



**TotalEnergies**

TotalEnergies Petrochemicals & Refining USA, Inc.  
Polymers Americas

**Polystyrene 524B**

Technical Data Sheet  
Polystyrene - Crystal  
Produced in the United States

## Description

**Polystyrene 524B:** Is general purpose crystal polystyrene targeted for gloss coextrusion cap applications. It is specially formulated to drastically reduce die buildup, die lines, and die maintenance.

### Application:

- High gloss coextrusion capping
- Blending crystal

### 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](http://www.UL.com).
- USP Class VI
- Material Safety Data Sheets are available to help customers satisfy their safety needs.

## Characteristics

|                                  | Method | Unit                   | Typical Value |
|----------------------------------|--------|------------------------|---------------|
| <b>Rheological Properties</b>    |        |                        |               |
| Melt Flow (200°C-5kg)            | D-1238 | g/10mn                 | 9.0           |
| <b>Mechanical Properties</b>     |        |                        |               |
| Tensile Strength                 | D-638  | psi                    | 6,700         |
| Tensile Modulus                  | D-638  | psi (10 <sup>5</sup> ) | 4.4           |
| Flexural Strength                | D-790  | psi                    | 13,500        |
| Flexural Modulus                 | D-790  | psi (10 <sup>5</sup> ) | 4.5           |
| <b>Thermal Properties</b>        |        |                        |               |
| Heat Distortion - Annealed       | D-648  | °F                     | 200           |
| Vicat Softening                  | D-1525 | °F                     | 213           |
| <b>Other Physical Properties</b> |        |                        |               |
| Density                          |        | g/cm <sup>3</sup>      | 1.04          |
| Linear Shrinkage                 | D-955  | in/in                  | .004 - .007   |
| Moisture                         |        | %                      | <0.1          |