TRINSEO™

MAGNUM™ 3416SC LE
ABS Resin

Overview

Overview:

MAGNUM™ 3416SC LE is developed as Low odor high-heat MASS ABS for the automotive industry. MAGNUM™ 3416SC LE resin pellets as well as the parts made by it have less odor, even in a wide process window. It is universally suitable for all interior and exterior applications.

Benefits:

- Low odor of the resin pellets and parts made by it
- 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

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.05	g/cm³	1.05	g/cm³	ISO 1183
Apparent (Bulk) Density	0.65	g/cm³	0.65	g/cm³	ISO 60
Melt Mass-Flow Rate (MFR)					ISO 1133
220°C/10.0 kg	6.5	g/10 min	6.5	g/10 min	
230°C/3.8 kg	2.3	g/10 min	2.3	g/10 min	
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	305000	psi	2100	MPa	ISO 527-1/1
Tensile Stress (Yield)	6240	psi	43.0	MPa	ISO 527-2/50
Tensile Strain					ISO 527-2/50
Yield	3.0	%	3.0	%	
Break	30	%	30	%	
Flexural Modulus [1]	305000	psi	2100	MPa	ISO 178
Flexural Stress [1]	9720	psi	67.0	MPa	ISO 178
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Charpy Notched Impact Strength					ISO 179/1eA
73°F (23°C), Injection Molded	6.7	ft·lb/in²	14	kJ/m²	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					ISO 75-2/A
264 psi (1.8 MPa), Unannealed	181	°F	83.0	°C	
Vicat Softening Temperature	226	°F	108	°C	ISO 306/B50
Flammability	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Flame Rating [2]					UL 94
0.06 in (1.5 mm)	HB		HB		
0.12 in (3.0 mm)	HB		HB		
Carbon Emission [2]	20.0	µg/g	20.0	µg/g	VDA 277

Additional Information
Mass balance versions (bio-based (BIO) or chemically recycled (CR)) of this product are chemically and physically indistinguishable to the standard fossil grade. This technical data sheet applies to all versions. Letters of sameness are available upon request.

Injection	Nominal Value	(English)	Nominal Value	(SI)
Drying Temperature	176 to 194	°F	80 to 90	°C
Drying Time	2.0 to 4.0	hr	2.0 to 4.0	hr

[HongKong] +852-69575415 [China GuangDong] +135-3858-6433 [China ShangHai] +188-1699-6168