

VFI®-4171 70 D Slow **Casting Plastic**

VFI®-4171 70 D Slow Casting Plastic is a 1:1 plastic with a slow demold time that is made to be poured. Polyurethane plastic is easily paintable with a primer and is recommended for any decorative application. VFI-4171 is a highly functional plastic that is easily machined with a CNC or other machinery and maintains its shape at high temperatures. Slow demold times allow for more intricate parts to be poured and more detail to be obtained. VFI-4171 Slow Casting Plastic's low viscosity and slow speed allows for degassing without the need of a vacuum chamber.

Technical Usage

VFI®-4171 70 D Slow Casting Plastic 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.

- Industrial Part Making
- Manufactured Stone
- Molding and Casting

Color

Standard color available is white. 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

Contact Volatile Free, Inc. for 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 xylene 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®-4171 70 D SLOW CASTING PLASTIC

Application Method



Physical Properties

Hardness Shore D	70
Tensile Strength	5,400 psi
Elongation	5%
Solid Material Density	66.35 PCF
Dimensional Stability	0.01 in/in

Liquid Properties

Solids by Weight	100%
Solids by Volume	100%
Liquid Density A Side	9.59 lbs/gal
Liquid Density B Side	8.36 lbs/gal
Mixed Liquid Density	7.41 lbs/gal
Specific Gravity A Side	0.95 g/mL
Specific Gravity B Side	0.834 g/mL
Specific Gravity Mixed	0.89 g/mL
Ratio by Volume (A:B)	1A:1B
Ratio by Weight (A:B)	100A:87.26B
Pot Life	5 minutes
Demold Time	35 minutes
voc	0



VOLATILE FREE, INC.

19500 JANACEK COURT | BROOKFIELD, WI 53045 | (262) 787-0400 | TOLL-FREE (800) 307-9218 | FAX (262) 787-0500 | INFO@VOLATILEFREE.COM

This information and technical advice provided herein are believed to be reliable and accurate to the best knowledge of Volatile Free, Inc., As based on tests and should serve only as a recommendation. As the manufacturer, Volatile Free, Inc makes no representations or warranties of any kind, expressed, implied or statutory, including but not limited to all implied warranties of merchantability or fitness for use or a particular purpose, or any other matter with respect to this product. Volatile Free, Inc makes no representations or warranties as to the results of the use of the product and assumes no obligation or liability in connection therewith. Volatile Free, Inc is not liable for any special, exemplary, punitive, incidental or consequential damages of any sort or kind from use of this product. The information provided herein is subject to change at any time without notice. Information changes may include, but are not limited to commercial and technical changes, changes in pricing, physical characteristics and packaging.