Technical Information

TRINSEO™

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/cm³	1.05	g/cm³	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/in²	44	kJ/m²	
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
264 psi (1.8 MPa), Unannealed	147 °F	64.0 °C	
Vicat Softening Temperature	207 °F	97.0 °C	ISO 306/B50

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%.

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

[1] 0.039 in/min (1.0 mm/min)

[2] 2.0 in/min (50 mm/min)

[3] 0.051 in/min (1.3 mm/min)

[4] 0.079 in/min (2.0 mm/min)

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