

TECHNICAL DATA SHEET

TECHNYL C 239L1 BK 9279 LP

(Previously DOMAMID 6I2LS3H1UV1 701 BK99279)

Polyamide 6, heat-aging stabilized, UV-stabilized, impact modified, lasermarkable, for injection moulding

General

Feature	Heat-aging stabilized Lasermarkable	Impact modified
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	

Product identification

ISO 1043 abbreviation	PA6-I
ISO 16396 designation	PA6-I,M1HL1O2,S14-020

Condition

Standard

Unit

Value

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.11
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.2 - 1.4
Molding shrinkage, normal		ISO 294-4, 2577	%	1.4 - 1.6
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145

Mechanical properties

dam / cond.*

	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2200 / 850
Strain at break	50 mm/min	ISO 527-1/-2	%	35 / 50
Yield stress	50 mm/min	ISO 527-1/-2	MPa	60 / 35
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	1800 / 750
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	75 / 30
Charpy impact strength, +23°C	+23°C	ISO 179/1eU		NB / NB
Charpy impact strength, -30°C	-30°C	ISO 179/1eU		NB / NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	19 / 60
Izod impact strength, +23°C	+23°C	ISO 180/1U		NB / NB
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	18 / 60

	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	145
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	55
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	180

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).
: 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	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.

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