LEONA™ 14G50

Asahi Kasei Corporation - *Polyamide 66*

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Stabilized		
Uses	• Automotive Applications • Electrical/Electronic Applications	• Rods • Structural Parts	
Automotive Specifications	• GM GMW3038P-PA66-GF50H Color: Black • GM GMW3038P-PA66-GF50H Color: Natural	• GM GMW3038P-PA66-GF50J Color: Black • GM GMW3038P-PA66-GF50J Color: Natural	• STELLANTIS MS-DB-41 CPN 4967 Color: Black
Part Marking Code (ISO 11469)	• >PA66-GF50<		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.58	--		ASTM D792
Density	1.58	--	g/cm³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.70	--	%	
Flow	0.40	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	--	1.3	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	2.45E+6	1.89E+6	psi	ISO 527-1
Tensile Strength	34100	24700	psi	ASTM D638
Tensile Stress (Break, 73°F)	34400	26500	psi	ISO 527-2
Tensile Elongation (Break)	2.5	4.0	%	ASTM D638
Tensile Strain (Break, 73°F)	2.0	4.0	%	ISO 527-2
Flexural Modulus	2.10E+6	1.42E+6	psi	ASTM D790
Flexural Modulus (73°F)	1.97E+6	1.60E+6	psi	ISO 178
Flexural Strength	56600	40600	psi	ASTM D790
Flexural Stress (73°F)	53800	39000	psi	ISO 178
Taber Abrasion Resistance (1000 Cycles)	--	22.0	mg	ASTM D1044
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength	6.7	10	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength	No Break	45 ft·lb/in²		ISO 179
Notched Izod Impact	2.6	3.6	ft·lb/in	ASTM D256
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Rockwell Hardness				ASTM D785
M-Scale	95	80		
R-Scale	118	--		
Rockwell Hardness				ISO 2039-2
M-Scale	95	80		
R-Scale	118	--		
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**

Deflection Temperature Under Load (66 psi, Unannealed)	500	--	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	500	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	482	--	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	491	--	°F	ISO 75-2/A
CLTE - Flow	1.1E-5	--	in/in/°F	ASTM D696
Thermal Conductivity	2.8	--	Btu·in/hr/ft²/°F	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	1.0E+15	--	ohms	ASTM D257
Surface Resistivity	1.0E+15	--	ohms	IEC 60093
Volume Resistivity	1.0E+15	--	ohms·cm	ASTM D257
Volume Resistivity (73°F)	1.0E+15	--	ohms·cm	IEC 60093
Dielectric Strength	530	--	V/mil	ASTM D149
Electric Strength	530	--	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	525	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (0.030 in)	HB	--		UL 94

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	527 to 563	°F
Mold Temperature	167 to 185	°F

Notes

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