



PRODUCT INFORMATION

TAROLOX 10 G5

PBT medium viscosity 25% glass fibres reinforced, good flow, high stiffness, good mechanical and thermal properties, very high dimensional stability.

ISO short Form ISO 1043: PBT-GF25 Pellets

Key Features

- High stiffness
- Designed for injection moulding applications
- Glass fibres reinforced
- Good flowability
- Good dimensional stability

Availability

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

Process

- INJECTION MOULDING

Application

- Power tools
- Household
- Furniture
- Electronic
- Electrical
- Consumer
- Automotive

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Volume Resistivity	IEC 60093	Ohm cm	>10exp(15)		
Dielectric Strength	IEC 60243-1	kV/mm	22	2 mm	
Dissipation Factor Frequency	IEC 60250	-	0,020		
Dielectric Constant	IEC 60250	-	3,6		
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	450		
Tracking Resistance (CTI - Method B)	IEC 60112	Volt	200M		

PHYSICAL

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Density (+23°C)	ISO 1183	g/cm ³	1,48-1,50	
Filler content	ISO 3451	%	25	750°C - 1 h
Granule Humidity	Internal method	%	<0,05	
Water Absorption (24h / +23°C)	ISO 62	%	0,045	
Water Absorption at Saturation	ISO 62	%	0,24	
Mould Shrinkage (Parallel)	Internal method	%	0,4-0,6	
Mould Shrinkage (Normal)	Internal method	%	0,6-1	
Melting temperature (DSC)	ISO 11357	°C	220-225	
Melt Flow Rate (MFR)	ISO 1133	g/10 min	20	250°C - 2,16 kg

MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	8000	Speed 1 mm/min
Elongation at Break	ISO 527-1,2	%	2,6	Speed 50 mm/min
Tensile Break Strength	ISO 527-1,2	MPa	115	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	7500	Speed 1 mm/min
Flexural Break Strength	ISO 178	MPa	180	Speed 1 mm/min
IZOD Notched Impact	ASTM D256	J/m	76	+23°C
IZOD Notched Impact	ASTM D256	J/m	65	-20°C
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m ²	7,5	

THERMAL

Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	216	50°C / h
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	212	50°C / h
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	208	120°C / h
Deflection Temperature 0,45 MPa (HDT B)	ISO 75B	°C	218	120°C / h
Ball Pressure Test	IEC 60695-10-2	°C	215	
Continuous service temperature (20.000 h)	UL746 B	°C	90 (130 H)	
Continuous service temperature (short term)	UL746 B	°C	130 (180 H)	
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K ⁻¹	3,5x10exp(-5)	-30°C / +30°C

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FLAMMABILITY

Flame Behaviour (0,97 mm)	UL94	Class	HB
Flame Behaviour (1,6 mm)	UL94	Class	HB
Flame Behaviour (3,2 mm)	UL94	Class	HB
Glow Wire Flammability Index-GWFI (2 mm)	IEC 60695-2-12	°C	650
Oxygen index	ASTM D2863	%	20