

TECHNICAL DATA SHEET

TECHNYL C 219 MT25 V15 NC

DOMAMID 6GM4015H1

Polyamide 6, 40% glass fiber and mineral filler, heat-aging stabilized, for injection moulding

General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA6	
Feature	organic heat stabilized	
Applications	automotive applications	
Colors available	natural	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA6-(GF15+MD25)
ISO 16396 designation	PA6,(GF+MD)40,MH,S14-080

Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.47
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.3 - 0.5
Molding shrinkage, normal		ISO 294-4, 2577	%	0.7 - 0.9
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145.0

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	8000 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	115 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	3.5 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	6500 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	175 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	40 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	40 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	4 / -

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221

	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

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

Processing conditions

Suggested max moisture	0.2 %
Rear temperature	240 - 250 °C
Middle temperature	250 - 260 °C
Front temperature	270 - 280 °C
Recommended melt temperature	240 - 280 °C
Recommended mould temperature	60 - 80 °C

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.