



Freeman 1066 Semi-Rigid Polyurethane Elastomer

Description

Freeman 1066 Semi-Rigid Polyurethane Elastomer was specifically designed for highly abrasion-resistant foundry tooling. Harder than the Freeman 1060, this resin offers enhanced deflection resistance with high pressure molding processes and may be more readily sanded and machined without softening.

Physical Properties

| | |
|---|--------------|
| Color (when mixed) | Red or Black |
| Mix Ratio (R:H, by weight or volume) | 100:50 |
| Viscosity (cps, mixed) | 3,200 |
| Gel Time (minutes @ 77°F.) | 15-17 |
| Demold Time (hours) | 2-4 |
| Hardness (Shore D) (ASTM 2240) | 65 |
| Specific Gravity, Mixed | 1.03 |
| Volumetric Yield (cu. in./ lb.) (ASTM D-792) | 26.9 |
| Tensile Strength (psi) (ASTM D-638) | 3,100 |
| Compressive Strength (psi) (ASTM D-695) | 1,800 |
| Compressive Modulus (psi) (ASTM D-695) | 58,000 |
| Tear Strength (psi) (ASTM D-624) | 630 |
| Flexural Strength @ Yield (psi) (ASTM D-790) | 3,700 |
| Flexural Modulus (psi) (ASTM D-790) | 74,000 |
| Elongation (% - ASTM D-412) | 140 |
| Heat Deflection Temp @ 66 psi (°F – ASTM D-648) | 181 |
| Linear Shrinkage (in/in)* (ASTM D-2566) | .0025 |

*Actual shrinkage dependent upon mass

Ordering Information

| Item Number | Description | Size | Net Wt. Lbs. |
|-------------|---------------------------------------|-----------|--------------|
| 055119 | Freeman 1066 Red (Resin & Hardener) | Gallon | 9.75 |
| 055120 | Freeman 1066 Black (Resin & Hardener) | Gallon | 9.75 |
| 055121 | Freeman 1066 Resin Only | 5-Gallon | 32.5 |
| 055118 | Freeman 1066 Hardener Only Red | 5-Gallon | 16.25 |
| 055122 | Freeman 1066 Hardener Only Black | 5-Gallon | 16.25 |
| 055123 | Freeman 1066 Resin Only | 55-Gallon | 420 |
| 055124 | Freeman 1066 Hardener Only Black | 55-Gallon | 210 |
| 055112 | Freeman 1066 Hardener Only Red | 55-Gallon | 210 |

Physical and mechanical properties of tooling plastics herein reported are typical after a full cure of seven (7) days at room temperature or equivalent. Designated mix ratios must be adhered to for desired results. The user shall determine the suitability of this product for their application and assumes all risks and liabilities associated with the use of this product. The exclusive remedy for all proven claims is replacement of our materials only and in no event shall Freeman Mfg. & Supply Co. be liable for special, incidental, or consequential claims.

READ SAFETY DATA SHEETS AND PRODUCT LABELS BEFORE USING PRODUCT

