Polystyrene 844E

Technical Data Sheet
Polystyrene - Impact
Produced in the United States

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Description

Polystyrene 844E: Is high impact polystyrene specially designed for the custom sheet market. This polymer produces tough, ductile sheet with a rich matte finish. 844E is specially formulated to minimize die buildup.

Application:

- This low gloss resin is an excellent choice for printing and thermoforming applications.
- The impact and tensile properties are preferred in deep draw and thermoforming 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	2.4
Tensile Strength	D-638	psi	3,200
Tensile Modulus	D-638	psi (10^5)	2.8
Elongation	D-638	%	55
Flexural Strength	D-790	psi	6,200
Flexural Modulus	D-790	psi (10^5)	2.8
Thermal Properties			
Heat Distortion - Annealed	D-648	°F	199
Vicat Softening	D-1525	°F	212
Other Physical Properties			
Gloss	D-523	60°	63
Density		g/cm^3	1.04
Linear Shrinkage	D-955	in/in	.004 - .008
Moisture		%	<0.1

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