TRINSEO™

MAGNUM™ 3325 SLG
ABS Resin

Overview

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

Automotive Specifications

- CHRYSLER MS-DB-191 Type A
- GM GMP.ABS.003
- FORD WSK-M4D827-A
- GM GMW15572P-ABS-T2

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.05	g/cm³	1.05	g/cm³	ASTM D792 ISO 1183/B
Apparent (Bulk) Density	0.69	g/cm³	0.69	g/cm³	ASTM D1895
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	3.1	g/10 min	3.1	g/10 min	ASTM D1238 ISO 1133
Molding Shrinkage					ISO 294-4
Across Flow	5.3E-3	in/in	0.53	%	
Flow	5.2E-3	in/in	0.52	%	
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Modulus					
-- [1]	301000	psi	2080	MPa	ASTM D638
--	278000	psi	1920	MPa	ISO 527-2
Tensile Strength					
Yield [1]	5800	psi	40.0	MPa	ASTM D638
Yield	5370	psi	37.0	MPa	ISO 527-2/50
Tensile Elongation					
Yield [1]	2.8	%	2.8	%	ASTM D638
Yield	2.8	%	2.8	%	ISO 527-2/50
Break [1]	22	%	22	%	ASTM D638
Break	19	%	19	%	ISO 527-2/50
Flexural Modulus					
-- [2]	311000	psi	2140	MPa	ASTM D790
-- [3, 4]	300000	psi	2070	MPa	ISO 178

Mechanical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Flexural Strength					
-- [2]	9300	psi	64.1	MPa	ASTM D790
-- [3, 4]	8850	psi	61.0	MPa	ISO 178
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Charpy Notched Impact Strength					ISO 179/1eA
-22°F (-30°C)	5.2	ft·lb/in²	11	kJ/m²	
73°F (23°C)	7.6	ft·lb/in²	16	kJ/m²	
Notched Izod Impact					
-22°F (-30°C)	2.4	ft·lb/in	130	J/m	ASTM D256
73°F (23°C)	3.5	ft·lb/in	190	J/m	ASTM D256
-22°F (-30°C)	5.2	ft·lb/in²	11	kJ/m²	ISO 180/A
73°F (23°C)	8.6	ft·lb/in²	18	kJ/m²	ISO 180/A
Instrumented Dart Impact					ASTM D3763
-22°F (-30°C), Peak Energy	204	in·lb	23.0	J	
73°F (23°C), Peak Energy	266	in·lb	30.0	J	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					
66 psi (0.45 MPa), Unannealed	206	°F	96.7	°C	ASTM D648
66 psi (0.45 MPa), Unannealed	207	°F	97.0	°C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	180	°F	82.2	°C	ASTM D648 ISO 75-2/A
Vicat Softening Temperature	214	°F	101	°C	ISO 306/B50 ASTM D1525 [5]
CLTE					ASTM E831
Flow : -40 to 212°F (-40 to 100°C)	4.6E-5	in/in/°F	8.3E-5	cm/cm/°C	
Transverse : -40 to 212°F (-40 to 100°C)	5.0E-5	in/in/°F	9.0E-5	cm/cm/°C	
Flammability	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
FMVSS Flammability [6]	0.96	in/min	24	mm/min	FMVSS 302

Injection	Nominal Value	(English)	Nominal Value	(SI)
Drying Temperature	180 to 185	°F	82 to 85	°C
Drying Time	> 2.0	hr	> 2.0	hr
Rear Temperature	460	°F	238	°C
Middle Temperature	480	°F	249	°C
Front Temperature	489	°F	254	°C
Nozzle Temperature	480 to 489	°F	249 to 254	°C
Processing (Melt) Temp	469 to 520	°F	243 to 271	°C
Mold Temperature	100 to 151	°F	38 to 66	°C