TECHNYL®

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TECHNICAL DATA SHEET

TECHNYL C 246M NC

(Previously PSB 196 / DOMAMID 6I4 NC)

TECHNYL C 246M NC is an unreinforced polyamide 6, with high impact resistance, for injection moulding. This grade offers high impact strength, flexibility and good surface aspect.

General

Feature	Good surface finish Low temperature impact resistant	High impact resistant
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Consumer good application Sport	Outdoor Applications
Colors available	Natural	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA6
ISO 16396 designation	PA6-I,M1,S14-020

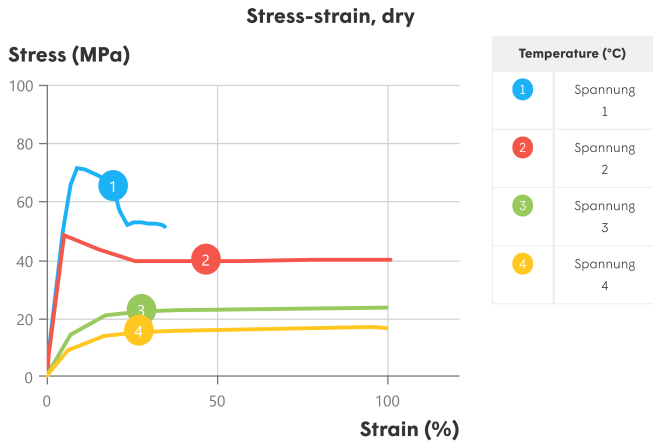
	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm³	1.06
Water absorption	24 hr, 23°C	ISO 62	%	1.2
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.9
Molding shrinkage, normal		ISO 294-4, 2577	%	1.9

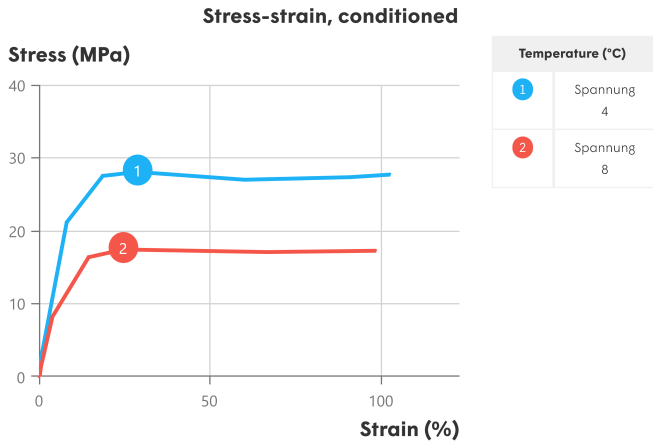
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2000 / -
Stress at break		ISO 527-1/-2	MPa	40 / -
Strain at break		ISO 527-1/-2	%	50 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	1800 / 600
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	65 / 120

	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	135
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	60
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	170
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+012
Burning behaviour				
Flammability, 0.75 mm	0.75 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		<100

**: conditioned according to ISO 1110*

Processing conditions	
Drying temperature/time	80 °C
Suggested max moisture	0.2 %
Rear temperature	230 - 235 °C
Middle temperature	235 - 240 °C
Front temperature	235 - 245 °C
Recommended mould temperature	60 - 80 °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.

Injection advice

For unfilled polyamides, Domo recommends the use of high alloy steel with a low chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.

Disclaimer

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