MAGNUM™ 342 EZ
ABS Resin

Overview

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MAGNUM™ 342EZ is a standard heat ABS. It is a reliable and cost effective solution for general covered interior automotive applications. MAGNUM™ 342EZ has high flow characteristics supporting part design freedom.

Benefits:

- Lot to lot consistency allowing for optimal machine parameters settings from the start
- Low VOC allowing a better interior air quality facing increasing regulatory and OEMs constraints.
- Heat stability during wide range of processing temperatures: enhanced part design freedom

Applications:

- General purpose covered interior automotive applications
- Mid-consoles
- Door liners
- Seat trims

Automotive Specifications

- CHRYSLER MS-DB-200 Type A CPN3457 Color: 90% Color Match
- FORD WSS-M4D483-C1
- GM GMW15572P-ABS-T1
- CHRYSLER MS-DB-200 Type A CPN508 Color: 90% Color Match
- FORD WSS-M4D827-A3
- TOYOTA TSM 5512G-2A

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.04	g/cm³	1.04	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	6.0	g/10 min	6.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	4.0E-3 to 7.0E-3	in/in	0.40 to 0.70	%	ASTM D955
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Modulus [1]					ASTM D638
0.126 in (3.20 mm), Injection Molded	260000	psi	1790	MPa	
Tensile Strength					ASTM D638
Yield, 0.126 in (3.20 mm), Injection Molded	6000	psi	41.4	MPa	
Tensile Elongation					ASTM D638
Yield, 0.126 in (3.20 mm), Injection Molded	3.0	%	3.0	%	
Flexural Modulus [2]					ASTM D790
0.126 in (3.20 mm), Injection Molded	290000	psi	2000	MPa	
Flexural Strength [2]					ASTM D790
0.126 in (3.20 mm), Injection Molded	8500	psi	58.6	MPa	
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Notched Izod Impact					ASTM D256
0°F (-18°C), 0.126 in (3.20 mm), Injection Molded	1.5	ft·lb/in	80	J/m	
73°F (23°C), 0.126 in (3.20 mm), Injection Molded	3.0	ft·lb/in	160	J/m	
Instrumented Dart Impact					ASTM D3763
73°F (23°C), 0.126 in (3.20 mm), Injection Molded, Peak Energy	290	in·lb	32.8	J	
73°F (23°C), 0.126 in (3.20 mm), Injection Molded, Total Energy	380	in·lb	42.9	J	

Thermal	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Deflection Temperature Under Load					ASTM D648
66 psi (0.45 MPa), Unannealed	195	°F	90.6	°C	
264 psi (1.8 MPa), Unannealed	170	°F	76.7	°C	
Vicat Softening Temperature	220	°F	104	°C	ASTM D1525 [3]

Injection	Nominal Value	(English)	Nominal Value	(SI)
Drying Temperature	180 to 185	°F	82 to 85	°C
Drying Time	2.0 to 4.0	hr	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%	0.10	%
Processing (Melt) Temp	450 to 475	°F	232 to 246	°C
Mold Temperature	80 to 120	°F	27 to 49	°C
Back Pressure	50.0 to 100	psi	0.345 to 0.689	MPa
Clamp Tonnage	2.0 to 3.0	tons/in²	2.8 to 4.1	kN/cm²
Screw L/D Ratio	20.0:1.0		20.0:1.0	
Screw Compression Ratio	1.5:1.0 to 3.5:1.0		1.5:1.0 to 3.5:1.0	

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] Method I (3 point load), 0.079 in/min (2.0 mm/min)

[3] Rate B (120°C/h), Loading 1 (10 N)

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