



**TotalEnergies**

TotalEnergies Petrochemicals & Refining USA, Inc.  
Polymers Americas

**Polystyrene 830**

Technical Data Sheet  
Polystyrene - Impact  
Produced in the United States

### 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](http://www.UL.com).
- USP Class VI
- Material Safety Data Sheets are available to help customers satisfy their safety needs.

### Characteristics

	Method	Unit	Typical Value
<b>Rheological Properties</b>			
Melt Flow (200°C-5kg)	D-1238	g/10mn	13.0
<b>Mechanical Properties</b>			
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 <sup>5</sup> )	3.2
Elongation	D-638	%	45
Flexural Strength	D-790	psi	5,700
Flexural Modulus	D-790	psi (10 <sup>5</sup> )	3
<b>Thermal Properties</b>			
Heat Distortion - Annealed	D-648	°F	189
Vicat Softening	D-1525	°F	200
<b>Other Physical Properties</b>			
Gloss	D-523	60°	94
Density		g/cm <sup>3</sup>	1.04
Linear Shrinkage	D-955	in/in	.004 - .007
Moisture		%	<0.1

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Polystyrene

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All tests were run under laboratory conditions. ASTM (where applicable) testing procedures. The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of TotalEnergies products must be guided by the users own methods for selection of proper formulation. TotalEnergies Petrochemicals & Refining USA, Inc. disclaims any responsibility for misuse or misapplication of its products. TotalEnergies MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. TotalEnergies' liability and customer's exclusive remedy for any claims arising out of sales of its products are expressly limited at customer option to replacement of non-performing goods or payment not to exceed the purchase price plus transportation charges thereon in respect to any material which damage is claimed.