TECHNYL®

DOMO caring is our formula

TECHNICAL DATA SHEET

TECHNYL C 238 NC

(Previously DOMAMID 6I3H2 NC)

Polyamide 6, heat-aging stabilized, impact modified, for injection moulding, natural color

General

Feature	Heat-aging stabilized	Impact modified
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	

Product identification

ISO 1043 abbreviation	PA6-HI
ISO 16396 designation	PA6-I,M1H,S14-020

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm³	1.09
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.5 - 2.9
Water absorption	24 hr, 23°C	ISO 62	%	1.8 - 2
Water absorption, saturation			%	9.1
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2300 / 800
Strain at break	50 mm/min	ISO 527-1/-2	%	30 / 100
Yield stress	50 mm/min	ISO 527-1/-2	MPa	55 / 30
Yield strain	50 mm/min	ISO 527-1/-2	%	4 / 25
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2000 / 600
Charpy impact strength, +23°C	+23°C	ISO 179/1eU		NB / NB
Charpy impact strength, -30°C	-30°C	ISO 179/1eU		NB / NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	15 / 100
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	10 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U		NB / NB
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	15 / 95

	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	165
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	54
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	175
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+013
Burning behaviour				
Flammability, 0.75 mm	0.75 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

Test run at 23°C if not differently specified, DAM state (dry as moulded).
**: 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	240 - 280 °C
Recommended mould temperature	60 - 80 °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.

Disclaimer