volatile Free, Inc. with any primer questions.

### → Cleanup Solvent

Preferred cleanup solvent is chemically dry mineral spirits or MEK. Please contact Volatile Free, Inc. for more information on cleanup of equipment and tools.

### → Thinning

Do not thin prior to application.

### → Precautions

Contains isocyanate that may be irritating to the skin and is toxic if inhaled as particulate matter. See Safety Data Sheet for complete safety data. Do not add any foreign material to this product. Avoid prolonged breathing of vapors and prolonged or repeated skin contact. Use only with adequate ventilation.

# VFI®-3181 80 A MDI MOLDING RUBBER

## Application Method

SPRAY	QWIK SPRAY	BRUSH	TROWEL	ROLLER	INJECTABLE	POUR
-	-	-	-	-	-	X

## Physical Properties

Hardness Shore A	80
Tensile Strength	1,430 psi
Elongation	690%
Tear Strength	180 pli
Solid Material Density	25.81 (in <sup>3</sup> /lb)
Dimensional Stability	<0.001%

## Liquid Properties

Solids by Weight	100%
Solids by Volume	100%
Liquid Density A Side	9.71 lbs/gal
Liquid Density B Side	8.69 lbs/gal
Mixed Liquid Density	8.94 lbs/gal
Specific Gravity A Side	1.17 g/mL
Specific Gravity B Side	1.04 g/mL
Specific Gravity Mixed	1.08 g/mL
Ratio by Volume (A:B)	1A:2B
Ratio by Weight (A:B)	100A:178.85B
Solids by Volume A Side	100%
Solids by Volume B Side	100%
Mixed Solids by Volume	100%
Viscosity A Side	950 cps
Viscosity B Side	1,050 cps
Mixed Viscosity	1,000 cps
Pot Life	30 minutes
Demold Time	16 hours

## Packaging



**VOLATILE FREE, INC.**

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