

MAGNUM™ 3616

ABS Resin

Overview

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MAGNUM™ 3616 is a high-heat ABS. Its high impact properties make it suitable for main interior automotive applications requiring ductility at ambient temperature and is used in head-impact areas, e.g. for mid-consoles.

Benefits:

- Lot to lot consistency allowing for optimal machine parameters settings from the start
- Self-coloring enabling improvement of costs by using less pigments and lowering your logistic costs
- 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:

- Main interior automotive applications
- Mid-consoles
- Door panels
- Door handles
- Pillars

Automotive Specifications

- BMW GS 93016
- GM GMW15572P-ABS-T2 Color: Natural
- VAG VW-TL 527 B
- DAIMLER DBL 5404.79
- VAG VW-TL 527 A

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm ³	1.05 g/cm ³	ISO 1183/B
Apparent (Bulk) Density	0.65 g/cm ³	0.65 g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	5.5 g/10 min	5.5 g/10 min	ISO 1133
Molding Shrinkage - Flow	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	319000 psi	2200 MPa	ISO 527-2
Tensile Stress (Yield)	5510 psi	38.0 MPa	ISO 527-2/50
Tensile Strain (Yield)	3.0 %	3.0 %	ISO 527-2/50
Flexural Modulus ¹	305000 psi	2100 MPa	ISO 178
Flexural Stress ¹	9430 psi	65.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F (-30°C)	4.8 ft-lb/in ²	10 kJ/m ²	
73°F (23°C)	12 ft-lb/in ²	25 kJ/m ²	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Annealed	203 °F	95.0 °C	
Vicat Softening Temperature	225 °F	107 °C	ISO 306/B50

Notes

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

¹ 0.079 in/min (2.0 mm/min)

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