



NEXUS 830

High Impact Polystyrene for Injection Molding

Nexus 830 is high melt flow, high impact polystyrene specially designed for hard to fill injection molding applications. Material is targeted for large parts, thin wall parts or molds with complex runner and gate systems. The high flow material aids production of stress free parts. Applications are for thin wall molding, textile spools, and medical application, an excellent color concentrate carrier resin.

Typical Properties

Rheological Properties	ASTM Test	Unit	Typical Value
Melt Flow (200°C-5kg)	D1238	g/10mn	13.0
Thermal Properties			
Heat Distortion - Annealed	D648	°F	189
Vicat Softening	D1525	°F	200
Impact Properties			
Falling Dart	D3029	in lb	120

Izod-notched	D256	ft lbs/in	2.1
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Tensile Properties

Strength	D638	psi	3,300
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Modulus	D638	psi (10 ⁵)	3.2
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Elongation	D638	%	45
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Flexural Properties

Strength	D790	psi	5,700
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Modulus	D790	psi (10 ⁵)	3
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Other Properties

Gloss	D523	60°	94
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Density		g/cm ³	1.04
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Linear Shrinkage	D955	in/in	.004-.007
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Moisture		%	<0.1
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General Information

Material complies with FDA requirements.

Material holds Underwriters Laboratory recognition.

Material Safety Data Sheets are available.

Nexus Resin Group, LLC has no control over the use to which others may put this material. Nexus Resin Group, LLC does not guarantee that the same results as described will be obtained by the end user. Nexus Resin Group, LLC does not guarantee the effectiveness or safety of any material for the design or the suitability of the material nor the designs of both for the end user's own particular use. Statements concerning possible or suggested uses of the materials or designs described herein are not to be construed as recommendations for use of such materials or designs.

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