

Description

TOTAL Petrochemicals 945E is a super high impact polystyrene designed for applications requiring extra toughness without sacrificing mechanical properties, excellent falling dart impact which, combined with the high gloss, make it a candidate for some ABS applications. This polymer is superior for co-extrusion of high gloss sheet. 945E has unique capabilities for deep draw thermoforming with good sidewall distribution.

Applications

Custom sheet extrusion, deep draw thermoforming, ABS replacement and super high gloss high impact 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.

Properties

Rheological Properties	ASTM Test	Unit	Typical Value
Melt Flow (200°C-5kg)	D-1238	g/10mn	3.5
Thermal Properties			
Heat Distortion - Annealed	D-648	°F	196
Vicat Softening	D-1525	°F	208
Impact Properties			
Falling Dart	D-3029	in-lb	160
Izod - notched	D-256	ft-lbs/in	3.2
Tensile Properties			
Strength	D-638	psi	3,500
Modulus	D-638	psi (10 ⁵)	3.0
Elongation	D-638	%	55
Flexural Properties			
Strength	D-790	psi	6,300
Modulus	D-790	psi (10 ⁵)	3.1
Other Properties			
Gloss	D-523	60°	90
Density		g/cm ³	1.04
Linear Shrinkage	D-955	in/in	.004 - .007
Moisture		%	<0.1

10/2010

Polystyrene



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All tests were run under laboratory conditions. ASTM (where applicable) testing procedures. The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of these products must be guided by the user's own methods for selection of proper formulation. TOTAL PETROCHEMICALS USA, INC. disclaims any responsibility for misuse or misapplication of its products. TOTAL PETROCHEMICALS USA, INC. MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. TOTAL PETROCHEMICALS USA, INC. liability and customer's exclusive remedy for any claims arising out of sales of its products are expressly limited at customer option to replacement of non-performing goods or payment not to exceed the purchase price plus transportation charges thereon in respect to any material which damage is claimed.