

Technical Data Sheet High Impact Polystyrene

Produced in the United States

Description

Polystyrene 940E: Is a super high impact polystyrene designed for high gloss sheet extrusion and thermoforming applications that require additional toughness. Combination of high gloss, toughness and high stiffness makes 940E an excellent choice for:

Application:

- · Cups, food packaging
- Custom sheet and coextrusion applications
- Specialty injection appliance and electronic applications.

General Information:

- This material complies with FDA requirements as described in 21 CFR §177.1640.
- This material holds Underwriters Laboratory recognition 94HB; see UL File E55470 at www.UL.com.
- Material Safety Data Sheets are available to help customers satisfy their safety needs.

Characteristics

| | Method | Unit | Typical Value |
|----------------------------|--------|------------------------|---------------|
| Rheological Properties | | | |
| Melt Flow (200°C-5kg) | D-1238 | g/10mn | 2.8 |
| Mechanical Properties | | | |
| Falling Dart | D-3029 | in-lb | 160 |
| Izod - notched | D-256 | ft-lbs/in | 3.0 |
| Tensile Strength | D-638 | psi | 3,800 |
| Tensile Modulus | D-638 | psi (10 ⁵) | 3.0 |
| Elongation | D-638 | % | 50 |
| Flexural Strength | D-790 | psi | 6,900 |
| Flexural Modulus | D-790 | psi (10 ⁵) | 3.0 |
| Thermal Properties | | | |
| Heat Distortion - Annealed | D-648 | °F | 201 |
| Vicat Softening | D-1525 | °F | 214 |
| Other Physical Properties | | | |
| Gloss | D-523 | 60° | 92 |
| Density | | g/cm ³ | 1.04 |
| Linear Shrinkage | D-955 | in/in | .004007 |
| Moisture | | % | <0.1 |

