

LEONA™ FG173

Asahi Kasei Corporation - Polyamide 66

General Information

General	
Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific Europe North America
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber, 30% Filler by Weight
Additive	<ul style="list-style-type: none"> Flame Retardant
Features	<ul style="list-style-type: none"> Flame Retardant Halogenated
Uses	<ul style="list-style-type: none"> Connectors Electrical Parts Electrical/Electronic Applications Switches
Part Marking Code (ISO 11469)	<ul style="list-style-type: none"> >PA66-GF30 FR(17)<

Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.65	--		ASTM D792
Density	1.65	--	g/cm ³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.70	--	%	
Flow	0.30	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	--	0.80	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	1.70E+6	1.52E+6	psi	ISO 527-1
Tensile Strength	24200	20600	psi	ASTM D638
Tensile Stress (Break, 73°F)	25200	19900	psi	ISO 527-2
Tensile Elongation (Break)	2.5	3.5	%	ASTM D638
Tensile Strain (Break, 73°F)	2.0	2.0	%	ISO 527-2
Flexural Modulus	1.57E+6	1.20E+6	psi	ASTM D790
Flexural Modulus (73°F)	1.49E+6	1.26E+6	psi	ISO 178
Flexural Strength	36300	32100	psi	ASTM D790
Flexural Stress (73°F)	37600	27300	psi	ISO 178
Taber Abrasion Resistance (1000 Cycles)	--	29.0	mg	ASTM D1044
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	5.2	4.8	ft·lb/in ²	ISO 179
Charpy Unnotched Impact Strength	24	25	ft·lb/in ²	ISO 179
Notched Izod Impact	1.6	1.8	ft·lb/in	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness (M-Scale)	100	60		ASTM D785
Rockwell Hardness (M-Scale)	100	60		ISO 2039-2
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	500	--	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	504	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	486	--	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	473	--	°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.

