

Technical Datasheet

Material Type	PA6	Trademark	Ecolon®	Grade Name	GF3045-BK1
Feature					<ul style="list-style-type: none"> 45% Glass-Reinforced Nylon Resin (PA6)
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	220	ISO 3146	DSC
4	Tensile Strength	MPa	175	ISO 527	5 mm/mm
5	Tensile Elongation	%	3	ISO 527	5 mm/mm
6	Flexural Strength	MPa	240	ISO 178	2 mm/mm
7	Flexural Modulus	MPa	12,000	ISO 178	2 mm/mm
8	Charpy Impact Notched	kJ/m ²	9.5	ISO 180	23 °C
9	Heat Deflection Temperature	°C	200	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.	250 - 290 °C (F), 250 - 290 °C (M), 260 - 290 °C (B)
Melt Temp.	260 - 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.