

TECHNYL ® C 218 V50

Description

Polyamide PA6 , reinforced with 50% of glass fibre, heat stabilized, for injection moulding.

Applications

It has good mechanical properties, it is used in all sectors of industry, offering an excellent combination between thermal and mechanical properties.

It is used in the automotive industry and electrical sectors.

This product is available in colours on request.

Processing

The material is supplied in airtight bags, ready for use. In the case that the virgin material has absorbed moisture, it must be dried to a final moisture content less than 0.2% with a dehumidified air drying equipment at approx. 80°C.

Recommended moulding conditions :

- Barrel temperatures :

feed zone	225 - 230°C
compression zone	230 - 240°C
front zone	240 - 250°C

- Mould temperatures : 80 - 120 °C

For more detailed information, please refer to the technical sheet "Injection moulding".

Safety

Please refer to the Material Safety Data Sheet C1

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Main properties

Values measured at 23 °C

The values of properties are for natural grade.

Properties		Standards	Unit	Values	
				EH 0 – 23 °C	EH 50 – 23 °C
<u>Physical</u>	Water absorption, 24h in water at 23°C	ISO 62	%	0.75	-
	Density	ISO 1183-A	g/cm3	1.56	-
<u>Mechanical</u>	Tensile Modulus	ISO 527	MPa	14600	8600
	Tensile strain at break	ISO 527	%	2	3
	Tensile stress at break	ISO 527	MPa	225	150
	Flexural modulus	ISO 178	MPa	14500	8500
	Flexural stress at break	ISO 178	MPa	360	270
	Charpy notched impact strength	ISO 179/1EA-1993	kJ/m2	19	34
	Charpy impact strength	ISO 179/1EU-1993	kJ/m2	107	115
	Izod notched impact strength	ISO 180	kJ/m2	17	29
<u>Thermal</u>	Melt temperature	ISO 3146 - C	°C	222	-
	Temper. of dimensional stability 1,8 MPa	ISO 75-2	°C	215	-
	Coef. linear expansion longit. 23°C-85°C	ASTM E 831	E-5 / °C	1.8	-
	Flammability UL94 thickness 1,6 mm	ISO 1210/UL 94	-	HB	-
	Glow wire test thickness 1,6 mm	IEC 695-2-1	°C	650	-
<u>Electrical</u>	Relative permittivity 1MHz	IEC 250	-	3.8	4.5
	Dissipation factor 1 MHz	IEC 250	-	0.02	0.09
	Volume resistivity	IEC 93	E14.Ohm.cm	10	0.001
	Surface resistivity	IEC 93	E14.Ohm	0.1	0.001
	Dielectric strength	IEC 243-1	kV/mm	-	22
	Comparative tracking index KC	IEC 112	Volt	550	475

Identification code

>PA6-GF50<

The information contained in this document is supplied in good faith. It is based on the extent of our knowledge of the products as listed, and on the tests and experiments carried out in our laboratories. It is to be used only as an indication and shall not be construed in any way as a formal commitment or warranty on our part. Compliance of our products with your conditions of application or use can only be determined pursuant to your own prior appropriate test. The listed values of properties are for natural grade, if not otherwise specified.



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