LEONA™ 13G50

PA66-GF50 — Asahi Kasei

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**16900 / 13000**	MPa	ISO 527
[C] Stress at break	**237 / 183**	MPa	ISO 527
[C] Strain at break	**2 / 4**	%	ISO 527
Flexural modulus, 23°C	**13600 / 11000**	MPa	ISO 178
Flexural strength	**371 / 269**	MPa	ISO 178
[C] Charpy impact strength, +23°C	**N / 95**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**14 / 21**	kJ/m²	ISO 179/1eA
Rockwell hardness	**R 118**	-	ISO 2039-2
ASTM Data			
Tensile Strength	**235 / 170**	MPa	ASTM D 638
Elongation at Break	**2.5 / 4**	%	ASTM D 638
Flexural Modulus	**14500 / 9800**	MPa	ASTM D 790
Flexural Strength	**390 / 280**	MPa	ASTM D 790
Rockwell Hardness	**M 95 / M 80**	-	ASTM D 785
Taber Abrasion Resistance	**22**	mg/1000 cycles	ASTM D 1044
Izod Impact notched, 1/8 in	**140 / 190**	J/m	ASTM D 256

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**255 / ***	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**260 / ***	°C	ISO 75-1/-2
[C] Burning Behav. at thickness h	**HB / ***	class	IEC 60695-11-10
Thickness tested	**0.8 / ***	mm	-
Yellow Card available	**yes / ***	-	-
ASTM Data			
UL 94 Flame rating	**HB**	-	UL 94
Thickness tested	**0.75**	mm	-
Coefficient of Thermal Expansion, MD	**20**	E-6/K	ASTM D 696
DTUL @ 66 psi	**260**	°C	ASTM D 648
DTUL @ 264 psi	**250**	°C	ASTM D 648
Thermal Conductivity, solid state	**0.0577**	W/(m K)	ASTM C 177

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**1E13 / -**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	*** / 1E15**	Ohm	IEC 62631-3-2
[C] Electric strength	**21 / -**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**525 / -**	-	IEC 60112
ASTM Data			
Dielectric Strength, Short Time	**21 / -**	kV/mm	ASTM D 149
Volume Resistivity	**1E15 / -**	Ohm*cm	ASTM D 257

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Humidity absorption	**1.3 / ***	%	Sim. to ISO 62
[C] Density	**1580 / -**	kg/m³	ISO 1183
Density	**1580**	kg/m³	ASTM D 792

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80 - 90**	°C	-
Pre-drying - Time	**2 - 3**	h	-
Melt temperature	**275 - 295**	°C	-

Mold temperature	**75 - 85**	°C	-

Characteristics

Processing
Injection Molding

Delivery form
Pellets

Features
Creep Resistance, Fatigue Resistance

Applications
Automotive

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa