LEONA™ 53G33

Asahi Kasei Corporation - *Polyamide 66 + PA 612*

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	• Hydrolysis Resistant
Uses	• Automotive Applications • Electrical/Electronic Applications	• Structural Parts • Tanks
Part Marking Code (ISO 11469)	• >PA66+612-GF33<	

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.35	--		ASTM D792
Density	1.35	--	g/cm³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.90	--	%	
Flow	0.30	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	--	1.1	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.38E+6	1.09E+6	psi	ISO 527-1
Tensile Strength	31200	24700	psi	ASTM D638
Tensile Stress (Break, 73°F)	29400	23400	psi	ISO 527-2
Tensile Elongation (Break)	3.0	5.0	%	ASTM D638
Tensile Strain (Break, 73°F)	4.0	6.0	%	ISO 527-2
Flexural Modulus	1.22E+6	972000	psi	ASTM D790
Flexural Modulus (73°F)	1.41E+6	1.13E+6	psi	ISO 178
Flexural Strength	44800	37900	psi	ASTM D790
Flexural Stress (73°F)	42900	36300	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength	6.2	7.1	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength	44	44	ft·lb/in²	ISO 179
Notched Izod Impact	2.5	3.0	ft·lb/in	ASTM D256
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	121	--		ASTM D785
Rockwell Hardness				ISO 2039-2
M-Scale	97	88		
R-Scale	121	112		
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	406	--	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	406	--	°F	ISO 75-2/A
CLTE - Flow	1.1E-5	--	in/in/°F	ASTM D696
Thermal Conductivity	2.8	--	Btu·in/hr/ft²/°F	

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	518 to 554 °F
Mold Temperature	167 to 185 °F

Notes

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