

STYRON A-TECH™ 1175

High-Impact Polystyrene Resins

STYRON A-TECH™ 1175 is a high impact, environment stress crack resistance (ESCR) resins, design for extrusion and thermoforming applications, especially for the refrigeration industry. The resin allows for potential downgauging and scrap reduction in the thermoforming process.

Main Characteristics

- Allow for downgauging
- ESCR to food stuff and hydrocarbons
- Ease of processing in extrusion and thermoforming
- Increased rigidity
- Excellent thermoforming behavior

Applications

- Large appliance/refrigerator liners
- General extrusion/thermoforming applications requiring ESCR

Complies with

- * EUROPE REGULATION (EC) 10/2011
 - * U.S. FDA 21 CFR177.1640
- Consult the regulations for complete details*

| Properties | Test Method | Unit | Typical Value |
|--|-------------|-------------------|---------------|
| Physical | | | |
| Melt Flow Rate (200 deg C/5 kg) | ASTM D1238 | g/10 min | 2.8 |
| Specific Gravity | ASTM D792 | g/cm ³ | 1.05 |
| UL 94 Classification @ 1.5 mm | | | HB |
| Injection Molded Properties | | | |
| Mechanical | | | |
| Yield, Tensile Strength | ASTM D638 | psi | 2200 |
| Ultimate, Tensile Strength | ASTM D638 | psi | 3400 |
| Break Elongation | ASTM D638 | % | 60 |
| Tensile Modulus | ASTM D638 | psi | 240000 |
| Flexural Strength | ASTM D790 | psi | 5600 |
| Flexural Modulus | ASTM D790 | psi | 240000 |
| Notched Izod @ 23 deg C | ASTM D256 | ft-lb/in | 2 |
| Thermal | | | |
| Vicat Softening Point | ASTM D1525 | deg C | 100 |
| Deflection Temperature Under Load @ 1.82 MPa, unannealed | ASTM D648 | deg C | 68 |

Notes

These are typical properties only and are not to be construed as specification. Users should confirm results by their own tests

