

Technical Datasheet

Material Type	PA66	Trademark	Ecolon®	Grade Name	GF2045-BK1
Feature	<ul style="list-style-type: none"> 45% Glass-Reinforced Nylon Resin (PA66) 				
Material Standard	<ul style="list-style-type: none"> XXXXXX 				
Availability	<ul style="list-style-type: none"> Asian-Pacific, America 				
Processing method	<ul style="list-style-type: none"> Injection Molding 				
Appearance	<ul style="list-style-type: none"> Color is Optional 				
Applications	<ul style="list-style-type: none"> Automotive and Engineering parts 				

General Properties

No.	Properties	Unit	Typical Value	Method	Test condition
1	Filler Content	%	45	ISO 3451-1, -4	
2	Density	g/mL	1.53	ISO 1183	23 °C
3	Melt Point	°C	260	ISO 3146	DSC
4	Tensile Strength	MPa	180	ISO 527	5 mm/mm
5	Tensile Elongation	%	3	ISO 527	5 mm/mm
6	Flexural Strength	MPa	281	ISO 178	2 mm/mm
7	Flexural Modulus	MPa	13,920	ISO 178	2 mm/mm
8	Charpy Impact notched	kJ/m ²	10.0	ISO 180	23 °C
9	Heat Deflection Temperature	°C	240	ISO 75	1.8 MPa
10	Material Shrinkage	%	0.3/1.0 (flow/cross)	ISO 294	23 °C, 48h

Processing Conditions

Drying condition	80 °C, 2-4 h
Molding Temp.	260 - 290 °C (F), 260 - 290 °C (M), 270 - 290 °C (B)
Melt Temp.	270 - 290 °C
Mold Temp.	70 - 90 °C
Screw Speed	30 - 120 rpm
Injection Pressure	30 - 140 MPa
Back Pressure	0.30 – 1.40 MPa

Notes: This technical data in the product brochures are typical test results for reference, and should not be defined as minimum value.