

LEONA™ 90G50

Asahi Kasei Corporation - Polyamide 66/6I Copolymer

General Information

General	
Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Features	• High Flow • Pleasing Surface Appearance
Uses	• Automotive Applications • Fabrics • Industrial Applications • Structural Parts
Automotive Specifications	• STELLANTIS MS-DB-41 CPN 5164 Color: Natural
Part Marking Code (ISO 11469)	• >PA66/6I-GF50<

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.58	--		ASTM D792
Density	1.58	--	g/cm ³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.50	--	%	
Flow	0.20	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	--	1.2	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	2.61E+6	2.47E+6	psi	ISO 527-1
Tensile Strength	34100	28400	psi	ASTM D638
Tensile Stress (Break, 73°F)	36300	29000	psi	ISO 527-2
Tensile Elongation (Break)	2.5	3.0	%	ASTM D638
Tensile Strain (Break, 73°F)	2.0	3.0	%	ISO 527-2
Flexural Modulus	2.25E+6	1.75E+6	psi	ASTM D790
Flexural Modulus (73°F)	2.06E+6	1.74E+6	psi	ISO 178
Flexural Strength	54100	44100	psi	ASTM D790
Flexural Stress (73°F)	51500	34700	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	7.6	7.6	ft·lb/in ²	ISO 179
Charpy Unnotched Impact Strength	42	40	ft·lb/in ²	ISO 179
Notched Izod Impact	2.4	2.5	ft·lb/in	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785
M-Scale	90	--		
R-Scale	120	--		
Rockwell Hardness				ISO 2039-2
M-Scale	100	--		
R-Scale	120	--		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	464	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	437	--	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	437	--	°F	ISO 75-2/A
CLTE - Flow	1.1E-5	--	in/in/°F	ASTM D696
Flammability	Dry	Conditioned	Unit	Test Method



Flame Rating (0.030 in)	HB	--	UL 94
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	527 to 563 °F		
Mold Temperature	185 to 203 °F		

Notes

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

