

COMMERCIAL / NON CORE

## TECHNYL A 216HR V25 BK

(Previously DOMAMID 66G25HR1 BK)

Polyamide 66, 25% glass fiber reinforced, hydrolisis stabilized, for injection moulding

### General

Feature	Hydrolisis stabilized	
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Colors available	Black	Natural
Forms	Pellets	

### Product identification

ISO 1043 abbreviation	PA66-GF25
ISO 16396 designation	PA66,GF25,M1W,S14-080

	Condition	Standard	Unit	Value
<b>Physical properties</b>				
Density		ISO 1183	g/cm <sup>3</sup>	1.32
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.3 - 2.4
Water absorption	24 hr, 23°C	ISO 62	%	0.8 - 0.9
Water absorption, saturation			%	5.6
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2 - 0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.9 - 1.1
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	8000 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	150 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	2.7 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7000 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	230 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	50 / -
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>	6.5 / -

### Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	259
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	245
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	250

### Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+013

### Burning behaviour

Flammability, 0.75 mm	0.75 mm	UL 94		HB
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)
Rear temperature	270 - 280 °C
Middle temperature	275 - 285 °C
Front temperature	280 - 290 °C
Recommended melt temperature	270 - 290 °C
Recommended mould temperature	90 - 110 °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.*

## Processing conditions

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### 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.

### Disclaimer

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