

TECHNICAL DATA SHEET

TECHNYL AC 218M BK

Domamid 66/6I1H2 BK

Polyamide 66/6, heat-aging stabilized, impact modified, for injection molding, black

General

Polymer type	PA66/6 copolymer		
Certifications	RoHS	EC 1907/2006 (REACH)	
Feature	heat-aging stabilized	impact modified	
Colors available	black		
Forms	pellets		
Processing technology	injection moulding		

Product identification

ISO 1043 abbreviation	PA66/6-I		
ISO 16396 designation	PA66+PA6-I,M1H,S14-030		

Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.12
Water absorption	24 hr, 23°C	ISO 62	%	2.4 - 3.2
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.4 - 1.6
Molding shrinkage, normal		ISO 294-4, 2577	%	1.6 - 1.8

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2700 / 1900
Yield stress		ISO 527-1/-2	MPa	70 / 45
Yield strain		ISO 527-1/-2	%	4 / 20
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2200 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	90 / -
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	7 / -
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	5 / -

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	167
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	52

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

Processing conditions	
Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Rear temperature	250 - 260 °C
Middle temperature	255 - 265 °C
Front temperature	265 - 275 °C
Recommended melt temperature	250 - 275 °C

Processing conditions

Recommended mould temperature	70 - 90 °C
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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 unfilled polyamides, Domo recommends the use of high alloy steel with a low chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (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.