

Technical Data Sheet Polystyrene - Crystal Produced in the United States

TotalEnergies Petrochemicals & Refining USA, Inc. Polymers Americas

Description

Polystyrene 595W: Is a high molecular weight, low melt flow, high heat crystal polystyrene specifically designed for direct injection foam operations to provide enhanced foam properties. It has higher melt strength than other high heat crystal resins in this melt flow range giving the converter the ability to reduce weight in their foam applications.

Application:

- Foam disposables
- Foam graphic art board
- Insulation foam board
- · OPS disposables

General Information:

- This material complies with FDA requirements as described in 21 CFR §177.1640.
- 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	1.6
Mechanical Properties			
Tensile Strength	D-638	psi	7,700
Tensile Modulus	D-638	psi (10 ⁵)	4.4
Flexural Strength	D-790	psi	15,100
Flexural Modulus	D-790	psi (10 ⁵)	4.9
Thermal Properties			
Heat Distortion - Annealed	D-648	°F	211
Vicat Softening	D-1525	°F	225
Other Physical Properties			
Density		g/cm ³	1.04
Linear Shrinkage	D-955	in/in	.004007
Moisture		%	<0.1