TRINSEO™

MAGNUM™ 275
ABS Resin

Overview

MAGNUM™ 275 ABS resin is a medium flow ABS with medium impact resistance, providing a balance of property perfomance. Because of the Mass ABS process, this material is a good choice for applications using colored concentrates at press.

Applications

- Injection molding applications
- Extrusion and thermoforming applications

Complies with:

- U.S. FDA 21 CFR 181.32

Consult the regulation 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	8.0	g/10 min	8.0	g/10 min	
230°C/3.8 kg	2.6	g/10 min	2.6	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]	276000	psi	1900	MPa	ASTM D638
--	290000	psi	2000	MPa	ISO 527-1/1
Tensile Strength					
Yield [2]	5800	psi	40.0	MPa	ASTM D638
Yield	5950	psi	41.0	MPa	ISO 527-2/50
Tensile Elongation					
Yield [2]	3.6	%	3.6	%	ASTM D638
Yield	3.8	%	3.8	%	ISO 527-2/50
Flexural Modulus					
-- [3]	305000	psi	2100	MPa	ASTM D790
-- [4]	319000	psi	2200	MPa	ISO 178
Flexural Strength					
-- [3]	8410	psi	58.0	MPa	ASTM D790
-- [4]	8990	psi	62.0	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	9.5	ft·lb/in²	20	kJ/m²	
Notched Izod Impact (73°F (23°C))	4.9	ft·lb/in	260	J/m	ASTM D256
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					
66 psi (0.45 MPa), Unannealed	201	°F	94.0	°C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	176	°F	80.0	°C	ISO 75-2/A
Vicat Softening Temperature	210	°F	99.0	°C	ISO 306/B50

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating [5]			UL 94
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	

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