MAGNUM™ 3325 SLG

Trinseo - ABS Resin

Sunday, November 3, 2019

General Information

Product Description

Overview:

MAGNUM™ 3325SLG is a medium heat ABS. Its very low gloss combined with a high flow makes it specifically suitable for unpainted interior automotive applications. MAGNUM™ 3325SLG can thereby help you to save up to 50% of the part costs.

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
- High scratch and mar resistance for an improved aesthetic durability of the parts
- Easier recyclability of unpainted part

Applications:

- Matt/unpainted interior automotive applications
- Mid-consoles
- Pillars
- Door liners
- Glove boxes

General

Material Status	• Commercial: Active		
Availability	• Latin America	• North America	
Features	• Low Gloss	• Medium Heat Resistance	• Medium Impact Resistance
Uses	• Automotive Applications	• Automotive Interior Parts	
Automotive Specifications	• CHRYSLER MS-DB-191 Type A • FORD WSK-M4D827-A	• FORD WSS-M4D827-C1 • GM GMP.ABS.003	• GM GMW15572P-ABS-T2
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.05		ASTM D792
Density	1.05	g/cm³	ISO 1183/B
Apparent (Bulk) Density	0.69	g/cm³	ASTM D1895
Melt Mass-Flow Rate (230°C/3.8 kg)	3.1	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	3.1	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	0.53	%	
Flow	0.52	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [2]	301000	psi	ASTM D638
Tensile Modulus	278000	psi	ISO 527-2
Tensile Strength [2] (Yield)	5800	psi	ASTM D638
Tensile Stress (Yield)	5370	psi	ISO 527-2/50

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Mechanical	Nominal Value	Unit	Test Method
Tensile Elongation [2] (Yield)	2.8	%	ASTM D638
Tensile Strain (Yield)	2.8	%	ISO 527-2/50
Tensile Elongation [2] (Break)	22	%	ASTM D638
Tensile Strain (Break)	19	%	ISO 527-2/50
Flexural Modulus [3]	311000	psi	ASTM D790
Flexural Modulus [4, 5]	300000	psi	ISO 178
Flexural Strength [3]	9300	psi	ASTM D790
Flexural Stress [4, 5]	8850	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.2	ft·lb/in²	
73°F	7.6	ft·lb/in²	
Notched Izod Impact			ASTM D256
-22°F	2.4	ft·lb/in	
73°F	3.5	ft·lb/in	
Notched Izod Impact Strength			ISO 180/A
-22°F	5.2	ft·lb/in²	
73°F	8.6	ft·lb/in²	
Instrumented Dart Impact			ASTM D3763
-22°F, Peak Energy	204	in·lb	
73°F, Peak Energy	266	in·lb	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	206	°F	ASTM D648
Heat Deflection Temperature (66 psi, Unannealed)	207	°F	ISO 75-2/B
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	180	°F	
Heat Deflection Temperature (264 psi, Unannealed)	180	°F	ISO 75-2/A
Vicat Softening Temperature	214	°F	ASTM D1525 [6]
Vicat Softening Temperature	214	°F	ISO 306/B50
CLTE - Flow (-40 to 212°F)	4.6E-5	in/in/°F	ASTM E831
CLTE - Transverse (-40 to 212°F)	5.0E-5	in/in/°F	ASTM E831
Flammability	**Nominal Value**	**Unit**	**Test Method**
FMVSS Flammability [7]	0.96	in/min	FMVSS 302

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180 to 185	°F
Drying Time	> 2.0	hr
Rear Temperature	460	°F
Middle Temperature	480	°F
Front Temperature	489	°F
Nozzle Temperature	480 to 489	°F
Processing (Melt) Temp	469 to 520	°F
Mold Temperature	100 to 151	°F

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Notes

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

[2] 2.0 in/min

[3] Method I (3 point load), 0.051 in/min

[4] 0.079 in/min

[5] 3-points

[6] Rate A (50°C/h), Loading 2 (50 N)

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