

# VFI®-2173 70 A TDI **Molding Rubber**

VFI®-2173 70 A TDI Molding Rubber is a 70 A hardness, urethane molding rubber that provides high durability and easy demolding. This TDI (Toluene Diisocyanate) prepolymer based rubber will decrease moisture sensitivity and give extended working time when working with the material. VFI®-2173's low viscosity allows for the dissipation of air bubbles without the use of a vacuum chamber. Increased rebound properties allow for easier demolding with less stress on the casted part.

# Technical Usage

VFI®-2173 70 A TDI 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.

- Cast Stone
- Formliners
- Manufactured Stone
- Molding and Casting
- Precast
- Theming

#### Color

Standard color available is blue. A neutral color is available and is called VFI-2174 70 A TDI 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.

#### Overage/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. on 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®-2173 70 A TDI MOLDING RUBBER

# Application Method



# Physical Properties

Hardness Shore A	70
Tensile Strength	1050 psi
Elongation	1050%
Tear Strength	180 pli
Solid Material Density	25.7 (in <sup>3</sup> /lb)
Dimensional Stability	<0.01%

# Liquid Properties

Solids by Volume Liquid Density A Side Side Side Side Side Side Side Side	Solids by Weight	100%
Liquid Density B Side  Mixed Liquid Density  Specific Gravity A Side  Specific Gravity B Side  Specific Gravity B Side  Specific Gravity Mixed  Ratio by Volume (A:B)  Ratio by Weight (A:B)  Viscosity A Side  Viscosity B Side  Mixed Viscosity  Pot Life  8.73 lbs/gal  8.96 lbs/gal  1.00 g/mL  1.08 g/mL  1.08 g/mL  1.08 g/mL  1.08 g/mL  2.00 cps  2.00 cps  2.00 minutes	Solids by Volume	100%
Mixed Liquid Density  Specific Gravity A Side  Specific Gravity B Side  Specific Gravity B Side  Specific Gravity Mixed  Ratio by Volume (A:B)  Ratio by Weight (A:B)  Viscosity A Side  Viscosity B Side  Mixed Viscosity  Pot Life  8.96 lbs/gal	Liquid Density A Side	9.20 lbs/gal
Specific Gravity A Side Specific Gravity B Side Specific Gravity B Side Specific Gravity Mixed Ratio by Volume (A:B) Ratio by Weight (A:B) Viscosity A Side Viscosity B Side Mixed Viscosity Pot Life  1.00 g/mL 1.08 g/	Liquid Density B Side	8.73 lbs/gal
Specific Gravity B Side  1.05 g/mL  Specific Gravity Mixed  Ratio by Volume (A:B)  Ratio by Weight (A:B)  Viscosity A Side  Viscosity B Side  Mixed Viscosity  Pot Life  1.05 g/mL  1.08 g/mL  1.08 g/mL  105.32A:100B  2800 cps  2800 cps  2400 cps  2800 cps	Mixed Liquid Density	8.96 lbs/gal
Specific Gravity Mixed Ratio by Volume (A:B) Ratio by Weight (A:B) Viscosity A Side Viscosity B Side Mixed Viscosity Pot Life  1.08 g/mL	Specific Gravity A Side	1.10 g/mL
Ratio by Volume (A:B)1A:1BRatio by Weight (A:B)105.32A:100BViscosity A Side2800 cpsViscosity B Side2400 cpsMixed Viscosity2800 cpsPot Life20 minutes	Specific Gravity B Side	1.05 g/mL
Ratio by Weight (A:B) 105.32A:100B Viscosity A Side 2800 cps Viscosity B Side 2400 cps Mixed Viscosity 2800 cps Pot Life 20 minutes	Specific Gravity Mixed	1.08 g/mL
Viscosity A Side2800 cpsViscosity B Side2400 cpsMixed Viscosity2800 cpsPot Life20 minutes	Ratio by Volume (A:B)	1A:1B
Viscosity B Side2400 cpsMixed Viscosity2800 cpsPot Life20 minutes	Ratio by Weight (A:B)	105.32A:100B
Mixed Viscosity 2800 cps Pot Life 20 minutes	Viscosity A Side	2800 cps
Pot Life 20 minutes	Viscosity B Side	2400 cps
	Mixed Viscosity	2800 cps
<b>Demold Time</b> 16 hours	Pot Life	20 minutes
	Demold Time	16 hours

# Packaging









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