Polystyrene 740

Technical Data Sheet
Polystyrene - Impact
Produced in the United States

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

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.
- 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	4.0
Mechanical Properties			
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 (10^5)	3.4
Elongation	D-638	%	45
Flexural Strength	D-790	psi	8,000
Flexural Modulus	D-790	psi (10^5)	3.7
Thermal Properties			
Heat Distortion - Annealed	D-648	°F	201
Vicat Softening	D-1525	°F	214
Other Physical Properties			
Gloss	D-523	60°	92
Density		g/cm^3	1.04
Linear Shrinkage	D-955	in/in	.004 - .008
Moisture		%	<0.1

Rev: Feb 2026

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