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TECHNICAL DATA SHEET

TECHNYL C 116 BK LP

(Previously DOMAMID 6LV 909)

Polyamide 6, improved flowability, for injection moulding

General

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

Product identification

ISO 1043 abbreviation	PA6
ISO 16396 designation	PA6,M1,S12-030

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm³	1.13
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.9 - 1.1
Molding shrinkage, normal		ISO 294-4, 2577	%	1.1 - 1.3
Viscosity number	96% H2SO4	ISO 307	cm³/g	135
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3200 / -
Strain at break	50 mm/min	ISO 527-1/-2	%	10 / -
Yield stress	50 mm/min	ISO 527-1/-2	MPa	78 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2600 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	100 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	NB / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	5 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	NB / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	5 / -

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	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+013
Burning behaviour				
UL Yellow Card availability	Click here to have access to the UL Yellow Card → E170540-100053880			
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

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	230 - 235 °C
Middle temperature	235 - 240 °C
Front temperature	235 - 245 °C
Recommended melt temperature	230 - 245 °C
Recommended mould temperature	60 - 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.

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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