TECHNYL® SHAPE
For extrusion & blow molding

DOMO
caring is our formula

TECHNICAL DATA SHEET

TECHNYL SHAPE C 402 NC

DOMAMID 6HV NC01

Polyamide 6, high viscosity, for injection moulding

General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA6	
Feature	high viscosity	
Colors available	natural	
Forms	pellets	
Processing technology	injection moulding	extrusion

Product identification

ISO 1043 abbreviation	PA6
ISO 16396 designation	PA6,M,S27-030

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.14
Viscosity number	96% H2SO4	ISO 307	cm³/g	245.0

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	Condition	Standard	Unit	Value
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3000 / -
Strain at break	50 mm/min	ISO 527-1/-2	%	50 / -
Yield stress	50 mm/min	ISO 527-1/-2	MPa	80 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2600 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	6 / -
Rockwell hardness		ISO 2039/2	ScaleR	120 / -

: 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	180
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	70
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	205

	Condition	Standard	Unit	Value
Burning behaviour				
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
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E13
Comparative tracking index	Solution A	IEC 60112	V	600.0
CTI performance level category		Sol A		PLC 0

Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	230 - 250 °C
Recommended mould temperature	60 - 90 °C

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.