

**LEONA™ 1300G**

Asahi Kasei Corporation - Polyamide 66

**General Information**
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Material Status	<ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>
Availability	<ul style="list-style-type: none"> <li>Africa &amp; Middle East</li> <li>Asia Pacific</li> <li>Europe</li> <li>North America</li> </ul>
Filler / Reinforcement	<ul style="list-style-type: none"> <li>Glass Fiber, 33% Filler by Weight</li> </ul>
Uses	<ul style="list-style-type: none"> <li>Automotive Applications</li> <li>Automotive Under the Hood</li> <li>Electrical/Electronic Applications</li> <li>Structural Parts</li> </ul>
Automotive Specifications	<ul style="list-style-type: none"> <li>GM GMP.PA66.065</li> </ul>
Part Marking Code (ISO 11469)	<ul style="list-style-type: none"> <li>&gt;PA66-GF33&lt;</li> </ul>

**Properties<sup>1</sup>**

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.39	--		ASTM D792
Density	1.39	--	g/cm <sup>3</sup>	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 <sup>2</sup>	ISO 179
Charpy Unnotched Impact Strength	34	39	ft·lb/in <sup>2</sup>	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/ft <sup>2</sup> /°F	
<b>Electrical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
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)	600	--	V	IEC 60112
<b>Flammability</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating (0.030 in)	HB	--		UL 94
Oxygen Index	23	--	%	ASTM D2863

### Processing Information

<b>Injection</b>	<b>Dry Unit</b>		
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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

