

TECHNICAL DATA SHEET

## TECHNYL C 219 V15 NC

(Previously DOMAMID 6G15H1 NC)

Polyamide 6, 15% glass fiber reinforced, heat-aging stabilized, for injection moulding

### General

Feature	UL HB	Heat-aging stabilized
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	UL-Yellow Card

### Product identification

ISO 1043 abbreviation	PA6-GF15
ISO 16396 designation	PA6,GF15,M1H,S14-060

	Condition	Standard	Unit	Value
<b>Physical properties</b>				
Density		ISO 1183	g/cm <sup>3</sup>	1.23
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.5
Water absorption	24 hr, 23°C	ISO 62	%	8
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.4 - 0.6
Molding shrinkage, normal		ISO 294-4, 2577	%	0.8 - 1
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm <sup>3</sup> /10 min	50
Viscosity number	96% H2SO4	ISO 307	cm <sup>3</sup> /g	145

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	6100 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	130 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	3.5 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	5200 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	200 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	45 / -
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>	40 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	7 / -
Rockwell hardness		ISO 2039/2	ScaleR	120 / -


### Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	215
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	190
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	210

### Electrical properties

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="https://www.ul.com/Products/Plastics/Engineering-Plastics/TECHNYL-C-219-V15-NC">E170540-225450</a>			
Flammability, 1.5 mm	1.5 mm	UL 94		HB
Flammability, 3.0 mm	3.0 mm	UL 94		HB
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	650
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

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 - 260 °C
Recommended mould temperature	80 - 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.*

## Disclaimer

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