

TotalEnergies

Technical Data Sheet Polystyrene - Impact Produced in the United States

TotalEnergies Petrochemicals & Refining USA, Inc. Polymers Americas

Description

Polystyrene 940E: Is a super high impact polystyrene designed for high gloss sheet extrusion and thermoforming applications that require additional toughness. Combination of high gloss, toughness and high stiffness makes 940E an excellent choice for:

Application:

- Cups, food packaging
- Custom sheet and coextrusion applications
- Specialty injection appliance and electronic applications.

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.
- 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	2.8
Mechanical Properties			
Falling Dart	D-3029	in-lb	160
Izod - notched	D-256	ft-lbs/in	3.0
Tensile Strength	D-638	psi	3,800
Tensile Modulus	D-638	psi (10 ⁵)	3.0
Elongation	D-638	%	50
Flexural Strength	D-790	psi	6,900
Flexural Modulus	D-790	psi (10⁵)	3.0
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	.004007
Moisture		%	<0.1

Polystyrene

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