TRINSEO™

MAGNUM™ A533
ABS Resin

Overview

MAGNUM™ A533 is a good flow ABS resin with excellent processing characteristics and a matt surface finish. Produced by MASS (continues process) polymerization technology, this material offers a low emission and low odor performance even in a wide range of processing window. Its stable light base color makes it an ideal candidate for self-coloring process to reduce the total production cost.

- Applications:
  - Matt/unpainted automotive interior trims
  - Door liners
  - Dashboard components
  - Pillar covers
  - Consoles
  - Glove boxes

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.05	g/cm³	1.05	g/cm³	ISO 1183
Apparent (Bulk) Density	0.65	g/cm³	0.65	g/cm³	ISO 60
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	9.0	g/10 min	9.0	g/10 min	ISO 1133
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	268000	psi	1850	MPa	ISO 527-1/1
Tensile Stress (Yield)	5800	psi	40.0	MPa	ISO 527-2/50
Tensile Strain					ISO 527-2/50
Yield	3.5	%	3.5	%	
Break	20	%	20	%	
Flexural Modulus [1]	276000	psi	1900	MPa	ISO 178
Flexural Stress [1]	8410	psi	58.0	MPa	ISO 178
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Charpy Notched Impact Strength					ISO 179/1eA
-22°F (-30°C), Injection Molded	4.8	ft·lb/in²	10	kJ/m²	
73°F (23°C), Injection Molded	7.1	ft·lb/in²	15	kJ/m²	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					
66 psi (0.45 MPa), Unannealed	203	°F	95.0	°C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	176	°F	80.0	°C	ISO 75-2/A
Vicat Softening Temperature	212	°F	100	°C	ISO 306/B50
Flammability	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Burning Rate [2]	60.0	min/mm	60.0	min/mm	ISO 3795
Carbon Emission [2]	30.0	µg/g	30.0	µg/g	VDA 277
Additional Information	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Fogging - (100C)	98	%	98	%	ISO 6452

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