

TECHNICAL DATA SHEET

TECHNYL C 218M NC

(Previously DOMAMID 6I1H2 NC)

Polyamide 6, heat-aging stabilized, impact modified, for injection moulding, natural color

General

Feature	Heat-aging stabilized	Impact modified
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
ISO 16396 designation	PA6-I,M1H,S14-030

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm ³	1.11
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.8 - 3.2
Water absorption, saturation			%	9
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.5 - 1.7
Molding shrinkage, normal		ISO 294-4, 2577	%	1.5 - 1.7

TECHNICAL DATA SHEET

TECHNYL C 218M NC

	Condition	Standard	Unit	Value dam / cond.*
Mechanical properties				
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2600 / 850
Strain at break		ISO 527-1/-2	%	20 / 50
Yield stress	50 mm/min	ISO 527-1/-2	MPa	65 / 40
Yield strain	50 mm/min	ISO 527-1/-2	%	4.5 / 20
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2300 / 900
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	90 / 30
Charpy impact strength, +23°C	+23°C	ISO 179/1eU		NB / NB
Charpy impact strength, -30°C	-30°C	ISO 179/1eU		NB / NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	10 / 40
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	7 / 8
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	165
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	190
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	575
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

Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for natural colored products.

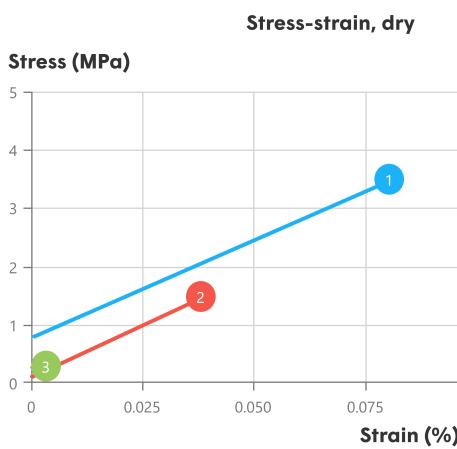
*: conditioned according to ISO 1110

Processing conditions

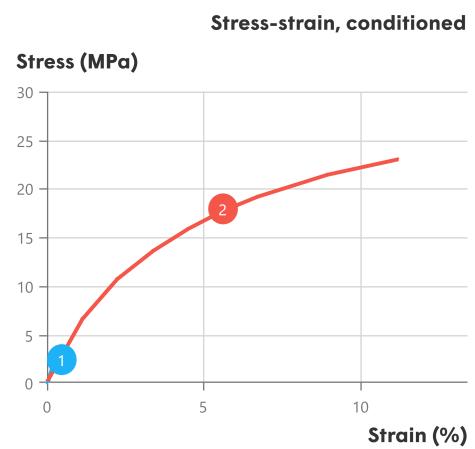
Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	240 - 280 °C
Recommended mould temperature	60 - 80 °C

These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.

Processing conditions



Temperature (°C)	
1	Spannung Mw
2	Spannung 1
3	Spannung 2



Temperature (°C)	
1	Spannung Mw
2	Spannung 1

Disclaimer

The information provided in this documentation corresponds to our technical knowledge at the date of its publication and do not constitute a specification. This information may be subject to revision at our discretion. Domo cannot anticipate all conditions under which this information and our products of other manufacturers in combination with our products may be used. Domo accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Domo sells the product without warranties. Buyers and users assume all responsibility and liability for loss or damage arising from handling and use of our products, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.