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TECHNYL® SLIDE
Friction & wear resistance

DOMO
caring is our formula

TECHNICAL DATA SHEET

TECHNYL SLIDE A 218 Y10 NC

(Previously TECHNYL A 218 Y10 NATURAL)

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

General

Feature	Heat-aging stabilized Low friction	Good surface finish
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Consumer good application Pulleys	Industrial Applications White Goods & Small Appliances
Colors available	Grey	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA66

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm³	1.16
Water absorption	24 hr, 23°C	ISO 62	%	1.2
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.1
Molding shrinkage, normal		ISO 294-4, 2577	%	1.3

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/m²	3.5 / 10
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	3.5 / 8

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Thermal properties

	Condition	Standard	Unit	Value
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

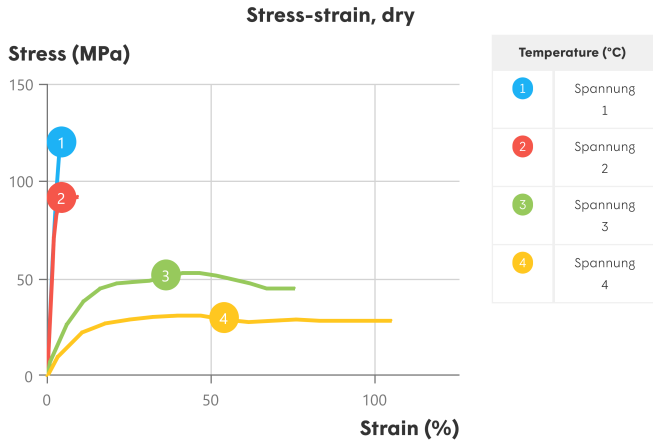
Electrical properties

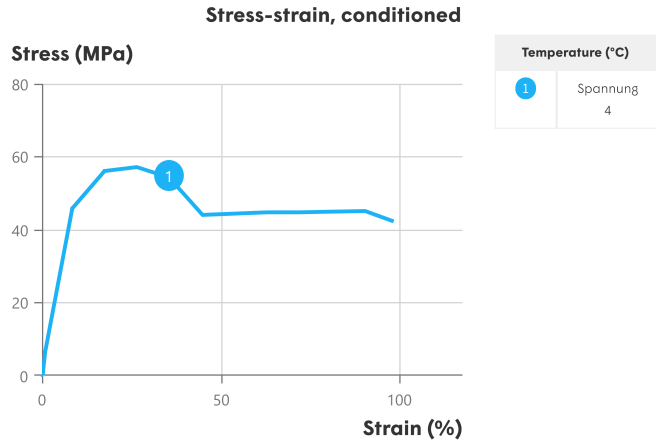
Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+014
Comparative tracking index	Solution A	IEC 60112	V	575
CTI performance level category		Sol A		PLC 1
Dielectric strength	1 mm	IEC 60243-1	kV/mm	30

**: conditioned according to ISO 1110*

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.

Disclaimer

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