

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Description

Polystyrene 960E: Is a high-impact polystyrene designed for extrusion/thermoforming applications that require exceptional resistance to attack from fats and oils. This environmental stress crack resistance (ESCR) material is used for lids and containers for salad dressings, gravies, and high fat dairy products.

Application:

- Disposables requiring high ESCR
- Refrigeration liners
- Capping 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.
- 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	3.8
Mechanical Properties			
Falling Dart	D-3029	in-lb	110
Izod - notched	D-256	ft-lbs/in	3.0
Tensile Strength	D-638	psi	2,500
Tensile Modulus	D-638	psi (10 ⁵)	2.3
Elongation	D-638	%	70
Flexural Strength	D-790	psi	4,800
Flexural Modulus	D-790	psi (10 ⁵)	2.4
Thermal Properties			
Heat Distortion - Annealed	D-648	°F	197
Vicat Softening	D-1525	°F	210
Other Physical Properties			
Gloss	D-523	60°	57
Density		g/cm ³	1.04
Linear Shrinkage	D-955	in/in	.004 - .007
Moisture		%	<0.1