LEONA™ 14G15

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, 15% Filler by Weight	
Additive	• Heat Stabilizer	
Features	• Heat Stabilized	
Uses	• Automotive Applications • Automotive Under the Hood	• Electrical/Electronic Applications • Structural Parts
Automotive Specifications	• GM GMW3038P-PA66-GF15H Color: Black • GM GMW3038P-PA66-GF15H Color: Natural	• GM GMW3038P-PA66-GF15J Color: Black • GM GMW3038P-PA66-GF15J Color: Natural
Part Marking Code (ISO 11469)	• >PA66-GF15<	

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.25	--		ASTM D792
Density	1.25	--	g/cm³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	1.2	--	%	
Flow	0.70	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	--	2.1	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	841000	522000	psi	ISO 527-1
Tensile Strength	15700	11500	psi	ASTM D638
Tensile Stress (Yield, 73°F)	--	11200	psi	ISO 527-2
Tensile Stress (Break, 73°F)	15500	10600	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	--	6.0	%	ISO 527-2
Tensile Elongation (Break)	2.5	8.0	%	ASTM D638
Tensile Strain (Break, 73°F)	2.5	11	%	ISO 527-2
Flexural Modulus	711000	363000	psi	ASTM D790
Flexural Modulus (73°F)	696000	479000	psi	ISO 178
Flexural Strength	24200	15700	psi	ASTM D790
Flexural Stress (73°F)	23500	16800	psi	ISO 178
Taber Abrasion Resistance (1000 Cycles)	--	9.00	mg	ASTM D1044
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength	2.9	2.4	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength	12	18	ft·lb/in²	ISO 179
Notched Izod Impact	0.92	1.1	ft·lb/in	ASTM D256
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Rockwell Hardness				ASTM D785
M-Scale	94	71		
R-Scale	120	--		
Rockwell Hardness				ISO 2039-2
M-Scale	94	71		
R-Scale	120	--		

Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	496	--	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	500	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	464	--	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	455	--	°F	ISO 75-2/A
CLTE - Flow	2.2E-5	--	in/in/°F	ASTM D696
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	660	--	V/mil	ASTM D149
Electric Strength	660	--	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	425	--	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.