



Freeman 1080 Polyurethane Elastomer

Description

Freeman 1080 is a brilliant white urethane elastomer that is well suited for duplicating and creating prototypes of rigid injection molded parts. This material features a 1:1 mix ratio by volume and a very low mixed viscosity for excellent pouring results in thin-wall sections. Freeman 1080 may be cast up to 1/2" thick. This material is moisture sensitive. Degassing material is highly recommended.

Physical Properties

Color (when mixed)	Brilliant White
Mix Ratio (by weight)	115:100
Mix Ratio (by volume)	1:1
Viscosity (cps, mixed)	150
Gel Time (minutes @ 77°F.)	20
Demold Time (hours)	2-4
Hardness (Shore D) (ASTM 2240)	80
Specific Gravity, Mixed	1.12
Volumetric Yield (cu. in./ lb.) (ASTM D-792)	24.7
Compressive Strength (psi) (ASTM D-695)	8,300
Flexural Strength (psi) (ASTM D-790)	9,500
Flexural Modulus (psi) (ASTM D-790)	288,000
Tensile Strength (psi) (ASTM D-638)	6,650
Izod Impact Strength (ft-lbs./in) (ASTM D-256)	0.31
Deflection Temperature @ 66 psi (°F) (ASTM D-648)	134
Linear Shrinkage (in/in)* (ASTM D-2566)	0.003

*Actual shrinkage dependent upon mass

Ordering Information

Item Number	Description	Size	Net Wt. Lbs.
055419	Freeman 1080 Slow	Quart	2
055412	Freeman 1080 Slow	Gallon	16
054411	Freeman 1080 Slow	5 Gallon	80

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