

# Star HIPS 3.5

Polystyrene - Impact



### Overview

Polystyrene 845E is a high impact polystyrene specially designed for the custom sheet market. This polymer produces tough, ductile sheet with a rich matte finish.

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](http://www.UL.com).
- USP Class VI
- Material Safety Data Sheets are available to help customers satisfy their safety needs.

### Applications

- 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.

Property	Value	Unit	ASTM
Melt index (condition 230°C/2.16 kg)	3.0	g/10 min	D 1238
Density (g/cm <sup>3</sup> )	1.040	g/cm <sup>3</sup>	D 792
Falling Dart	110	in-lb	D3029
Izod - notched	2.4	ft-lbs/in	D256
Tensile Strength	3,200	psi	D638
Tensile Modulus	2.8	psi (10 <sup>^5</sup> )	D638
Elongation	55	%	D638
Flexural Strength	6,200	psi	D790
Flexural Modulus	2.8	psi (10 <sup>^10</sup> )	D790
Heat Distortion - Annealed	199	°F	D648
Vicat Softening	212	°F	D1525

Property	Value	Unit	ASTM
Gloss	63	60°	D523
Linear Shrinkage	.004 - .008	in/in	D955
Moisture	<0.1	%	