



TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

Polystyrene 523W

Technical Data Sheet
Polystyrene - Crystal
Produced in the United States

Description

Polystyrene 523W: Is a unique high flow, high heat crystal polystyrene. Specially designed for foam applications 523W has a very narrow molecular weight distribution that provides excellent performance in extruded loose fill foam applications.

Application:

- Loose fill packaging
- Foam board
- Insulation board

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	11.0
Mechanical Properties			
Tensile Strength	D-638	psi	6,500
Tensile Modulus	D-638	psi (10 ⁵)	4.4
Flexural Strength	D-790	psi	11,900
Flexural Modulus	D-790	psi (10 ⁵)	4.8
Thermal Properties			
Heat Distortion - Annealed	D-648	°F	204
Vicat Softening	D-1525	°F	222
Other Physical Properties			
Density		g/cm ³	1.04
Linear Shrinkage	D-955	in/in	.004 - .007
Moisture		%	<0.1

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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

Polystyrene