

LEONA™ 1402G

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, 33% Filler by Weight	
Additive	• Heat Stabilizer	
Features	• Heat Stabilized	
Uses	• Automotive Applications • Automotive Under the Hood	• Electrical/Electronic Applications • Structural Parts
Part Marking Code (ISO 11469)	• >PA66-GF33<	

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.39	--		ASTM D792
Density	1.39	--	g/cm ³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.90	--	%	
Flow	0.40	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	--	1.7	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.45E+6	1.16E+6	psi	ISO 527-1
Tensile Strength	27000	19100	psi	ASTM D638
Tensile Stress (Break, 73°F)	27600	19600	psi	ISO 527-2
Tensile Elongation (Break)	3.0	5.0	%	ASTM D638
Tensile Strain (Break, 73°F)	3.0	5.0	%	ISO 527-2
Flexural Modulus	1.35E+6	914000	psi	ASTM D790
Flexural Modulus (73°F)	1.31E+6	986000	psi	ISO 178
Flexural Strength	41900	31300	psi	ASTM D790
Flexural Stress (73°F)	39900	29300	psi	ISO 178
Taber Abrasion Resistance (1000 Cycles)	--	15.0	mg	ASTM D1044
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	5.2	7.6	ft·lb/in ²	ISO 179
Charpy Unnotched Impact Strength	34	39	ft·lb/in ²	ISO 179
Notched Izod Impact	2.4	2.8	ft·lb/in	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785
M-Scale	96	75		
R-Scale	120	112		
Rockwell Hardness				ISO 2039-2
M-Scale	96	75		
R-Scale	120	112		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	500	--	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	509	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	482	--	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	482	--	°F	ISO 75-2/A
CLTE - Flow	1.7E-5	--	in/in/°F	ASTM D696



Specific Heat	0.380	--	Btu/lb/°F	
Thermal Conductivity	2.1	--	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	710	--	V/mil	ASTM D149
Electric Strength	710	--	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
Oxygen Index	23	--	%	ASTM D2863

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.

