

TECHNICAL DATA SHEET

TECHNYL C 226F NC

DOMAMID 6N1 402 NC

Polyamide 6, nucleated, for injection moulding, natural color

General

Certifications	RoHS
Polymer type	PA6
Feature	nucleated not heat stabilized fast molding cycle
Processing technology	injection moulding

Product identification

ISO 1043 abbreviation	PA6
ISO 16396 designation	PA6,M,S14-040

Condition	Standard	Unit	Value
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Physical properties

Property	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.12
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
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.9 - 0.95
Molding shrinkage, normal		ISO 294-4, 2577	%	1.0 - 1.1
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm ³ /10 min	170.0
Melt volume-flow rate, MVR, 2.16 kg	275°C, 2,16 kg	ISO 1133	cm ³ /10 min	70.0
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	3200 / 900
Stress at break	50 mm/min	ISO 527-1/-2	MPa	65 / 68
Strain at break	50 mm/min	ISO 527-1/-2	%	3.7 / 400
Yield stress	50 mm/min	ISO 527-1/-2	MPa	90 / 85
Yield strain	50 mm/min	ISO 527-1/-2	%	4 / 5
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2750 / 800
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	110 / 35
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	NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4 / 20
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	2.4 / 2.4

*: **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	156
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	66
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	199

	Condition	Standard	Unit	Value
Burning behaviour				
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

Condition	Standard	Unit	Value
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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)
Recommended melt temperature	240 - 280 °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.