

TECHNICAL DATA SHEET

TECHNYL SAFE A 222FFC NC
TECHNYL A 222F NATURAL FA



TECHNYL SAFE A 222FFC NC is a polyamide 66, unfilled, food contact approved, for injection moulding with a special crystallizing agent for fast cycles. Designed to offer increased productivity associated with excellent dimensional stability and good rigidity of moulded parts requiring food contact compliance in industrial consumer good and appliance applications.

General

Polymer type	PA66	
Certifications	RoHS EC 1935/2004 EU No 10/2011	EC 1907/2006 (REACH) EC 2023/2006
Feature	food contact approved fast molding cycle	heat-aging stabilized
Applications	consumer applications	home appliance
Colors available	black	natural
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA66
ISO 16396 designation	PA66,M,S14-030

Condition	Standard	Unit	Value
-----------	----------	------	-------

Physical properties

Condition	Standard	Unit	Value	
Density	ISO 1183	g/cm ³	1.14	
Water absorption	24 hr, 23°C, immersion in water, thickness 2mm	ISO 62	%	1.2
Molding shrinkage, parallel	ISO 294-4, 2577	%	1.1 - 1.3	
Molding shrinkage, normal	ISO 294-4, 2577	%	1.3 - 1.5	

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	4000 / 1800
Stress at break		ISO 527-1/-2	MPa	95 / 55
Strain at break		ISO 527-1/-2	%	9 / 80
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4.1 / 13

***: conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	261

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

	Condition	Standard	Unit	Value
Electrical properties				
Dielectric strength	1 mm	IEC 60243-1	kV/mm	22.0

Processing conditions				
Drying temperature/time		80 °C		
Suggested max moisture		0.2 %		
Rear temperature		265 - 275 °C		
Middle temperature		270 - 280 °C		
Front temperature		280 - 285 °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.