Polystyrene 825E

Technical Data Sheet
Polystyrene - Impact
Produced in the United States

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Description

Polystyrene 825E: Designed specifically for extrusion/thermoforming. The polymer's balanced properties and processing characteristics make it especially suitable for industrial packaging deep draw thermoforming and custom multilayer sheet extrusion. Over the years, this popular resin has established itself as the industry standard extrusion grade high impact polystyrene.

Application:

- Custom sheet extrusion
- Extrusion thermoforming
- Packaging applications
- Form – Fill – Seal 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	3.0
Mechanical Properties			
Falling Dart	D-3029	in-lb	110
Izod - notched	D-256	ft-lbs/in	2.3
Tensile Strength	D-638	psi	3,600
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 (10^5)	3.2
Thermal Properties			
Heat Distortion - Annealed	D-648	°F	202
Vicat Softening	D-1525	°F	215
Other Physical Properties			
Gloss	D-523	60°	70
Density		g/cm^3	1.04
Linear Shrinkage	D-955	in/in	.004 - .007
Moisture		%	<0.1

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