



Polystyrene 500W

Technical Data Sheet
Polystyrene - Crystal
Produced in the United States

TotalEnergies Petrochemicals & Refining USA, Inc.

Polymers Americas
Description

Polystyrene 500W: Is a high melt flow crystal polystyrene for high speed injection molding applications. The high flow characteristics make it easy to fill thin wall parts. Additionally, this material exhibits excellent clarity, strength and has a neutral water-white tint.

Application:

- Cutlery, tumblers, and containers
- Gloss capping material
- Blending crystal
- Masterbatch carrier

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	14
Mechanical Properties			
Tensile Strength	D-638	psi	6,400
Tensile Modulus	D-638	psi (10 ⁵)	4.5
Flexural Strength	D-790	psi	12,200
Flexural Modulus	D-790	psi (10 ⁵)	4.6
Thermal Properties			
Heat Distortion - Annealed	D-648	°F	195
Vicat Softening	D-1525	°F	206
Other Physical Properties			
Density		g/cm ³	1.04
Linear Shrinkage	D-955	in/in	.004 - .007
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

Polystyrene