

MAGNUM™ 3904 Smooth LP ABS Resin

Overview

MAGNUM™ 3904 Smooth LP is an extrusion / thermoforming resin developed for high impact and other technical applications.

The mass (continuous process) ABS technology ensures an ABS resin that combines excellent processability with a stable light base colour that is ideal for self-colouring.

With its very low particulate content, this grade is an addition to the " Smooth Series" and features a lower plate (LP) out content. This results in a superior surface finish in which the plate out build-up on the extruder roll stack is reduced significantly. This new grade enables customers to produce parts with both outstanding aesthetics and surface cleanness at lower total cost.

Applications

- Automotive interior
- Furniture

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|--|-------------------------|------------------------|--------------|
| Density | 1.05 g/cm ³ | 1.05 g/cm ³ | ISO 1183 |
| Apparent (Bulk) Density | 0.65 g/cm ³ | 0.65 g/cm ³ | ISO 60 |
| Melt Mass-Flow Rate (MFR) (220°C/10.0 kg) | 4.7 g/10 min | 4.7 g/10 min | ISO 1133 |
| Molding Shrinkage | 4.0E-3 to 7.0E-3 in/in | 0.40 to 0.70 % | ISO 294-4 |
| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Modulus | 264000 psi | 1820 MPa | ISO 527-1/1 |
| Tensile Stress (Yield) | 5370 psi | 37.0 MPa | ISO 527-2/50 |
| Tensile Strain (Yield) | 2.6 % | 2.6 % | ISO 527-2/50 |
| Flexural Modulus ¹ | 276000 psi | 1900 MPa | ISO 178 |
| Flexural Stress ¹ | 8410 psi | 58.0 MPa | ISO 178 |
| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed | 207 °F | 97.0 °C | ISO 75-2/A |
| Vicat Softening Temperature | 207 °F | 97.0 °C | ISO 306/B50 |
| Flammability | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Flame Rating ² (0.06 in (1.5 mm)) | HB | HB | UL 94 |

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.

| Injection | Nominal Value (English) | Nominal Value (SI) |
|--------------------|-------------------------|--------------------|
| Drying Temperature | 176 to 194 °F | 80 to 90 °C |
| Drying Time | 2.0 to 4.0 hr | 2.0 to 4.0 hr |