

KOPA® KN333G45BL

Injection Molding , PA66+GF45%, General Purpose , Black

Application

Automotive (Internal gears)

Properties	Measurement condition	Test Method	Unit	Typical value
Physical				
Density		ASTM D792	—	1.49
Shrinkage		ASTM D955	%	0.1~0.5
Water Absorption	23℃ , H ₂ O, 24hr	ASTM D570	%	0.7
Mechanical				
Tensile Strength at Break (3.2mm)	5 mm/min	ASTM D638	MPa	200
Elongation at Break (3.2mm)	5 mm/min	ASTM D638	%	—
Flexural Strength (3.2mm)	5 mm/min	ASTM D790	MPa	330
Flexural Modulus (3.2mm)	5 mm/min	ASTM D790	MPa	12,200
Izod Impact Strength (6.4mm)		ASTM D256		
(Notched)	23 ℃		J/m	170
Rockwell Hardness	R scale	ASTM D785	—	120
Thermal				
Melting Point	20 ℃/min	ASTM D1525	℃	260
Heat Deflection Temperature	1.8 MPa	ASTM D648	℃	250
Coefficient of linear expansion		ASTM D696	$\times 10^{-4}$ cm/cm · ℃	—
Flammability (0.8mm)		UL94	Class	—

※ 1MPa = 10.197162 Kg/cm², 1J/m = 0.10197 Kg · cm/cm, (Test specimen Thickness)



Processing Guide (Injection Molding)

Drying Temperature(℃)	80 ~ 90			
Drying Time(hr)	3~5 (Dehumidifying Dryer)			
Processing Moisture Contents(%)	≤ 0.1			
	Nozzle	Front	Middle	Rear
Cylinder Temperature(℃)	285~315	285~315	275~305	265~295
Mold Temperature(℃)	60~100			

