

TECHNICAL DATA SHEET

DOMONYL 1850T3H1 BK-7-1

Polyamide 6, low temperature impact modified, heat stabilized, for injection moulding. For America availability only.

General

Polymer type	PA6		
Certifications	RoHS	EC 1907/2006 (REACH)	
Feature	heat-aging stabilized low temperature impact resistant	high impact resistant	
Colors available	black		
Forms	pellets		
Processing technology	injection moulding		

Product identification

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

Condition	Standard	Unit	Value
-----------	----------	------	-------

Physical properties

	Standard	Unit	Value
Density	ISO 1183	g/cm ³	1.06
Molding shrinkage, parallel	ISO 294-4, 2577	%	1.2
Molding shrinkage, normal	ISO 294-4, 2577	%	1.5

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	1800 / 560
Stress at break		ISO 527-1/-2	MPa	40 / 39
Strain at break		ISO 527-1/-2	%	26 / 230
Yield stress		ISO 527-1/-2	MPa	48 / 25
Yield strain		ISO 527-1/-2	%	4.1 / 36
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	16000 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	68 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	NB
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	76 / 110
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	27 / 37

*: **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	160
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	59

	Condition	Standard	Unit	Value
Burning behaviour				
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100mm/min

Processing conditions				
Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)			
Suggested max moisture	0.2 %			

TECHNYL®

DOMO
caring is our formula

TECHNICAL DATA SHEET

DOMONYL 1850T3H1 BK-7-1

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.