+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

TECHNYL®

DOMO
caring is our formula

TECHNICAL DATA SHEET

TECHNYL KC 246 NC

(Previously TECHNYL ALLOY KC 246 NATURAL)

TECHNYL KC 246 NC is an unfilled grade based on blend of polyamide 6 and acrylonitrile butadiene styrene (PA6 + ABS), impact modified, for injection moulding. This grade offers high mechanical properties, good dimensional stability and good processability. This grade offers an excellent impact with an ideal combination between stiffness and toughness. It is a synergistic blend material between Polyamide 6 and ABS with an ideal property combination, meaning that it has dual characteristics between semi-crystalline and amorphous polymers.

General

Feature	High impact resistant	
Polymer type	(PA6 + ABS) blend	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	home & office furniture PC / laptop / tablet	Sport
Colors available	Black Grey	Natural
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA6+ABS

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm³	1.08
Water absorption	24 hr, 23°C	ISO 62	%	0.9
Molding shrinkage, parallel		ISO 294-4, 2577	%	1 - 1.2
Molding shrinkage, normal		ISO 294-4, 2577	%	1 - 1.2

Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2250 / -
Stress at break		ISO 527-1/-2	MPa	53 / -
Strain at break		ISO 527-1/-2	%	94 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2150 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	63 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	48 / -

TECHNYL®

DOMO caring is our formula

TECHNICAL DATA SHEET **TECHNYL KC 246 NC**

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	225
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	105
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	70
Electrical properties				
Comparative tracking index	Solution A	IEC 60112	V	600
CTI performance level category		Sol A		PLC 0
Burning behaviour				
Flammability, 0.75 mm	0.75 mm	UL 94		HB
Glow-wire flammability index, GWFI, 0.75 mm	0.75 mm	IEC 60695-2-12	°C	750
Glow-wire flammability index, GWFI, 1.5 mm	1.5 mm	IEC 60695-2-12	°C	650
Glow-wire flammability index, GWFI, 3.0 mm	3.0 mm	IEC 60695-2-12	°C	960

**: conditioned according to ISO 1110*

Processing conditions

Drying temperature/time	80 °C
Suggested max moisture	0.2 %
Rear temperature	235 - 240 °C
Middle temperature	240 - 250 °C
Front temperature	250 - 260 °C
Recommended mould temperature	60 - 90 °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 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.

Disclaimer

The information provided in this documentation corresponds to our technical knowledge at the date of its publication and do not constitute a specification. This information may be subject to revision at our discretion. Domo cannot anticipate all conditions under which this information and our products of other manufactures in combination with our products may be used. Domo accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Domo sells the product without warranties. Buyers and users assume all responsibility and liability for loss or damage arising from handling and use of our products, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.