

MAGNUM™ 3404 Smooth

Trinseo - ABS Resin

Sunday, November 3, 2019

General Information

Product Description

MAGNUM™ 3404 Smooth is an excellent general purpose extrusion / thermoforming resin with outstanding processability. 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. The new MAGNUM 'Smooth Series' resins have an ultra low particulate content, which results in a superb surface finish that will enable our customers to produce parts with excellent aesthetics at a lower total cost.

Applications:

- · Transportation
- · Sanitary ware
- Signage
- Furnishings
- · Protective covers
- Marine
- · Recreational vehicles

| General | | | |
|-------------------|--|--|---------------|
| Material Status | Commercial: Active | | |
| Availability | • Europe | Latin America | North America |
| Features | Good Processability | Pleasing Surface Appear | rance |
| Uses | FurnitureGeneral Purpose | Marine Applications Protective Coverings | |
| Forms | • Pellets | | |
| Processing Method | Blow MoldingInjection Molding | Profile Extrusion Sheet Extrusion | Thermoforming |

| ASTM & ISO Properties 1 | | | | | |
|---|---------------|------------------------|--------------|--|--|
| Physical | Nominal Value | Unit | Test Method | | |
| Density | 1.05 | g/cm³ | ISO 1183/B | | |
| Melt Mass-Flow Rate (MFR) (220°C/10.0 kg) | 6.6 | g/10 min | ISO 1133 | | |
| Melt Volume-Flow Rate (MVR) (220°C/10.0 kg) | 6.70 | cm ³ /10min | ISO 1133 | | |
| Molding Shrinkage - Flow | 0.40 to 0.70 | % | ISO 294-4 | | |
| Mechanical | Nominal Value | Unit | Test Method | | |
| Tensile Modulus (0.126 in, Injection Molded) | 312000 | psi | ISO 527-2 | | |
| Tensile Stress (Yield, 0.126 in, Injection Molded) | 6240 | psi | ISO 527-2/50 | | |
| Tensile Strain (Yield, 0.126 in, Injection Molded) | 2.7 | % | ISO 527-2/50 | | |
| Flexural Modulus ^{2, 3} (0.126 in, Injection Molded) | 305000 | psi | ISO 178 | | |
| Flexural Stress ^{2, 3} (0.126 in, Injection Molded) | 10200 | psi | ISO 178 | | |
| Impact | Nominal Value | Unit | Test Method | | |
| Charpy Notched Impact Strength | | | | | |
| -22°F, Injection Molded | 6.2 | ft·lb/in² | ISO 179/1eA | | |
| -22°F, Injection Molded | 3.8 | ft·lb/in² | ISO 179/2C | | |
| 73°F, Injection Molded | 8.6 | ft·lb/in² | ISO 179/1eA | | |
| 73°F, Injection Molded | 6.2 | ft·lb/in² | ISO 179/2C | | |



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| Impact | Nominal Value | Unit | Test Method |
|---|---------------|-----------|-------------|
| Notched Izod Impact Strength | | | ISO 180/A |
| -22°F, Injection Molded | 5.2 | ft·lb/in² | |
| 73°F, Injection Molded | 9.0 | ft·lb/in² | |
| Thermal | Nominal Value | Unit | Test Method |
| Heat Deflection Temperature (264 psi, Annealed) | 214 | °F | ISO 75-2/A |
| Vicat Softening Temperature | 216 | °F | ISO 306/B50 |
| Flammability | Nominal Value | Unit | Test Method |
| Burning Rate ⁴ (0.0787 in) | 2.0 | in/min | ISO 3795 |
| Flame Rating ⁴ | | | UL 94 |
| 0.06 in | НВ | | |
| 0.12 in | НВ | | |
| Notes | | | |
| ¹ Typical properties: these are not to be construed as specifications. | | | |

² 0.079 in/min

³ 3-points

⁴ This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.