

MAGNUM™ 575

ABS Resin

Overview

MAGNUM™ 575 is a medium heat, high stiffness, and very high impact resistant ABS that is suitable for extrusion and thermoforming applications. This material is available in North America.

Benefits

- Lot to lot consistency for optimal machine parameters
- Self-coloring improvement to lower costs in pigments and logistics
- Low VOC to improve interior air quality
- Heat stability for processing temperatures to improve part design
- Low gels for excellent thermoformability with low levels of scrap

Applications

- Recreational vehicles
- Panels
- Signs

Complies with:

- U.S. FDA 21 CFR 181.32

Consult the regulations for complete details.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm ³	1.05 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)			ISO 1133
220°C/10.0 kg	4.8 g/10 min	4.8 g/10 min	
230°C/3.8 kg	1.4 g/10 min	1.4 g/10 min	
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			
-- ¹	305000 psi	2100 MPa	ASTM D638
--	290000 psi	2000 MPa	ISO 527-1/1
Tensile Strength			
Yield ²	6090 psi	42.0 MPa	ASTM D638
Yield	6960 psi	48.0 MPa	ISO 527-2/50
Tensile Elongation			
Break ²	17 %	17 %	ASTM D638
Break	15 %	15 %	ISO 527-2/50
Flexural Modulus			
-- ³	377000 psi	2600 MPa	ASTM D790
-- ⁴	363000 psi	2500 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
73°F (23°C), Injection Molded	21 ft-lb/in ²	44 kJ/m ²	
Notched Izod Impact			ASTM D256
-22°F (-30°C)	4.4 ft-lb/in	240 J/m	
73°F (23°C)	9.6 ft-lb/in	510 J/m	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	198 °F	92.0 °C	
66 psi (0.45 MPa), Annealed	218 °F	103 °C	
264 psi (1.8 MPa), Unannealed	172 °F	78.0 °C	
264 psi (1.8 MPa), Annealed	214 °F	101 °C	
Vicat Softening Temperature	207 °F	97.0 °C	ISO 306/B50

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

Injection Notes

Some applications such as plating may require moisture levels as low as 0.05%.