

VFI®-3054 80 D POLYURETHANE CASTING PLASTIC

VFI-3054 80 D Polyurethane Casting Plastic is an MDI-based urethane plastic that works as a versatile adhesive. It is a durable, two-component (two parts polyol to one part isocyanate by volume) material with great adhesion for bonding many different surfaces together. With a slower gel time, the adhesive compound has increased workability in mass and is more tolerant of a slower processing speed. VFI-3054 is 100% solids with little to no shrinkage and provides consistent adhesion without the use of excess product.

- Great adhesion for bonding surfaces together
- Increased workability with a slower gel time
- 100% solids with little to no shrinkage
- Superior chemical and moisture resistance
- Not dependent on pressure or heat to cure

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULTS
Hardness Shore D	ASTM D2240	83

LIQUID PROPERTIES	TEST METHOD	TEST RESULTS
Mixed Solids by Volume	ASTM D2697	100%
Mixed Liquid Density	ASTM D2939	12.58 lbs/gal
Specific Gravity A Side	N/A	1.24 g/mL
Specific Gravity B Side	N/A	1.65 g/mL
Mixed Specific Gravity	N/A	1.51 g/mL
Ratio by Volume (A:B)	N/A	1A:2B
Ratio by Weight (A:B)	N/A	100A:268.09B
Viscosity A Side	ASTM D2196	85 cps
Viscosity B Side	ASTM D2196	7,500 cps

MANUFACTURER OF HIGH PERFORMANCE POLYMERS

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SURFACE PREPARATION

Ensure all surfaces are clean, dry, and free of contaminants such as oil, dirt, and debris. For some applications, you may want to roughen up the surface with sandpaper to help the material adhere better.

MIXING

The B side (Poly) must be mixed before combining with the A side (Iso), ensuring that moisture and air entrapment are avoided. When mixing by hand, the pre-weighed B side must be poured into the pre-weighed A side before mixing until uniform. Transfer the mix to a new container and mix once again before use.

APPLICATION PROCESS

The material temperature should be brought to a minimum temperature of 65°F before use. The surface should be between 50°F - 100°F during the application, but if temperatures exceed 72°F, the pot life will shorten. The primary application of VFI-3054 is to inject the material with dispensing equipment or manual applicators. It is generally applied to a surface in thin, even strips using dispensing equipment and then pressed into an adjoining surface to bond them together. Clamping the surfaces together can help keep them firmly in place as the adhesive cures. Once dry, remove any squeeze-out with a scraper, being careful not to gouge the surface, and sand the area smooth. VFI-3054 can be cleaned using xylene or MEK.

STORAGE/SHELF LIFE

Store the material between 60°F - 90°F in a clean, dry building. The shelf life is 12 months from the date of manufacture for sealed and unopened containers. If you plan on storing containers after opening, they should be nitrogen purged.

PRECAUTIONS

VFI-3054 is not UV color stable and has no long-term UV testing. It contains isocyanate, a chemical that can be irritating upon skin contact 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 foreign material to the product. See Safety Data Sheet for complete safety instructions.