

VFI® -2095 95 A POLYURETHANE CASTING ELASTOMER

VFI-2095 95 A Polyurethane Casting Elastomer is a versatile, two-component urethane liquid. It is pourable, and once cured, it becomes a semi-rigid thermoset elastomer. With an extended pot life and elevated properties, it offers clean, bubble-free castings in a variety of applications. It is a low free TDI, MOCA-free blend with no HMDI. VFI-2095 works well for molding and thermoforming applications.

- Extended work time to create castings with precision
- Highly durable, versatile urethane with good rebound properties
- Clean, bubble-free castings when vacuum degassed
- Low free TDI, MOCA free blend with no HMDI
- 2A:1B mix ratio by volume for easy mixing and pouring

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Shore Hardness	ASTM D2240	95 A
Tensile Strength	ASTM D412	1,300 psi
Elongation at Break	ASTM D412	450%
Tear Strength (Die C)	ASTM D624	320 pli
Shrinkage (12" x 1/2" x 1/2")	ASTM D2566	N/A
Standard Color	N/A	Neutral

LIQUID PROPERTIES	TEST METHOD	TEST RESULTS
Mix Ratio by Volume	N/A	2A:1B
Mix Ratio by Weight	N/A	103A:50B
Weight per Gallon A Side	ASTM D1475	9.11 lb/gal
Weight per Gallon B Side	ASTM D1475	8.92 lb/gal
Mixed Weight per Gallon	ASTM D1475	9.05 lb/gal
Specific Volume	N/A	25.53 in ³ /lb
Viscosity A Side (cps @ 77°F)	ASTM D2196	2,750 cps
Viscosity B Side (cps @ 77°F)	ASTM D2196	1,900 cps
Mixed Viscosity (cps @ 77°F)	ASTM D2196	2,400 cps
Pot Life (150g mass @ 77°F)	N/A	23 minutes
Gel Time (150g mass @ 77°F)	N/A	36 minutes
Demold Time @ 77°F	N/A	16 hours
Full Cure Time	N/A	7 days

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MOLD PREPARATION

The mold must be clean and free of oils, dirt, or debris. All surfaces in contact with VFI-2095 must be sealed and coated with a release agent to prevent unwanted adhesion when demolding. Applying a release agent helps protect and prolong the life of the mold. Compatible molds for casting include urethane, metal, and platinum silicone when properly prepared. Do not heat the mold.

MIXING

Mixing until uniform is required for all components before use. The A side must be premixed before adding the measured B side to the measured A side container. Properly pour 2 parts of the "A" component into 1 part of the "B" component by volume, 103 parts "A" component to 50 parts "B" component by weight. Mix times may vary depending on volume and mixing method. To obtain optimal properties, vacuum degassing the product is necessary after mixing.

POST-CURE

Thinner pours will need more time to cure to develop the necessary green strength to demold. VFI-2095 will reach full physical properties after 7 days. It must be cured at room temperature. Do not heat cure this material.

STORAGE/SHELF LIFE

Store in a clean, dry building between 60°F - 90°F. The shelf life is 12 months from date of manufacture when stored and sealed in unopened containers. If storing after opening, the material can be resealed with a nitrogen purge. The material should be brought to a minimum temperature of 65°F before use.

PRECAUTIONS

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