

Technical Information

MAGNUM™ 3416 SC ABS Resin

Overview

Overview:

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

Povolený rozsah hodnot indexu toku taveniny pro vstupní kontrolu je:

5,2 - 7,8 g/10min

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Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm ³	1.05 g/cm ³	ISO 1183
Apparent 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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