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TECHNICAL DATA SHEET

TECHNYL C 246SI NC

(Previously DOMAMID 6IK4)

Polyamide 6, low temperature impact modified, for injection moulding

General

Feature	Low temperature impact modified	
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Colors available	Black	Natural

Product identification

ISO 1043 abbreviation	PA6-I
ISO 16396 designation	PA6-I,M1,S14-020

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.06
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.3 - 1.5
Molding shrinkage, normal		ISO 294-4, 2577	%	1.7 - 1.9
Viscosity number	96% H2SO4	ISO 307	cm³/g	145

	Condition	Standard	Unit	Value
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	1850 / 800
Strain at break	50 mm/min	ISO 527-1/-2	%	50 / 50
Yield stress	50 mm/min	ISO 527-1/-2	MPa	45 / 30
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	1600 / 700
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/m²	70 / 120
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	24 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U		NB / NB
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	70 / 120
Izod notched impact strength, -30°C	-30°C	ISO 180/1A	kJ/m²	22 / -
Rockwell hardness		ISO 2039/2	ScaleR	100 / -
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	135
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	50
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	170
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)
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.

Processing conditions

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