

TECHNICAL DATA SHEET

TECHNYL C 216 V30 BK 9281

DOMAMID 6G30 300 BK99281

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

General

Certifications	RoHS EC 1907/2006 (REACH)	UL listed product
Polymer type	PA6	
Feature	not heat stabilized	
Colors available	black	
Forms	pellets	
Processing technology	injection moulding	

Product identification

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

Condition	Standard	Unit	Value
-----------	----------	------	-------

Physical properties

Condition	Standard	Unit	Value	
Density	ISO 1183	g/cm ³	1.36	
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.0 - 2.4
Water absorption	24 hr, 23°C	ISO 62	%	1.4 - 1.5
Water absorption, saturation			%	6.2
Molding shrinkage, parallel	ISO 294-4, 2577	%		0.2 - 0.5
Molding shrinkage, normal	ISO 294-4, 2577	%		0.9 - 1.1
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145.0

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9100 / 5100
Stress at break	5 mm/min	ISO 527-1/-2	MPa	160 / 95
Strain at break	5 mm/min	ISO 527-1/-2	%	3 / 6
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7200 / 4300
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	70 / 90
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	60 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	10 / 17
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	8.5 / -

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
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	205
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	210

	Condition	Standard	Unit	Value
Burning behaviour				
UL Yellow Card availability 1	<u>Click here to have access to the UL Yellow Card availability 1 -> E329653-100458649</u>			
Flammability, 1.5 mm	1.5 mm	UL 94		HB
Flammability, 3.0 mm	3.0 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

Condition	Standard	Unit	Value
-----------	----------	------	-------

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E14

Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Rear temperature	250 - 270 °C
Middle temperature	260 - 280 °C
Front temperature	260 - 290 °C
Recommended melt temperature	250 - 290 °C
Recommended mould temperature	80 - 100 °C

Injection notes

The material is supplied in airtight bags, ready for use.,In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C.,Recommended time 2-4h.