



## Freeman 1050 Semi-Rigid Polyurethane Elastomer

### Description

Freeman 1050 is a semi-rigid polyurethane elastomer. This product features a 1:1 mix ratio by weight for easy mixing. It is a tough, wear-resistant material that is ideal for creating prototype or production parts that require some degree of flexibility. Its 26 minute gel time and overnight demold time provides ample opportunity to vacuum degas and pour both large and small parts.

### Physical Properties

Color (when mixed)	Amber
Mix Ratio (R:H, by weight)	100:100
Mix Ratio (R:H, by volume)	100:94
Viscosity (cps, mixed)	1,650
Gel Time (minutes @ 77°F.)	26
Demold Time (hours)	16
Hardness (Shore A) (ASTM 2240)	85
Specific Gravity, Mixed	1.10
Volumetric Yield (cu. in./ lb.) (ASTM D-792)	25.2
Tensile Strength (psi) (ASTM D-638)	2,050
Tear Strength (psi) (ASTM D-624)	280
Elongation (% - ASTM D-638)	510
Linear Shrinkage (in/in)* (ASTM D-2566)	.001

\*Actual shrinkage dependent upon mass

### Ordering Information

Item Number	Description	Size	Net Wt. Lbs.
055142	Freeman 1050 Resin & Hardener	Quart	2.5
055141	Freeman 1050 Resin & Hardener	Gallon	10
055139	Freeman 1050 Resin Only	5-Gallon	25
055140	Freeman 1050 Hardener Only	5-Gallon	25

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

