

MAGNUM™ 3416 SC ABS Resin

Overview

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MAGNUM™ 3416SC is the reference high-heat ABS in the automotive industry. It is universally suitable for all interior and exterior applications.

It is approved at all major OEMs. MAGNUM™ 3416SC is globally available, locally produced in major car production regions.

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 and exterior automotive applications
- Mid-consoles
- Door panels
- Door handles
- Pillars

Automotive Specifications

- BMW GS 93016 Color: Natural
- FORD WSS-M4D690-B1
- JLR STJLR.51.353
- JLR STJLR.51.5262 Color: Natural
- PSA Peugeot-Citroën ABS-0021
- VAG VW-TL 527 A
- DAIMLER DBL 5404.04
- GM GMW15572P-ABS-T2 Color: Natural
- JLR STJLR.51.5229
- PSA Peugeot-Citroën ABS-0019
- RNPO AS32-1
- VAG VW-TL 527 B

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm ³	1.05 g/cm ³	ISO 1183
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)	6.5 g/10 min	6.5 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	319000 psi	2200 MPa	ISO 527-2
Tensile Stress (Yield)	6240 psi	43.0 MPa	ISO 527-2
Tensile Strain (Yield)	3.1 %	3.1 %	ISO 527-2
Flexural Modulus ¹	319000 psi	2200 MPa	ISO 178
Flexural Stress ¹	11000 psi	76.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	5.7 ft-lb/in ²	12 kJ/m ²	
73°F (23°C)	8.1 ft-lb/in ²	17 kJ/m ²	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	185 °F	85.0 °C	
264 psi (1.8 MPa), Annealed	212 °F	100 °C	
Vicat Softening Temperature	226 °F	108 °C	ISO 306/B50

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate ² (0.0787 in (2.00 mm))	2.2 in/min	55 mm/min	ISO 3795
Flame Rating ²			UL 94
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	
Carbon Emission	10.0 µg/g	10.0 µg/g	VDA 277
Fogging	99 %	99 %	ISO 6452

Notes

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

¹ 3-points

² This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.

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