

Technical Data Sheet Polystyrene - Crystal Produced in the United States

TotalEnergies Petrochemicals & Refining USA, Inc. Polymers Americas

Description

Polystyrene 529W: Is a medium flow crystal polystyrene specially formulated for mar resistance. This easy processing crystal grade minimizes visual defects from ejection and automated part handling. The unique molecular architecture maximizes part strength while maintaining excellent process performance. It is an economical alternative to SAN and polycarbonate.

Application:

- Electronics
- Office accessories
- Appliance components

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 V
- 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	3.5
Mechanical Properties			
Tensile Strength	D-638	psi	7,500
Tensile Modulus	D-638	psi (10 ⁵)	4.3
Flexural Strength	D-790	psi	14,000
Flexural Modulus	D-790	psi (10 ⁵)	4.3
Thermal Properties			
Heat Distortion - Annealed	D-648	°F	196
Vicat Softening	D-1525	°F	208
Other Physical Properties			
Density		g/cm ³	1.04
Linear Shrinkage	D-955	in/in	.004007
Moisture		%	<0.1

Rev: Sept 2021

TOTALENERGIES PETROCHEMICALS & REFINING USA, INC. POLYMERS AMERICAS 1201 Louisiana Street Suite 1800 Houston, TX 77002 www.polymers.totalenergies.com

TECHNICAL CENTER P.O. Box 1200 Deer Park, Texas 77536 Phone: 281-884-7500

1-800-344-3462