

ECOMID® B GF20 BK 9005/Z

ECOMID®

Car industry, Household appliances, Electrical devices.

Product information

Resin Identification	PA6-GF20	ISO 1043
Part Marking Code	>PA6-GF20<	ISO 11469
Continuous Service Temperature	90 °C	IEC 60216-1

Rheological properties

	dry/cond.		
Melt volume-flow rate	20/*	cm ³ /10min	ISO 1133
Temperature	230/*	°C	
Load	5/*	kg	
Viscosity number	140/*	cm ³ /g	ISO 307, 1628
Moulding shrinkage range, parallel	0.4 - 0.8	%	ISO 294-4, 2577
Moulding shrinkage range, normal	0.8 - 1.3	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	7100/-	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	130/-	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	3/-	%	ISO 527-1/-2
Charpy impact strength, 23°C	30/-	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	25/-	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	5/-	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	3.5/-	kJ/m ²	ISO 179/1eA
Ball indentation hardness, H 961/30	145/-	MPa	ISO 2039-1
Poisson's ratio	0.35/- ^[C]		

[C]: Calculated

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	225/*	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	210/*	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	220/*	°C	ISO 75-1/-2

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.6/*	%	Sim. to ISO 62
Water absorption, 2mm	6.9/*	%	Sim. to ISO 62
Density	1260/-	kg/m ³	ISO 1183

Injection

Drying Recommended	yes
Drying Temperature	80 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Processing Moisture Content	≤0.15 %
Melt Temperature Optimum	250 °C
Min. melt temperature	235 °C
Max. melt temperature	280 °C
Screw tangential speed	≤0.2 m/s
Mold Temperature Optimum	80 °C

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Min. mould temperature	60 °C
Max. mould temperature	120 °C

Characteristics

Processing	Injection Moulding
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Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
VW Group	VW 50125	*Best Fitting Grade To PA6-5, Not Officially Approved