

Technical Data Sheet

Freeman 2490 Polyurethane Elastomer

Description

Freeman 2490 is ideal for producing durable parts such as impellers, rollers, gears and wheels. This elastomer features quick gel time, good hydrolysis resistance, and low viscosity for easy mixing and excellent detail reproduction. Maximum casting thickness is 4".

Physical Properties

Color	Translucent White
Mix Ratio (by weight)	58:100
Mix Ratio (by volume)	1:2
Viscosity, Mixed (cps)	600
Gel Time (minutes @ 75°F)	10-15
Demold Time (hours)	24
Hardness (Shore A)	90 +/- 5
Specific Gravity (g/cc)	1.09
Volumetric Yield (in3/lb.)	25.4
Tear Strength, Die C (pli)	380
Tear Strength, Split Tear (pli)	88
Tensile strength, (psi)	1,940
Elongation %	500
Shrink (in./in.)	0.0002

IMPORTANT: The polyol component requires thorough mixing before any material is taken from container.

Gallon containers can be shaken by hand. If dispensing from a pail a 5-gallon size paint paddle can be used to thoroughly mix the polyol for 3-5 minutes. A plunge mixer can also be used at a low speed.

If dispensing from 55-gal drum, this is best achieved by drum rolling. A speed of 20 rpm for 20 minutes should be a minimum. Material taken from an unmixed polyol drum will not be suitable for use, and the remainder of the contents of the drum will also be unusable. After mixing re-separation of the polyol component may occur in 3 to 6 hours (the harder grades separate more quickly than the softer grades), and re-mixing will be necessary.

The isocyanate will only require mixing once after melting from frozen. Liquid isocyanate will not reseparate once mixed. However, mixing the liquid isocyanate in the drum before use will ensure an even component temperature. A brief (~5 minutes) drum rolling will suffice to mix the isocyanate.

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.

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