

Trinseo - ABS Resin Thursday, March 10, 2022

### **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	<ul><li>Good Processability</li><li>Good Surface Finish</li></ul>	Medium Heat Resistance     Medium Impact Resistan		
Uses	<ul><li>Furniture</li><li>General Purpose</li></ul>	<ul><li>Marine Applications</li><li>Protective Coverings</li></ul>		
Forms	<ul> <li>Pellets</li> </ul>			
Processing Method	<ul><li>Blow Molding</li><li>Injection Molding</li></ul>	<ul><li> Profile Extrusion</li><li> Sheet Extrusion</li></ul>	Thermoforming	

ASTM & ISO Properties <sup>1</sup>					
Physical	Nominal Value	Unit	Test Method		
Density	1.05	g/cm³	ISO 1183		
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	6.6	g/10 min	ISO 1133		
Molding Shrinkage	0.40 to 0.70	%	ISO 294-4		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Modulus	2150	MPa	ISO 527-1/1		
Tensile Stress (Yield)	43.0	MPa	ISO 527-2/50		
Tensile Strain (Yield)	2.7	%	ISO 527-2/50		
Flexural Modulus <sup>2</sup>	2100	MPa	ISO 178		
Flexural Stress <sup>2</sup>	70.0	MPa	ISO 178		
Impact	Nominal Value	Unit	Test Method		
Charpy Notched Impact Strength			ISO 179/1eA		
23°C, Injection Molded	18	kJ/m²			
Thermal	Nominal Value	Unit	Test Method		
Deflection Temperature Under Load (1.8 MPa, Annealed)	101	°C	ISO 75-2/A		
Vicat Softening Temperature	102	°C	ISO 306/B50		



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Flammability	Nominal Value Unit	Test Method
Flame Rating <sup>3</sup>		UL 94
1.5 mm	НВ	
3.0 mm	НВ	

Processing Information		
Injection	Nominal Value Unit	
Drying Temperature	80 to 90 °C	
Drying Time	2.0 to 4.0 hr	

### **Notes**

- <sup>1</sup> Typical properties: these are not to be construed as specifications.
- <sup>2</sup> 2.0 mm/min

<sup>&</sup>lt;sup>3</sup> This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.



