

Provisional Document

ISODUR®	Code	
	Grade	A 10 10 GF50 BK
	Polymer	PBT+PET
	Application	Injection moulding

50% glass fiber reinforced. Good mechanical and thermal properties. Black color.

Properties	Method	Unit	Value
Physical			
Density at 23°C	ISO 1183	g/cm ³	1,70
Mould Shrinkage (%)	INTERNAL	%	0,2
Melting temperature (DSC)	ISO 11357-1	°C	235-240
Water absorption (24 h, immersion)	ISO 62	%	0,20-0,30
Humidity absorption (Equilibrium, 23°C, 50% RH)	INTERNAL	%	0,10-0,20
Thermal			
Vicat B50	ISO 306	°C	215
HDT, A (1.80 MPa)	ISO 75/Af	°C	210
HDT, B (0.45 MPa)	ISO 75/Af	°C	220
Mechanical at 23 °C			
Flexural Modulus (23°C - 2 mm/min)	ISO 178	MPa	17000
Flexural strength (23°C - 2 mm/min)	ISO 178	MPa	250
Tensile Modulus (23°C - 1 mm/min)	ISO 527-2	MPa	16500
Tensile stress at break (23°C-5 mm/min)	ISO 527-2	MPa	160
Tensile elong. at break (23°C-5 mm/min)	ISO 527-2	%	3,0
Izod notched impact strength (23°C) ISO	ISO 180/1A	KJ/m ²	12
Charpy unnotched impact strength (23°C) ISO	ISO 179/1eU	KJ/m ²	60
Charpy unnotched impact strength (-30°C) ISO	ISO 179/1eU	KJ/m ²	50

Flammability Class

Flammability class (1,5 mm)	UL94	HB
Flammability class (1,6 mm)	UL94	HB
Flammability class (3,2 mm)	UL94	HB

Electrical

Volume Resistivity	IEC 93	Ohm*cm	10E15
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Regulations compliance

RoHS compliance status: **COMPLIANT**

EN71:

UL listed file n°:

Water contact approvals.

Food contact status:

Technical documents

Material safety datasheet: <http://www.simax.it/sites/default/files/ISODUR%C2%AE%20MSDS.pdf>

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[§] Moulding shrinkage is not an intrinsic property of plastics. It also depends on moulding parameters. The values reported have been calculated in the direction parallel to the flow in a 3.0 x 12.7 x 127 mm sample.

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