

## 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

830 07/2014


 TOTAL PETROCHEMICALS & REFINING USA, INC.  
 POLYMERS AMERICAS  
[www.totalrefiningchemicals.com](http://www.totalrefiningchemicals.com)  
 1201 Louisiana Street  
 Suite 1800  
 Houston, TX 77002

 TECHNICAL CENTER  
 P.O. Box 1200  
 Deer Park, Texas 77536  
 Phone: 281-884-7500

**1-800-344-3462**