

DOMAMID PW 6FC

Polyamide 6, food contact approved, powder, general purpose

Typical properties	Condition	Standard	Unit	Value
Product identification				
ISO 1043 abbreviation	PA6			
ISO 16396 designation	PA6,GD,S14-030			
Physical properties				
Density		ISO 1183	g/cm ³	1.14
Top cut particle size (D90)		ASTM D1921	µm	1000
Top cut particle size (D50)		ASTM D1921	µm	500
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm ³ /10 min	165
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145
Mechanical properties				
				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3200 / 1000
Strain at break	50 mm/min	ISO 527-1/-2	%	40 / 50
Yield stress	50 mm/min	ISO 527-1/-2	MPa	80
Flexural modulus	2 mm/min	ISO 178	MPa	2700
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	5
Rockwell hardness		ISO 2039/2	ScaleR	120
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	180
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	70
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	205
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	600
Burning behaviour				
Flammability, 0.75 mm	0.75 mm	UL 94		V-2
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	850 - 960
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

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*Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for natural colored products.
: 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	270 - 290 °C
Recommended mould temperature	80 - 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.

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