TRINSEO™

# STYRON™ 666H

## General Purpose Polystyrene Resin

### Overview

STYRON™ 666H is a general purpose polystyrene with easy flow and good clarity. It is recommended for applications where a specific balance of flow and strength are important.

Applications:

- Media enclosures
- Disposable cups
- Blending with HIPS

Complies with:

- U.S. FDA 21 CFR 177.1640
- Consult the regulation for complete details.

| Physical | Nominal Value | (English) | Nominal Value | (SI) | Test Method |
|---|---|---|---|---|---|
| Density | 1.04 | g/cm³ | 1.04 | g/cm³ | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (200°C/5.0 kg) | 8.0 | g/10 min | 8.0 | g/10 min | ASTM D1238 |
| **Mechanical** | **Nominal Value** | **(English)** | **Nominal Value** | **(SI)** | **Test Method** |
| Tensile Strength [1] (Yield, Injection Molded) | 6960 | psi | 48.0 | MPa | ASTM D638 |
| Tensile Elongation [1] (Break, Injection Molded) | 2.0 | % | 2.0 | % | ASTM D638 |
| Flexural Modulus (Injection Molded) | 470000 | psi | 3240 | MPa | ASTM D790 |
| Flexural Strength (Injection Molded) | 13100 | psi | 90.0 | MPa | ASTM D790 |
| **Impact** | **Nominal Value** | **(English)** | **Nominal Value** | **(SI)** | **Test Method** |
| Notched Izod Impact | | | | | ASTM D256 |
| 73°F (23°C), Injection Molded | 0.30 | ft·lb/in | 16 | J/m | |
| **Thermal** | **Nominal Value** | **(English)** | **Nominal Value** | **(SI)** | **Test Method** |
| Deflection Temperature Under Load | | | | | ASTM D648 |
| 264 psi (1.8 MPa), Unannealed | 169 | °F | 76.0 | °C | |
| 264 psi (1.8 MPa), Annealed | 203 | °F | 95.0 | °C | |
| Vicat Softening Temperature | 210 | °F | 99.0 | °C | ASTM D1525 [2] |
| **Flammability** | **Nominal Value** | **(English)** | **Nominal Value** | **(SI)** | **Test Method** |
| Flame Rating [3] (0.06 in (1.5 mm)) | HB | | HB | | UL 94 |
| **Additional Information** | | | | | |
| Mass balance versions (bio-based (BIO) or chemically recycled (CR)) of this product are chemically and physically indistinguishable to the standard fossil grade. This technical data sheet applies to all versions. Letters of sameness are available upon request. | | | | | |