LEONA™ FG170

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	• Flame Retardant	
Features	• Flame Retardant	• Halogenated
Uses	• Connectors • Electrical Parts	• Electrical/Electronic Applications • Switches
Part Marking Code (ISO 11469)	• >PA66-GF15 FR(17)<	

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.48	--		ASTM D792
Density	1.48	--	g/cm³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	1.0	--	%	
Flow	0.60	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	--	1.2	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.09E+6	827000	psi	ISO 527-1
Tensile Strength	19100	15700	psi	ASTM D638
Tensile Stress (Break, 73°F)	19000	14500	psi	ISO 527-2
Tensile Elongation (Break)	2.5	2.7	%	ASTM D638
Tensile Strain (Break, 73°F)	2.5	3.5	%	ISO 527-2
Flexural Modulus	928000	711000	psi	ASTM D790
Flexural Modulus (73°F)	1.09E+6	682000	psi	ISO 178
Flexural Strength	27700	22000	psi	ASTM D790
Flexural Stress (73°F)	27300	21200	psi	ISO 178
Taber Abrasion Resistance (1000 Cycles)	--	24.0	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	21	21	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 (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)	478	--	°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	690	--	V/mil	ASTM D149
Electric Strength	690	--	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	200	--	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
Oxygen Index	38	--	%	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	518 to 536	°F
Mold Temperature	167 to 185	°F

Notes

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