

TECHNICAL DATA SHEET

TECHNYL C 236 V30 BK

(Previously DOMAMID 6G30 500 BK)

Polyamide 6, 30% glass fiber reinforced, improved impact resistance, for injection moulding

General

Feature	Improved impact resistance	
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Colors available	Black	Natural
Forms	Pellets	

Product identification

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

Physical properties

		Condition	Standard	Unit	Value
Density			ISO 1183	g/cm ³	1.34
Molding shrinkage, parallel			ISO 294-4, 2577	%	0.3 - 0.5
Molding shrinkage, normal			ISO 294-4, 2577	%	0.9 - 1.1
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg		ISO 1133	cm ³ /10 min	35
Viscosity number	96% H2SO4		ISO 307	cm ³ /g	145

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	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9200 / 5000
Stress at break	5 mm/min	ISO 527-1/-2	MPa	160 / 85
Strain at break	5 mm/min	ISO 527-1/-2	%	3.3 / 8
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	8000 / 4900
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	250 / 150
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	80 / 100
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m²	70 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	15 / 28
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	12 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	70 / 90
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	15 / 28

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	215
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	210

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+016
Surface resistivity		IEC 62631-3-1	ohm	1E+014
Comparative tracking index	Solution A	IEC 60112	V	500
CTI performance level category		Sol A		PLC 1

Burning behaviour

Flammability, 0.75 mm	0.75 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

*: conditioned according to ISO 1110

Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)			
Suggested max moisture	0.2 %			
Recommended melt temperature	240 - 270 °C			
Recommended mould temperature	60 - 90 °C			

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