

## TECHNICAL DATA SHEET

# TECHNYL A 216 GY R7035 LP

TECHNYL A 216 GY R7035 LP is an unreinforced polyamide 66, standard viscosity, for injection moulding. This grade offers all of the primary properties of unreinforced polyamide 66: thermal and mechanical properties, chemical resistance, impact and abrasion resistance.

### General

Feature	UL V2	
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Connectors Industrial Applications	Consumer good application
Colors available	Black Grey	Natural
Forms	Pellets	

### Product identification

ISO 1043 abbreviation	PA66
ISO 16396 designation	PA66,M1,S14-030

#### Condition

#### Standard

#### Unit

#### Value

### Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.14
Humidity absorption	T=23°C, 50% RH	ISO 62	%	3.1
Water absorption	24 hr, 23°C	ISO 62	%	1.3
Water absorption, saturation			%	8.3

### Mechanical properties

dam / cond.\*

	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3200 / 1300
Stress at break		ISO 527-1/-2	MPa	70 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2800 / 1300
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	140 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	3 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	3 / -

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
Melting temperature, 10°C/min		ISO 11357-1	°C	262
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	240

## Burning behaviour

Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		<100
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*Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for natural colored products.  
\*: conditioned according to ISO 1110*

## Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Suggested max moisture	0.2 %
Rear temperature	265 - 275 °C
Middle temperature	270 - 280 °C
Front temperature	280 - 285 °C
Recommended melt temperature	265 - 285 °C
Recommended mould temperature	60 - 80 °C

*These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.*

## 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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