



MAGNUM™ 3904 Smooth LP

Trinseo - ABS Resin

Sunday, November 3, 2019

General Information

Product Description

MAGNUM® 3904 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 ultra-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 cleanliness at lower total cost.

Applications

- Automotive interior
- Furniture

General

Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Features	• Good Processability	• High Impact Resistance	• Pleasing Surface Appearance
Uses	• Automotive Applications	• Automotive Interior Parts	• Furniture
Forms	• Pellets		
Processing Method	• Extrusion	• Thermoforming	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.05	g/cm ³	ISO 1183/B
Apparent (Bulk) Density	0.65	g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	4.7	g/10 min	ISO 1133
Molding Shrinkage - Flow	0.10 to 0.70	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	264000	psi	ISO 527-2
Tensile Stress			
Yield, 0.126 in, Injection Molded	5370	psi	ISO 527-2/50
Yield, 0.126 in, Injection Molded	5660	psi	ISO 527-2/100
Tensile Strain			
Yield, 0.126 in, Injection Molded	2.6	%	ISO 527-2/50
Yield, 0.126 in, Injection Molded	2.8	%	ISO 527-2/100
Flexural Modulus ^{2, 3}	276000	psi	ISO 178
Flexural Stress ^{2, 3}	8410	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	13	ft-lb/in ²	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Annealed)	207	°F	ISO 75-2/A
Vicat Softening Temperature	207	°F	ISO 306/B50

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Flammability	Nominal Value	Unit	Test Method
Flame Rating ⁴			UL 94
0.06 in		HB	
0.12 in		HB	

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.