

DIAREX THH103

General Purpose Polystyrene Resin

Special Characteristics: THH103 is the general purpose polystyrene with heat resistance and tensile strength. This grade is recommended for extrusion applications that need tensile and heat resistance properties.

Typical Applications: Packaging, stationary, PS foam sheet, oriented PS sheet

Typical Properties:

| Properties | DIAREX THH103 | Unit | Test Method |
|-------------------------------|---------------|--------------------|-------------|
| Physical Properties | | | |
| Melt Flow Rate (200 °C, 5 kg) | 1.7 | g/10 min | ASTM D1238 |
| Density | 1.05 | g/cm ³ | ASTM D792 |
| Vicat Softening Point | 107 | °C | ASTM D1525 |
| Deflection Temperature | 82 | °C | ASTM D648 |
| Mechanical Properties | | | |
| Tensile Strength at Yield | 7,700 | lb/in ² | ASTM D638 |
| Tensile Elongation | 2.6 | % | ASTM D638 |
| Izod Impact Strength | 0.4 | ft.lb/in | ASTM D256 |
| Rockwell Hardness | M80 | Scale | ASTM D785 |
| Underwriter Laboratory* | HB (1.5 mm) | | UL-94 |

*Data based on injection molding test pieces.

Recommendation:

DIAREX THH103 can be processed with recommended temperature between 190 – 240 °C and melt temperature should not exceed 260 °C.

Note: Modifications of the processing conditions based on the variations of the product design and machine configuration.

