

STYRON™ 2678 MED

General Purpose Polystyrene Resin

Overview

STYRON™ 2678 MED is a general purpose polystyrene with high flow and good toughness, designed for injection molding applications. It is compliant with ISO 10993 (biological Evaluation of Medical Devices) and is suitable for use in approved medical applications.

Applications:

- Injection moulded medical applications (such as device enclosures, packaging items, etc.)
- Thin-walled containers

Complies with:

- ISO 10993
- Europe EU-Directive 2002/72/EC by 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	1.05 g/cm ³	1.05 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)	11 g/10 min	11 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress (Yield)	6240 psi	43.0 MPa	ISO 527-2/5
Tensile Strain (Break)	2.0 %	2.0 %	ISO 527-2/5
Flexural Modulus	508000 psi	3500 MPa	ISO 178
Flexural Stress	11600 psi	80.0 MPa	ISO 178
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-Scale)	105	105	ISO 2039-2
Ball Indentation Hardness	21800 psi	150 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Annealed	187 °F	86.0 °C	ISO 75-2/B
264 psi (1.8 MPa), Annealed	180 °F	82.0 °C	ISO 75-2/A
Vicat Softening Temperature			
--	199 °F	93.0 °C	ISO 306/A120
--	187 °F	86.0 °C	ISO 306/B50
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Dissipation Factor (1 MHz)	6.0E-5	6.0E-5	ASTM D150
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ¹ (0.06 in (1.6 mm))	HB	HB	UL 94