

PRELIMINARY DATASHEET

## TECHNYL C 219 V35 GY 7196

Polyamide 6, 35% glass fiber reinforced, heat-aging stabilized, for injection moulding

### General

Feature	Heat-aging stabilized	
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS EC 1907/2006 (REACH)	UL-Yellow Card
Colors available	Black	Grey
Forms	Pellets	

### Product identification

ISO 1043 abbreviation	PA6-GF35
ISO 16396 designation	PA6,GF35,M1H,S14-110

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

### Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.41
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.2 - 2.4
Water absorption	24 hr, 23°C	ISO 62	%	1.4 - 1.5
Water absorption, saturation			%	6.1

### Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	10800 / -
Stress at break		ISO 527-1/-2	MPa	185 / -
Strain at break		ISO 527-1/-2	%	3 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	9800 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	275 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	95 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	7 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	85 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	7 / -

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

## Thermal properties

Condition	Standard	Unit	Value
Melting temperature, 10°C/min	ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa ISO 75	°C	220
Vicat softening temperature	50°C/h - 50N ISO 306	°C	215

## Electrical properties

Condition	Standard	Unit	Value
Volume resistivity	IEC 62631-3-1	ohm.m	1E+013
Surface resistivity	IEC 62631-3-1	ohm	1E+013
Comparative tracking index	Solution A IEC 60112	V	500
CTI performance level category	Sol A		PLC 1

## Burning behaviour

UL Yellow Card availability 	Click here to have access to the UL Yellow Card → <a href="#">E170540</a>		
Flammability, 1.5 mm	1.5 mm	UL 94	HB
Flammability, 3.0 mm	3.0 mm	UL 94	HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302	<100

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)
Recommended melt temperature	240 - 270 °C
Recommended mould temperature	90 °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.