

Technical Information



STYRON™ 485

High Impact Polystyrene Resin

Overview

STYRON™ 485 is an easy-flowing, high impact polystyrene, offering high impact strength coupled with good flexibility.

Applications:

- Packaging, diluted with general purpose polystyrene
- Industrial articles

Complies with:

- Europe REGULATION (EC)10/2011
- U.S. FDA 21 CFR 177.1640
- Consult the regulations for complete details.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.04 g/cm ³	1.04 g/cm ³	ISO 1183
Apparent (Bulk) Density	0.60 g/cm ³	0.60 g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	12 g/10 min	12 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	239000 psi	1650 MPa	ISO 527-1/1
Tensile Stress			ISO 527-2/5
Yield	2320 psi	16.0 MPa	
Break	2320 psi	16.0 MPa	
Tensile Strain			ISO 527-2/5
Yield	1.5 %	1.5 %	
Break	50 %	50 %	
Flexural Modulus	290000 psi	2000 MPa	ISO 178
Flexural Stress	7250 psi	50.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact Strength (73°F (23°C))	3.8 ft-lb/in ²	8.0 kJ/m ²	ISO 180/1A
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness	10200 psi	70.0 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	172 °F	78.0 °C	
Vicat Softening Temperature	205 °F	96.0 °C	ISO 306/A120
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ¹ (0.06 in (1.5 mm))	HB	HB	UL 94
Glow Wire Flammability Index ¹			IEC 60695-2-12
0.04 in (1.0 mm)	1290 °F	700 °C	
0.08 in (2.0 mm)	1200 °F	650 °C	
0.12 in (3.0 mm)	1200 °F	650 °C	

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.

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