LEONA™ FG171

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, 25% Filler by Weight	
Additive	• Flame Retardant	
Features	• Flame Retardant	• Halogenated
Uses	• Connectors • Electrical Parts	• Electrical/Electronic Applications • Switches
Part Marking Code (ISO 11469)	• >PA66-GF25 FR(17)<	

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.54	--		ASTM D792
Density	1.54	--	g/cm³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.90	--	%	
Flow	0.40	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	--	0.80	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.48E+6	1.19E+6	psi	ISO 527-1
Tensile Strength	23500	18400	psi	ASTM D638
Tensile Stress (Break, 73°F)	22300	17500	psi	ISO 527-2
Tensile Elongation (Break)	2.5	3.5	%	ASTM D638
Tensile Strain (Break, 73°F)	2.5	3.0	%	ISO 527-2
Flexural Modulus	1.29E+6	1.04E+6	psi	ASTM D790
Flexural Modulus (73°F)	1.41E+6	1.15E+6	psi	ISO 178
Flexural Strength	37100	27600	psi	ASTM D790
Flexural Stress (73°F)	35400	26100	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength	5.2	5.7	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength	32	32	ft·lb/in²	ISO 179
Notched Izod Impact	1.7	2.1	ft·lb/in	ASTM D256
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	95	55		ASTM D785
Rockwell Hardness (M-Scale)	95	55		ISO 2039-2
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	491	--	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	493	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	482	--	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	464	--	°F	ISO 75-2/A
CLTE - Flow	1.7E-5	--	in/in/°F	ASTM D696
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	1.0E+14	--	ohms	ASTM D257
Surface Resistivity	1.0E+14	--	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)	275	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (0.030 in)	V-0	--		UL 94
Glow Wire Flammability Index (0.12 in)	1760	--	°F	IEC 60695-2-12

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 536	°F
Mold Temperature	167 to 185	°F

Notes

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