

Technical Information



STYRON™ 637

General Purpose Polystyrene Resin

Overview

STYRON™ 637 is a general purpose polystyrene designed for use in extrusion blending with impact polystyrene where its high strength can be used to maximum advantage. It is a high molecular weight material designed for extrusion blending. Its high strength makes it ideally suited for packaging applications.

Applications:

- Injection molded packages
- Packaging foam extrusion
- Injection molded containers

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)	2.5 g/10 min	2.5 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress (Yield)	7980 psi	55.0 MPa	ISO 527-2/5
Tensile Strain (Break)	2.0 %	2.0 %	ISO 527-2/5
Flexural Modulus	479000 psi	3300 MPa	ISO 178
Flexural Stress	11600 psi	80.0 MPa	ISO 178
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness	21800 psi	150 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed	194 °F	90.0 °C	ISO 75-2/A
Vicat Softening Temperature	207 °F	97.0 °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

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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