



Freeman 1090

Clear Polyurethane Casting Resin

Freeman Mfg.
& Supply Co.
1101 Moore Rd
Avon, OH 44011

Phone 800 321 8511
Fax 440 934 7200

www.freemansupply.com

www.freemanwax.com

Description

Freeman 1090 is a water clear urethane elastomer that is ideal for creating parts which require near-perfect clarity. This product is available in both a fast formulation which has a demold time of 1/2 - 4 hours, as well as a slow formulation for pouring larger parts which requires a 16 hour cure before demolding. Both feature a 1:1 mix ratio and a low mixed viscosity which makes it excellent for pouring thin-wall parts.

Physical Properties

	Fast	Slow
Color (when mixed)	Clear	Clear
Mix Ratio (by wt., Resin to Hardener, A to B)	100:90	100:90
Mix Ratio (by volume, Resin to Hardener, A to B)	1:1	1:1
Mixed Viscosity (cps)	600	600
Gel Time (min. @ 72°F.)	9	20
Hardness (Shore D)	80	80
Tensile Strength (psi - ASTM D-412)	2,500	2,500
Flexural Strength (psi - ASTM D-790)	11,000	11,000
Specific Gravity	1.04	1.04
Linear Shrinkage (in./in.* - ASTM D-2566)	0.001	0.001
Volumetric Yield (cu. in./ lb.)	26.7	26.7
Maximum Cast Thickness (inches)	1/2"	3"
Demold Time (hours)	1/2 - 4	16

*- Actual shrinkage dependent upon mass.

Ordering Information

Item Number	Description	Size	Net Wt. Lbs.
055440	Freeman 1090 Fast Urethane	Gal. Kit	15.2 lbs.
055416	Freeman 1090 Slow Urethane	Quart Kit	3.80 lbs.
055415	Freeman 1090 Slow Urethane	Gal. Kit	15.2 lbs

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

Freeman Mfg. & Supply Co.

1101 Moore Rd.
Avon, Ohio 44011
www.freemansupply.com
800-321-8511