

CELANYL® XS3 GF60 BG 1019/C EF

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Compound designed for parts with maximum mechanical requirements, typically used to replace metal due to the high stiffness and strength, stable after conditioning. It shows better creep behavior and dimensional stability vs. an equivalent PA66 grade, with lower warpage and excellent surface finish.

Product information

Resin Identification	PA*-GF60	ISO 1043
Part Marking Code	>PA*-GF60<	ISO 11469

Rheological properties

Moulding shrinkage range, parallel	0.2 - 0.4 %	ISO 294-4, 2577
Moulding shrinkage range, normal	0.4 - 0.6 %	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	22000 / 19000	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	245 / 210	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.2 / 2.9	%	ISO 527-1/-2
Flexural strength	290 / 240	MPa	ISO 178
Charpy impact strength, 23°C	75 / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	14 / 15	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	13 / 14	kJ/m ²	ISO 179/1eA
Poisson's ratio	0.33 / 0.33 ^[C]		
[C]: Calculated			

Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	260 / *	°C	ISO 11357-1/-3
Temperature of deflection under load, 0.45 MPa	260 / *	°C	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	mm	IEC 60695-11-10

Physical/Other properties

	dry/cond.		
Density	1750 / -	kg/m ³	ISO 1183

Injection

Drying Recommended	yes
Drying Temperature	80 °C
Drying Time, Dehumidified Dryer	4 - 6 h
Processing Moisture Content	≤0.1 %
Melt Temperature Optimum	290 °C
Min. melt temperature	270 °C
Max. melt temperature	305 °C
Screw tangential speed	≤0.2 m/s
Mold Temperature Optimum	80 °C
Min. mould temperature	60 °C
Max. mould temperature	100 °C

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Characteristics

Processing	Injection Moulding
Delivery form	Granules
Special characteristics	Heat stabilised or stable to heat, High Gloss, Specialty appearance, Low Warpage