

Polyintec® PS155-EPG

General Purpose Polystyrene for Foam Extrusion

Product Description:

Polyintec® PS155-EPG is a general-purpose polystyrene manufactured by continuous mass polymerization of styrene monomer. Designed for foam extrusion applications, it is a crystal-like, hard, and brittle polymer characterized by medium flow, good tensile and flexural strength. It exhibits high Vicat softening and heat deflection temperatures.

Suggested Applications:

Foam extrusion.

Nominal Physical Properties:

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|--|----------------|-------------------|--------------|
| POLYMER PROPERTIES | | | |
| Melt Flow Rate (MFR) @ 200°C & 5 kg | 7 | g/10 min | ASTM D1238 |
| Load Density @ 23°C | 1050 | kg/m ³ | ASTM D792 |
| Bulk Density (Method B) | 600 | kg/m ³ | ASTM D1895 |
| MECHANICAL PROPERTIES | | | |
| Tensile Strength | 45 | MPa | ASTM D638 |
| Tensile Elongation | 2 | % | ASTM D638 |
| Tensile Modulus | 2990 | MPa | ASTM D638 |
| Flexural Strength | 66 | MPa | ASTM D790 |
| Flexural Modulus | 3627 | MPa | ASTM D790 |
| Izod Impact Notched @ 23°C | 16 | J/m | ASTM D256A |
| Rockwell Hardness | 93 | L-Scale | ASTM D785 |
| Rockwell Hardness | 60 | M-Scale | ASTM D785 |
| THERMAL PROPERTIES | | | |
| Vicat Softening Point (Rate A/50°C) | 102 | °C | ASTM D1525 |
| Heat Deflection Temp. (Method B, 455 KPa, Ann.) | 100 | °C | ASTM D648 |
| Flammability Rating, UL 94 | HB | @ 1.3 & 3 mm | UL 94 |

Important Note:

The properties listed above are typical values obtained under laboratory conditions and are not intended to be used as specifications. Test conditions: MFR was determined at 200°C with a 5 kg load. Heat Deflection Temperature was measured using Method B at 455 KPa on annealed samples. Flammability rating is for the natural color of the material.

