



Freeman 855 Iron-Filled Epoxy Casting Resin

Description

Freeman 855 is an iron-filled epoxy tooling resin that is most often used in foundry patterns, core box construction, and tooling fixtures. Freeman 855 features low shrinkage and a castable thickness up to a half inch.

Physical Properties

Color (when mixed)	Dark Gray
Mix Ratio (R:H, by wt.)	100:10
Mix Ratio (R:H by vol.)	100:25
Viscosity (cps, mixed)	13,950
Gel Time (min. @ 72°F.)	150
Demold Time (hrs.)	24
Hardness (Shore D) (ASTM 2240)	87
Specific Gravity, Mixed (ASTM D-792)	2.23
Volumetric Yield (cu. in./ lb.)	12.4
Tensile Strength (psi) (ASTM D-638)	6,800
Compressive Strength (psi)	13,400
Flexural Strength (psi)	9,100
Flexural Modulus (psi)	1,100,000
Deflection Temperature (°F)	230
Coefficient of Thermal Expansion (in/in/°F)	2.80×10^{-5}
Shrinkage (in/in – ASTM D-2566)	0.001

Ordering Information

Item Number	Description	Size	Net Wt. Lbs.
055857	Freeman 855 Casting Resin Only	5-Gallon	45
055858	Freeman 855 Casting Hardener Only	Gallon	4.5

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