

PRELIMINARY DATASHEET

TECHNYL C 216 BK 9253

(Previously DOMAMID 6 605 BK99253)

Polyamide 6, heat-aging stabilized, for injection moulding, black

General

Feature	Heat-aging stabilized		
Polymer type	PA6 (Polyamide 6)		
Processing technology	Injection molding		
Certification	RoHS	UL-Yellow Card	

Product identification

ISO 1043 abbreviation	PA6		
ISO 16396 designation	PA6,M1H,S14-030		

	Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.13
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm ³ /10 min	140
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145

Mechanical properties

dam / cond.*

	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2900 / -
Stress at break		ISO 527-1/-2	MPa	60 / -
Strain at break		ISO 527-1/-2	%	35 / -
Yield stress		ISO 527-1/-2	MPa	85 / -
Yield strain		ISO 527-1/-2	%	4.5 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2500 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	110 / -
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	105 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	5 / -
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	3 / -

	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	65
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	205

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+015
Surface resistivity		IEC 62631-3-1	ohm	1E+013

Burning behaviour

UL Yellow Card availability 	Click here to have access to the UL Yellow Card → QMFZ2.E170540			
Flammability, 0.75 mm	0.75 mm	UL 94		V2
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

*: 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	230 - 250 °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.