Polystyrene 830

Technical Data Sheet
Polystyrene - Impact
Produced in the United States

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Description

Polystyrene 830: A high melt flow, high impact polystyrene specially designed for hard to fill injection molding applications. The material is targeted for large parts, thin wall parts, or molds with complex runner and gate systems. The high flow 830 material aids production of stress free parts.

Application:

- Thin wall injection molding
- Textile spools
- Medical applications
- Excellent color concentrate carrier resin

General Information:

- This material complies with FDA requirements as described in 21 CFR §177.1640.
- This material holds Underwriters Laboratory recognition 94HB; see UL File E55470 at www.UL.com.
- USP Class VI
- Material Safety Data Sheets are available to help customers satisfy their safety needs.

Characteristics

	Method	Unit	Typical Value
Rheological Properties			
Melt Flow (200°C-5kg)	D-1238	g/10mn	13.0
Mechanical Properties			
Falling Dart	D-3029	in-lb	120
Izod - notched	D-256	ft-lbs/in	2.1
Tensile Strength	D-638	psi	3,300
Tensile Modulus	D-638	psi (10^5)	3.2
Elongation	D-638	%	45
Flexural Strength	D-790	psi	5,700
Flexural Modulus	D-790	psi (10^5)	3
Thermal Properties			
Heat Distortion - Annealed	D-648	°F	189
Vicat Softening	D-1525	°F	200
Other Physical Properties			
Gloss	D-523	60°	94
Density		g/cm^3	1.04
Linear Shrinkage	D-955	in/in	.004 - .007
Moisture		%	<0.1

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