

LEONA™ 90G55

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, 55% Filler by Weight	
Features	• High Flow	• Pleasing Surface Appearance
Uses	• Automotive Applications • Automotive Exterior Parts	• Industrial Applications • Windows & Doors
Automotive Specifications	• STELLANTIS MS-DB-41 CPN 4413 Color: Black	• STELLANTIS MS-DB-41 CPN 5311
Part Marking Code (ISO 11469)	• >PA66/6I-GF55<	

Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.64	--		ASTM D792
Density	1.64	--	g/cm ³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.50	--	%	
Flow	0.20	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	--	1.1	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	2.70E+6	2.15E+6	psi	ISO 527-1
Tensile Strength	32100	26300	psi	ASTM D638
Tensile Stress (Break, 73°F)	33600	23600	psi	ISO 527-2
Tensile Elongation (Break)	2.0	3.0	%	ASTM D638
Tensile Strain (Break, 73°F)	2.0	3.0	%	ISO 527-2
Flexural Modulus	2.28E+6	1.84E+6	psi	ASTM D790
Flexural Modulus (73°F)	2.23E+6	1.78E+6	psi	ISO 178
Flexural Strength	50500	41200	psi	ASTM D790
Flexural Stress (73°F)	57100	39000	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	6.2	6.2	ft·lb/in ²	ISO 179
Charpy Unnotched Impact Strength	39	34	ft·lb/in ²	ISO 179
Notched Izod Impact	2.1	2.2	ft·lb/in	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785
M-Scale	95	88		
R-Scale	120	115		
Rockwell Hardness				ISO 2039-2
M-Scale	95	88		
R-Scale	120	115		
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
Specific Heat	0.461	--	Btu/lb/°F	



Thermal Conductivity	2.1	--	Btu·in/hr/ft²/°F	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+13	--	ohms	ASTM D257
Surface Resistivity	1.0E+13	--	ohms	IEC 60093
Dielectric Strength	710	--	V/mil	ASTM D149
Electric Strength	710	--	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	450	--	V	IEC 60112

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.

