

TECHNICAL DATA SHEET

TECHNYL A 216S V33 NC

Polyamide 66, 33% glass fiber reinforced, surface improved, for injection moulding

General

Polymer type	PA66		
Certifications	RoHS	EC 1907/2006 (REACH)	
Feature	improved surface finish		
Colors available	natural		
Forms	pellets		
Processing technology	injection moulding		

Product identification

ISO 1043 abbreviation	PA66,GF33		
ISO 16396 designation	PA66,GF33,M1H,S14-100		

Condition	Standard	Unit	Value
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Physical properties

Condition	Standard	Unit	Value
Density	ISO 1183	g/cm ³	1.4
Molding shrinkage, parallel	ISO 294-4, 2577	%	>=0.21
Molding shrinkage, normal	ISO 294-4, 2577	%	>=0.69

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	12000 / 6600
Stress at break		ISO 527-1/-2	MPa	200 / 130
Strain at break		ISO 527-1/-2	%	3.7 / 7.7
Yield stress		ISO 527-1/-2	MPa	210 / 130
Yield strain		ISO 527-1/-2	%	3.6 / 6.8
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	10000 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	320 / -

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	260
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	250

	Condition	Standard	Unit	Value
Burning behaviour				
Flammability, 1.5 mm	1.5 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		<100

	Condition	Standard	Unit	Value
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E13

Processing conditions	
Drying temperature/time	70-80Å°C / 2-4h (with dew point of dried air < -40 Å°C)
Suggested max moisture	0.2 %

Processing conditions

Recommended melt temperature	305 °C
Recommended mould temperature	100 °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 reinforced polyamides, Domo recommends the use of steel with a high content of carbon, and purified for polishing, to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 / 1.2343 (DIN Norm) or X160CrMoV12 (EN Norm) - 1.2601 / 1.2379 (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.