

STYRON™ 656D

General Purpose Polystyrene Resins

STYRON[™] 656D is a general purpose polystyrene with easy flow and good clarity. It is recommended for applications where a specific balance of flow and strength are important.

Main Characteristics

- Easy processing
- Light Blue
- UL94 HB
- FDA compliance
 - * U.S. FDA 21 CFR177.1640
 - * Europe Regulation (EU) No 10/2011

Applications

- Media enclosures
- Refrigerator accessories
- Blending with HIPS
- Disposable cups

| Properties | Test Method | Unit | Typical Value |
|-----------------------------------|-------------|-------------------|---------------|
| Physical | | | |
| Melt Flow Rate (200 deg C/5 kg) | ASTM D1238 | g/10 min | 8.5 |
| Density | ASTM D792 | g/cm ³ | 1.04 |
| Mold Shrinkage | ASTM D955 | in/in | 0.004-0.007 |
| UL 94 Classification @ 1.5 mm | | | НВ |
| Injection Molded Properties | | | |
| Mechanical | | | |
| Yield, Tensile Strength | ASTM D638 | psi | 6900 |
| Ultimate, Tensile Strength | ASTM D638 | psi | 6900 |
| Break Elongation | ASTM D638 | % | 2 |
| Flexural Strength | ASTM D790 | psi | 12600 |
| Flexural Modulus | ASTM D790 | psi | 470000 |
| Notched Izod @ 23 deg C | ASTM D256 | ft-lb/in | 0.39 |
| Compression Molded Properties | | | |
| Mechanical | | | |
| Yield Tensile Strength | ASTM D638 | psi | 5900 |
| Ultimate Tensile Strength | ASTM D638 | psi | 5900 |
| Break Elongation | ASTM D638 | % | 1 |
| Flexural Strength | ASTM D790 | psi | 8200 |
| Flexural Modulus | ASTM D790 | psi | 450000 |
| Notched Izod @ 23 deg C | ASTM D256 | ft-lb/in | 0.21 |
| Thermal | | | |
| Vicat Softening Point | ASTM D1525 | deg C | 99 |
| Deflection Temperature Under Load | | | |
| @ 1.82 Mpa, unannealed | ASTM D648 | deg C | 76.1 |
| Deflection Temperature Under Load | | | |
| @ 1.82 Mpa, annealed | ASTM D648 | deg C | 95 |
| CLTE-Flow | ASTM D696 | cm/cm/deg C | 0.000042 |

Notes

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