

TECHNYL® A 221T1 NC S

DOMO Engineering Plastics - Polyamide 66

General Information

Product Description

TECHNYL A 221T1 NC S is an unfilled polyamide 66, with a special crystallizing agent for very fast cycles, with improved thermal stability, for injection moulding. This grade offers a good combination between primary properties of the unreinforced polyamide 66 and processing properties leading to increased productivity. These performances are associated with excellent dimensional stability and good rigidity of moulded parts. It is designed to be used in food contact applications.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Fast Molding Cycle	• Good Surface Finish	
Uses	• Connectors	• Consumer Applications	• Industrial Applications
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
ISO Designation (ISO 16396)	• PA66,M,S14-030		
Resin ID (ISO 1043)	• PA66		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.3	--	%	
Flow	1.3	--	%	
Water Absorption (24 hr, 73°F)	1.1	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	508000	232000	psi	ISO 527-1
Tensile Stress (Break)	13100	5800	psi	ISO 527-2
Tensile Strain (Break)	6.5	100	%	ISO 527-2
Flexural Modulus	493000	218000	psi	ISO 178
Flexural Stress	17400	7250	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.9	5.7	ft·lb/in ²	ISO 179/1eA
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	383	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	185	--	°F	ISO 75-2/A
Melting Temperature ²	505	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+15	--	ohms	IEC 62631-3-2
Volume Resistivity	1.0E+13	--	ohms·m	IEC 62631-3-1
Electric Strength	560	--	V/mil	IEC 60243-1
Flammability	Dry	Conditioned	Unit	Test Method
Glow Wire Flammability Index (0.06 in)	1290	--	°F	IEC 60695-2-12

Processing Information

Injection	Dry Unit
Drying Temperature	176 °F
Suggested Max Moisture	0.20 %
Rear Temperature	509 to 527 °F
Middle Temperature	518 to 536 °F



Front Temperature	536 to 545 °F
Mold Temperature	140 to 176 °F

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.

Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min

