



Freeman Synthene PRC 1700 Clear Casting Resin

Description

Freeman Synthene PRC 1700 is a clear transparent polyurethane casting resin that offers excellent clarity, high impact strength, UV stability, and a heat deflection temperature of 221°F.

Physical Properties

Color (when mixed)	Clear
Mix Ratio (by weight)	100:60
Viscosity (cps, mixed)	500
Gel Time (minutes @ 72°F.)	17-19
Demold Time (hours) @ Room Temperature	24
Demold Time (hours) @ 158°F	2
Hardness (Shore D)	87
Specific Gravity, Mixed	1.10
Maximum Tensile Strength (psi)	10,152
Maximum Flexural Strength (psi)	11,603
Linear Shrinkage (in/in)	.002
Izod Impact Strength (J/m)	29.9
Heat Deflection Temperature (°F)	221

The above properties are average values measured on specimens after post curing 2 hours at 158°F, plus 16 hours at 212°F, plus 24 hours at room temperature.

Process with vacuum casting machine:

Weigh isocyanate part in the upper cup.

Weigh polyol part in the mixing cup.

After 3 to 5 min of vacuum, pour the isocyanate part in mixing cup and mix until total clearness has been achieved (at least 1-1/2 minutes for a process at ambient temperatures).

Pour into the mold.

Put the mold in an oven at 158°F for approximately (2) hours according to the thickness of the part.

Process with manual casting:

Weigh the two parts in a clean mixing cup.

Mix manually until total clearness of the mixture has been achieved (at least 1-1/2 minutes for a process at ambient temperatures).

Pour the mixture in a second clean cup and mix again.

Degas in a vacuum chamber.

Pour in the mold.

Put the mold in an oven at 158°F for approximately (2) hours.

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