Polystyrene 523W

Technical Data Sheet
Polystyrene - Crystal
Produced in the United States

TotalEnergies Petrochemicals & Refining USA, Inc.
Polymers Americas

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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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 TotalEnergies products must be guided by the users own methods for selection of proper formulation. TotalEnergies Petrochemicals & Refining USA, Inc. disclaims any responsibility for misuse or misapplication of its products. TotalEnergies MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. TotalEnergies' 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.