

TECHNICAL DATA SHEET

TECHNYL C 116S BK 21N

DOMAMID 6LV 302 BK999

Polyamide 6, improved flowability, for injection moulding, black

General

Certifications	RoHS	UL listed product
Polymer type	PA6	
Feature	improved flowability	not heat stabilized
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA6
ISO 16396 designation	PA6,M,S12-030

Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.12
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm ³ /10 min	>=190.0
Melt volume-flow rate, MVR, 2.16 kg	275°C, 2,16 kg	ISO 1133	cm ³ /10 min	130.0
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	130.0

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3000 / -
Stress at break	50 mm/min	ISO 527-1/-2	MPa	40 / -
Strain at break	50 mm/min	ISO 527-1/-2	%	5 / -
Yield stress	50 mm/min	ISO 527-1/-2	MPa	84 / -
Yield strain	50 mm/min	ISO 527-1/-2	%	3.6 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4 / -

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
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	155
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	63
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	202

	Condition	Standard	Unit	Value
Burning behaviour				
UL Yellow Card availability 1	<u>Click here to have access to the UL Yellow Card availability 1 -> E170540-100053880</u>			
Flammability, 0.75 mm	0.75 mm	UL 94		V2
Flammability, 1.5 mm	1.5 mm	UL 94		V2
Flammability, 3.0 mm	3.0 mm	UL 94		V2
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

Condition	Standard	Unit	Value
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Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E14

Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)			
Recommended melt temperature	240 - 280 °C			
Recommended mould temperature	60 - 80 °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 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.