

VFI®-2143 45 A TDI **Molding Rubber**

VFI®-2143 45 A TDI Molding Rubber is a 45 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®-2143'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®-2143 45 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-2144 45 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. 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®-2143 45 A TDI MOLDING RUBBER

Application Method



Physical Properties

Hardness Shore A	45
Tensile Strength	550 psi
Elongation	2000%
Tear Strength	84 pli
Solid Material Density	26.7 (in ³ /lb)
Dimensional Stability	<0.01%

Liquid Properties

Solids by Weight	100%
Solids by Volume	100%
Liquid Density A Side	8.68 lbs/gal
Liquid Density B Side	8.57 lbs/gal
Mixed Liquid Density	8.63 lbs/gal
Specific Gravity A Side	1.04 g/mL
Specific Gravity B Side	1.03 g/mL
Specific Gravity Mixed	1.04 g/mL
Ratio by Volume (A:B)	1A:1B
Ratio by Weight (A:B)	101.2A:100B
Viscosity A Side	1700 cps
Viscosity B Side	1500 cps
Mixed Viscosity	2200 cps
Pot Life	15 minutes
Demold Time	16 hours

Packaging











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