



**TotalEnergies**

TotalEnergies Petrochemicals & Refining USA, Inc.  
 Polymers Americas

**Polystyrene 740**

Technical Data Sheet  
 Polystyrene - Impact  
 Produced in the United States

## Description

**Polystyrene 740:** Impact polystyrene designed for extrusion and injection molding. It is especially suitable for extrusion thermoforming applications requiring high gloss and high stiffness. A unique combination of thermal properties and high stiffness favors 740 for thin walling, high-speed thermoforming gloss, small appliance, and electronics applications.

### Application:

- Food service disposables such as lids, cups, and portion cup containers.
- Injection molding applications requiring high gloss.

### 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	4.0
<b>Mechanical Properties</b>			
Falling Dart	D-3029	in-lb	120
Izod - notched	D-256	ft-lbs/in	2.0
Tensile Strength	D-638	psi	4,400
Tensile Modulus	D-638	psi (10 <sup>5</sup> )	3.4
Elongation	D-638	%	45
Flexural Strength	D-790	psi	8,000
Flexural Modulus	D-790	psi (10 <sup>5</sup> )	3.7
<b>Thermal Properties</b>			
Heat Distortion - Annealed	D-648	°F	201
Vicat Softening	D-1525	°F	214
<b>Other Physical Properties</b>			
Gloss	D-523	60°	92
Density		g/cm <sup>3</sup>	1.04
Linear Shrinkage	D-955	in/in	.004 - .008
Moisture		%	<0.1