

STYRON™ 2686 MED

General Purpose Polystyrene Resin

Overview

STYRON™ 2686 MED is a general purpose resin with medium flow and good toughness, designed for injection moulding and extrusion applications. It has been tested according to ISO 10993 (biological Evaluation of Medical Devices) and is suitable for use in approved medical applications.

Applications:

- Injection moulded applications
- Thin wall containers

Complies with:

- Commission Regulation (EU) No 10/2011 and its amendments
- U.S. FDA 21 CFR 177.1640

Consult the regulations for complete details.

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--|-------------------------|------------------------|--------------|
| Density | 1.04 g/cm ³ | 1.04 g/cm ³ | ISO 1183 |
| Apparent (Bulk) Density | 0.60 g/cm ³ | 0.60 g/cm ³ | ISO 60 |
| Melt Mass-Flow Rate (MFR) (200°C/5.0 kg) | 2.5 g/10 min | 2.5 g/10 min | ISO 1133 |
| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Stress (Yield) | 7980 psi | 55.0 MPa | ISO 527-2/5 |
| Tensile Strain (Break) | 2.0 % | 2.0 % | ISO 527-2/5 |
| Flexural Modulus | 508000 psi | 3500 MPa | ISO 178 |
| Flexural Stress | 13800 psi | 95.0 MPa | ISO 178 |
| Hardness | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Ball Indentation Hardness | 21800 psi | 150 MPa | ISO 2039-1 |
| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Deflection Temperature Under Load | | | ISO 75-2/A |
| 264 psi (1.8 MPa), Annealed | 208 °F | 98.0 °C | |
| Vicat Softening Temperature | 225 °F | 107 °C | ISO 306/A120 |

Additional Information

Mass balance versions (bio-based (BIO) or chemically recycled (CR)) of this product are chemically and physically indistinguishable to the standard fossil grade. This technical data sheet applies to all versions. Letters of sameness are available upon request.