

MAGNUM™ 3616

Units: SI ▾

Trinseo - Acrylonitrile Butadiene Styrene**Action****Legend (Open)****General Information****Product Description****Overview:**

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

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• Latin America
Features	• Ductile • Good Processability	• Good Stiffness • High Heat Resistance	• High Impact Resistance
Uses	• Automotive Applications	• Automotive Instrument Panel	• Automotive Interior Trim
Automotive Specifications	• BMW GS 93016 • DAIMLER DBL 5404.79	• FORD WSS-M4D906-B2 • GM GMW15572P-ABS-T2 Color: Natural	• VAG VW-TL 527 A • VAG VW-TL 527 B
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.05	g/cm ³	ISO 1183
Apparent (Bulk) Density	0.65	g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	5.5	g/10 min	ISO 1133
Molding Shrinkage	0.40 to 0.70	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2000	MPa	ISO 527-2/1
Tensile Stress (Yield)	38.0	MPa	ISO 527-2/50
Tensile Strain (Yield)	2.8	%	ISO 527-2/50
Tensile Strain (Break)	50	%	ISO 527-2/50
Flexural Modulus ²	2000	MPa	ISO 178
Flexural Stress ²	62.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C, Injection Molded)	18	kJ/m ²	ISO 179/1eA
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	79.0	°C	ISO 75-2/A
Vicat Softening Temperature	107	°C	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Carbon Emission	20.0	µg/g	VDA 277

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	80 to 90	°C
Drying Time	2.0 to 4.0	hr

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 mm/min

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