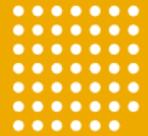


TECHNICAL DATA SHEET

TECHNYL SLIDE A 218 Y10 NC

TECHNYL A 218 Y10 NATURAL



TECHNYL SLIDE A 218 Y10 NC is an unreinforced polyamide 66, heat stabilized and specially modified to have improved frictional properties (molybdenum disulfide) for injection moulding. This grade offers all of the primary properties of unreinforced polyamide 66 and has excellent surface properties as low coefficient of friction and good resistance to wear.

General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA66	
Feature	heat-aging stabilized good surface finish	improved tribological properties low friction
Applications	consumer applications pulleys	industrial applications white goods / small appliances
Colors available	grey	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA66
-----------------------	------

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

Physical properties

Condition	Standard	Unit	Value	
Density	ISO 1183	g/cm ³	1.16	
Water absorption	24 hr, 23°C, immersion in water, thickness 2mm	ISO 62	%	1.2
Molding shrinkage, parallel	ISO 294-4, 2577	%	1.1	
Molding shrinkage, normal	ISO 294-4, 2577	%	1.3	

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3900 / 1500
Stress at break		ISO 527-1/-2	MPa	92 / 43
Strain at break		ISO 527-1/-2	%	9 / 98
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2900 / 1300
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	125 / 65
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	3.5 / 10
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	3.5 / 8

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	263
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	230
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	80
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	220

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

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

Electrical properties

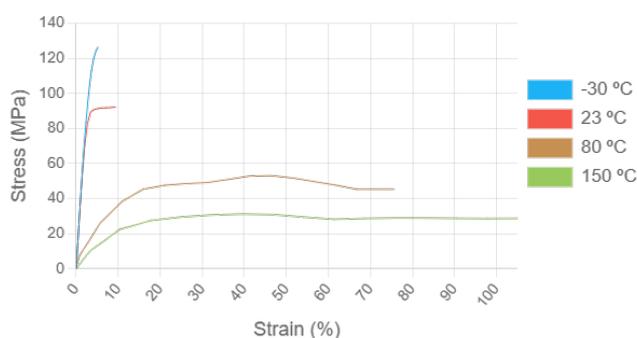
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E14
Comparative tracking index	Solution A	IEC 60112	V	575.0
CTI performance level category		Sol A		PLC 1
Dielectric strength	1 mm	IEC 60243-1	kV/mm	30.0

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

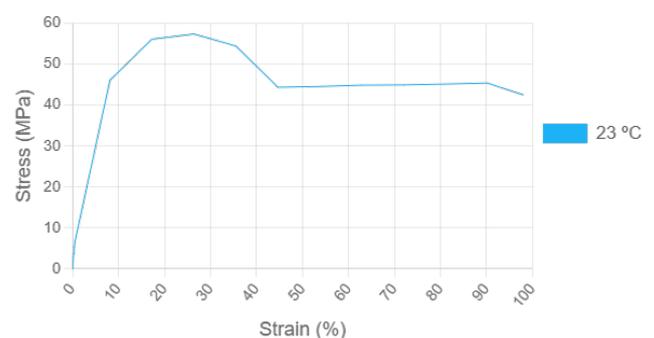
Stress-strain, dry

Temperature (°C)



Stress-strain, conditioned

Temperature (°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.