



Repro[®] 83 Fast-Cast Urethane

Description

Repro 83 is our most popular tooling urethane with a great balance of speed and accuracy. This castable polyurethane is used extensively in foundry and thermoforming applications, mold making and in most general plastic casting applications. Offered in a choice of blue, gray, or white, Repro 83 features one to one mix ratio by weight or volume with low viscosity ensuring easy pouring characteristics and excellent surface reproduction.

Physical Properties

Color (when mixed)	Blue, Gray, or White
Mix Ratio (R:H, by weight or volume)	1:1
Viscosity (cps, mixed)	1,100
Gel Time (minutes @ 77°F.)	6-7
Demold Time (minutes.)	60-90
Hardness (Shore D) (ASTM 2240)	84
Specific Gravity, Mixed (ASTM D-792)	1.9
Volumetric Yield (cu. in./ lb.)	14.5
Compressive Strength (psi) (ASTM D-695)	6,470
Flexural Strength (psi) (ASTM D-790)	5,140
Flexural Modulus (psi) (ASTM D-790)	939,000
Tensile Strength (psi) (ASTM D-638)	3,130
Tensile Modulus (psi) (ASTM D-638)	941,000
Izod Impact Strength (ft-lbs./in) (ASTM D-256)	0.31
Deflection Temperature @ 66 psi (°F) (ASTM D-648)	135
Linear Shrinkage (in/in)* (ASTM D-2566)	0.001

*Actual shrinkage dependent upon mass

Ordering Information

Item Number	Description	Size	Net Wt. Lbs.
053150	Repro 83 White Unit	Quart	5
053156	Repro 83 White Unit	Gallon	20
053152	Repro 83 Blue Unit	Quart	5
053158	Repro 83 Blue Unit	Gallon	20
053164	Repro 83 Blue Unit	5-Gallon	100
053154	Repro 83 Gray Unit	Quart	5
053160	Repro 83 Gray Unit	Gallon	20

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

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