



PRODUCT INFORMATION

TAROLOX 10 K4

PBT medium viscosity 20% glass bead reinforced, good flow, good stiffness and deflection temperature, with isotropic properties and low tendency to warpage.

ISO short Form ISO 1043: PBT-GB20 Pellets

Key Features

- Glass beads reinforced
- Good flowability
- Good dimensional stability

Availability

- W: lubricated
- LP: laser printable
- L: UV stabilized
- H: heat stabilized
- All colours

Process

- INJECTION MOULDING

Application

- Household
- Electronic
- Electrical
- Consumer

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	450		
Tracking Resistance (CTI - Method B)	IEC 60112	Volt	350M		
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm ³	1,45		
Filler content	ISO 3451	%	20	750°C - 1 h	
Granule Humidity	Internal method	%	< 0,05		
Water Absorption (24h / +23°C)	ISO 62	%	0,05		
Water Absorption at Saturation	ISO 62	%	0,28		
Mould Shrinkage (Parallel)	Internal method	%	1,5 - 1,7		

PRODUCT INFORMATION

TAROLOX 10 K4

Mould Shrinkage (Normal)	Internal method	%	1,5 - 1,7	
Melting temperature (DSC)	ISO 11357	°C	225	
Melt Flow Rate (MFR)	ISO 1133	g/10 min	18	250°C - 2,16 kg

MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	3400	Speed 1 mm/min
Elongation at Break	ISO 527-1,2	%	4,5	Speed 50 mm/min
Tensile Break Strength	ISO 527-1,2	MPa	55	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	3200	Speed 1 mm/min
Flexural Break Strength	ISO 178	MPa	95	Speed 1 mm/min
IZOD Notched Impact (+23°C)	ASTM D256	J/m	38	
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m ²	3,4	

THERMAL

Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	195	50°C / h
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	130	120°C / h

FLAMMABILITY

Flame Behaviour (1,6 mm)	UL94	Class	HB	
Glow Wire Flammability Index-GWFI (2 mm)	IEC 60695-2-12	°C	650	
Oxygen index	ASTM D2863	%	20	

INJECTION MOULDING

	Value
Drying Temperature (Desiccant Dryer)	80 - 120°C
Drying Time (Desiccant Dryer)	2 - 4 h
Suggested Max Moisture	< 0,04
Suggested Max Regrind	< 20%
Melt Temperature	235 - 260°C
Feed Temperature	60°C
Rear Temperature	235°C
Middle Temperature	245°C
Front Temperature	255°C



PRODUCT INFORMATION

TAROLOX 10 K4

Nozzle Temperature	260°C
Mould Temperature	60 - 100°C
Injection Rate	Medium to Fast
Injection Pressure	40 - 100 MPa
Packing Pressure	30 - 80 MPa
Back Pressure	0,5 - 1 MPa
Screw Revolving Speed	70 rpm @ Diameter 60 mm
Screw Revolving Speed	95 rpm @ Diameter 45 mm
Screw Revolving Speed	140 rpm @ Diameter 30 mm
Screw Revolving Speed	220 rpm @ Diameter 20 mm
Screw Revolving Speed	300 rpm @ Diameter 15 mm
Cushion	2 - 6 mm
Screw L/D Ratio	18 - 22
Screw Compression Ratio	2:1 - 2,5:1
Vent Depth	0,02 mm

Notes During processing, a dehumidifying hopper dryer is recommended at a temperature of 60 to 80°C.