

TECHNICAL DATA SHEET

TECHNYL C 206PW NC

DOMAMID PW 6 NC

Polyamide 6, powder

General

Polymer type	PA6		
Certifications	RoHS	EC 1907/2006 (REACH)	
Feature	powder	UL 94 V2	
Colors available	natural		
Forms	powder		
Processing technology	rotational moulding		

Product identification

ISO 1043 abbreviation	PA6		
ISO 16396 designation	PA6,GD,S14-030		

Condition	Standard	Unit	Value
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Physical properties

Condition	Standard	Unit	Value	
Density	ISO 1183	g/cm ³	1.14	
Humidity absorption	T=23°C, 50% RH	ISO 62	%	3.3 - 3.4
Water absorption	24 hr, 23°C	ISO 62	%	1.9 - 2.0
Water absorption, saturation			%	9.1
Top cut particle size (D90)	ASTM D1921	µm		1000.0
Top cut particle size (D50)	ASTM D1921	µm		500.0
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm ³ /10 min	165.0
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	2600 / 1000
Stress at break		ISO 527-1/-2	MPa	50 / -
Strain at break	50 mm/min	ISO 527-1/-2	%	40 / 50
Yield stress	50 mm/min	ISO 527-1/-2	MPa	80 / -
Yield strain		ISO 527-1/-2	%	4 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2200 / 900
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	105 / 35
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	100 / 100
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	NB
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	100 / -
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4 / 15
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	5.5 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	100 / 100
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	NB
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	4.5 / 19
Rockwell hardness		ISO 2039/2	ScaleR	120 / -

*: **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	175
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	65
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	200

Condition	Standard	Unit	Value
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Burning behaviour

Condition	Standard	Unit	Value
Flammability, 0.75 mm	0.75 mm	UL 94	V2
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302	< 100 mm/min

Condition	Standard	Unit	Value
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Electrical properties

Condition	Standard	Unit	Value
Volume resistivity		IEC 62631-3-1	ohm.m
Surface resistivity		IEC 62631-3-1	ohm
Comparative tracking index	Solution A	IEC 60112	V
CTI performance level category		Sol A	PLC 0

Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	230 - 250 °C
Recommended mould temperature	60 - 90 °C

