

TECHNICAL DATA SHEET

TECHNYL A 216 GY 53N

TECHNYL A 216 GY 53N is an unreinforced polyamide 66, standard viscosity, for injection moulding.

General

Feature	Chemical resistant		
Polymer type	PA66 (Polyamide 66)		
Processing technology	Injection molding		
Certification	RoHS	EC 1907/2006 (REACH)	
Applications	Consumer good application		
Colors available	Grey		
Forms	Pellets		

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

Physical properties

Density		ISO 1183	g/cm ³	1.14
Water absorption	24 hr, 23°C	ISO 62	%	1.3

Mechanical properties

dam / cond.*

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2800 / 1300
Stress at break		ISO 527-1/-2	MPa	45 / 30
Strain at break		ISO 527-1/-2	%	30 / 100
Yield stress		ISO 527-1/-2	MPa	75 / 50
Yield strain		ISO 527-1/-2	%	4 / 8
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2800 / 1100
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	105 / 60
Charpy notched impact strength		ISO 179/1eA	kJ/m ²	4 / 8

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	200
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	75

TECHNICAL DATA SHEET

TECHNYL A 216 GY 53N

	Condition	Standard	Unit	Value
Burning behaviour				
Flammability, 1.5 mm	1.5 mm	UL 94		V2
Flammability, 3.0 mm	3.0 mm	UL 94		V2
Glow-wire flammability index, GWFI, 0.75 mm	0.75 mm	IEC 60695-2-12	°C	650
Glow-wire ignition temperature, GWIT, 1.5 mm	1.5 mm	IEC 60695-2-13	°C	650
Oxygen index			%	26
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		<100

**: conditioned according to ISO 1110*

Processing conditions

Drying temperature/time	80
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

The information provided in this documentation corresponds to our technical knowledge at the date of its publication and do not constitute a specification. This information may be subject to revision at our discretion. Domo cannot anticipate all conditions under which this information and our products of other manufactures in combination with our products may be used. Domo accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Domo sells the product without warranties. Buyers and users assume all responsibility and liability for loss or damage arising from handling and use of our products, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.