LEONA™ SG105

Asahi Kasei Corporation - *Polyamide 66 + PA 6I*

General Information

General			
Material Status	• Commercial: Active [1]		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Features	• Humidity Independent	• Pleasing Surface Appearance	
Uses	• Automotive Applications	• Automotive Interior Parts	• Industrial Applications
Part Marking Code (ISO 11469)	• >PA66+6I-GF50<		

Properties [2]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.59	--	g/cm³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.50	--	%	
Flow	0.20	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	--	1.2	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	2.61E+6	2.61E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	39200	33400	psi	ISO 527-2
Tensile Strain (Break, 73°F)	2.5	2.5	%	ISO 527-2
Flexural Modulus (73°F)	2.32E+6	2.18E+6	psi	ISO 178
Flexural Stress (73°F)	55100	50800	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength	8.1	7.6	ft·lb/in²	ISO 179
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	103	100		ISO 2039-2
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	482	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	464	--	°F	ISO 75-2/A
CLTE - Flow (-22 to 266°F)	6.7E-6	--	in/in/°F	ASTM D696
CLTE - Transverse (-22 to 266°F)	4.3E-5	--	in/in/°F	ASTM D696
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	1.0E+16	--	ohms	IEC 60093
Volume Resistivity	1.0E+15	--	ohms·cm	IEC 60093
Electric Strength	970	--	V/mil	IEC 60243-1
Comparative Tracking Index	600	--	V	IEC 60112

Processing Information

Injection	Dry	Unit
Drying Temperature - Vacuum Dryer	176 to 194	°F
Drying Time - Vacuum Dryer	2.0 to 3.0	hr
Processing (Melt) Temp	536 to 572	°F
Mold Temperature	212 to 248	°F

Notes

[1] All data is provisional.

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