

TECHNICAL DATA SHEET

TECHNYL C 216 V30 BK 9293

(Previously DOMAMID 6G30 BK99293)

Polyamide 6, 30% glass fiber reinforced, for injection moulding

General

Polymer type	PA6 (Polyamide 6)		
Processing technology	Injection molding		
Certification	RoHS	UL-Yellow Card	

Product identification

ISO 1043 abbreviation	PA6-GF30		
ISO 16396 designation	PA6,GF30,M1,S14-090		

		Condition	Standard	Unit	Value
Physical properties					
Density			ISO 1183	g/cm³	1.36
Humidity absorption	T=23°C, 50% RH		ISO 62	%	2
Water absorption	24 hr, 23°C		ISO 62	%	7
Molding shrinkage, parallel			ISO 294-4, 2577	%	0.3 - 0.5
Molding shrinkage, normal			ISO 294-4, 2577	%	0.8 - 1
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg		ISO 1133	cm³/10 min	45
Viscosity number	96% H2SO4		ISO 307	cm³/g	145

TECHNICAL DATA SHEET

TECHNYL C 216 V30 BK 9293

	Condition	Standard	Unit	Value
Mechanical properties			dam / cond.*	
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9500 / 6000
Stress at break	5 mm/min	ISO 527-1/-2	MPa	170 / 105
Strain at break	5 mm/min	ISO 527-1/-2	%	3 / 6
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	8200 / 5000
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	250 / 150
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	85 / 100
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m²	70 / 90
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	13 / 24
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	9 / 19
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	75 / 85
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	13 / 25
Rockwell hardness		ISO 2039/2	ScaleR	122 / -

Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	220
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	200
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	215

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+013
Comparative tracking index	Solution A	IEC 60112	V	500
CTI performance level category		Sol A		PLC 1

Burning behaviour

UL Yellow Card availability 	Click here to have access to the UL Yellow Card → QMFZ2.E44716			
Flammability, 0.75 mm	0.75 mm	UL 94		HB
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	650
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

Test run at 23°C if not differently specified, DAM state (dry as moulded).
*: conditioned according to ISO 1110

Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	240 - 270 °C
Recommended mould temperature	90 - 100 °C

These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.

Disclaimer

The information provided in this documentation corresponds to our technical knowledge at the date of its publication and do not constitute a specification. This information may be subject to revision at our discretion. Domo cannot anticipate all conditions under which this information and our products of other manufactures in combination with our products may be used. Domo accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Domo sells the product without warranties. Buyers and users assume all responsibility and liability for loss or damage arising from handling and use of our products, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.