

EXPERIMENTAL DATASHEET

## TECHNYL C 118 V35 NC

### DOMAMID 6LVG35H2 NC

Polyamide 6, 35% glass fiber reinforced, heat-aging stabilized, improved flowability, for injection moulding, natural color

#### General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA6	
Feature	heat-aging stabilized	improved flowability
Colors available	black	natural
Forms	pellets	
Processing technology	injection moulding	

#### Product identification

ISO 1043 abbreviation	PA6-GF35
ISO 16396 designation	PA6,GF35,MH,S12-110

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

#### Physical properties

Property	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.42
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.9 - 2.3
Water absorption	24 hr, 23°C	ISO 62	%	1.4 - 1.5
Water absorption, saturation			%	5.9
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.1 - 0.15
Molding shrinkage, normal		ISO 294-4, 2577	%	0.5 - 0.6

EXPERIMENTAL DATASHEET

TECHNYL C 118 V35 NC

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	11200 / 6700
Stress at break		ISO 527-1/-2	MPa	210 / 130
Strain at break		ISO 527-1/-2	%	3.2 / 6.4
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	9800 / 6200
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	330 / 210
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	105 / 115
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m <sup>2</sup>	80 / 85
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	15 / 25
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	12 / 12

\*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
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	205
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	205

	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
Flammability, 0.75 mm	0.75 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

	Condition	Standard	Unit	Value
<b>Electrical properties</b>				
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E14
Comparative tracking index	Solution A	IEC 60112	V	450.0
CTI performance level category		Sol A		PLC 1

### Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30°C)
Rear temperature	250 - 270 °C
Middle temperature	260 - 280 °C
Front temperature	260 - 290 °C
Recommended melt temperature	250 - 290 °C
Recommended mould temperature	80 - 100 °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 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.