

DIAREX H820E

High Impact Polystyrene Resin

Special Characteristics: H820E is high impact polystyrene for extrusion and thermoforming in E&E appliances with good Environmental Stress Cracking Resistant (ESCR) property.

Typical Applications: Refrigerator door, Cabinet liner and accessories

Typical Properties:

| Properties | DIAREX H820E | Unit | Test Method |
|-------------------------------|--------------|--------------------|-------------|
| Physical Properties | | | |
| Melt Flow Rate (200 °C, 5 kg) | 2.8 | g/10 min | ASTM D1238 |
| Density | 1.04 | g/cm ³ | ASTM D792 |
| Vicat Softening Point | 100 | °C | ASTM D1525 |
| Mechanical Properties | | | |
| Tensile Strength at Yield | 3,600 | lb/in ² | ASTM D638 |
| Tensile Elongation | 50 | % | ASTM D638 |
| Flexural Strength | 5,100 | lb/in ² | ASTM D790 |
| Flexural Modulus (x10,000) | 36 | lb/in ² | ASTM D790 |
| Izod Impact Strength | 2.0 | ft.lb/in | ASTM D256 |
| Rockwell Hardness | R112 | Scale | ASTM D785 |
| Underwriter Laboratory* | HB (1.5 mm) | | UL-94 |

*Data based on injection molding test pieces.

Recommendation:

DIAREX H820E 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.

