TECHNYL®

DOMO caring is our formula

TECHNICAL DATA SHEET

TECHNYL D 247F NC

TECHNYL D 247F NC is an unfilled grade based on polyamide blend of polyamide 6.10 and polyamide 66, heatstabilized, impact modified, for injection moulding. This grade has been designed to offer high impact strength, alkaliresistance and excellent productivity. It is a partially bio-sourced materia

General

Polymer type	PA610 + PA66 blend	
Certifications	RoHS	EC 1907/2006 (REACH)
Feature	impact modified excellent processability	moulding release agent
Applications	industrial applications	
Colors available	natural	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA66+PA610
ISO 16396 designation	PA66+PA610,0,M1,S14-020

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.07
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.4
Water absorption	24 hr, 23°C	ISO 62	%	0.6 - 0.7
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.3 - 1.5
Molding shrinkage, normal		ISO 294-4, 2577	%	0.9 - 1.1

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	Condition	Standard	Unit	Value
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2400 / 1300
Strain at break		ISO 527-1/-2	%	35 / -
Yield stress		ISO 527-1/-2	MPa	60 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2150 / 1300
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	80 / 45
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	11 / 20
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	11 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	21 / -
Rockwell hardness		ISO 2039/2	ScaleR	111 / -

: conditioned according to ISO 1110

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	140
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	60

	Condition	Standard	Unit	Value
Burning behaviour				
Flammability, 3.0 mm	3.0 mm	UL 94		HB

Processing conditions	
Drying temperature/time	80°C
Suggested max moisture	0.2 %
Rear temperature	260 - 270 °C
Middle temperature	265 - 275 °C
Front temperature	270 - 280 °C

Processing conditions

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.