



PRODUCT INFORMATION

TAROLOX 2050 W G6

PBT/PET alloy 30% glass fibres reinforced, very good surface appearance, high temperature and chemical resistance. High dimensional stability with low moisture absorption.

ISO short Form ISO 1043: PBT+PET-GF30 Pellets

Key Features

- Designed for injection moulding applications
- Glass fibres reinforced
- Good surface aspect

Availability

- W: lubricated
- L: UV stabilized
- H: heat stabilized
- All colours

Process

- INJECTION MOULDING

Application

- Household
- Consumer
- Automotive

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Volume Resistivity	IEC 60093	Ohm cm	> 10E14		
Dielectric Strength	IEC 60243-1	kV/mm	22	3,2 mm	
Dissipation Factor Frequency	IEC 60250	-	0,017		
Dielectric Constant	IEC 60250	-	3,6		
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	250		
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm ³	1,53		
Filler content	ISO 3451	%	30	750°C - 1 h	
Granule Humidity	Internal method	%	< 0,05		
Water Absorption (24h / +23°C)	ISO 62	%	0,05		
Mould Shrinkage (Parallel)	Internal method	%	0,3 - 0,5		

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Mould Shrinkage (Normal)	Internal method	%	0,5 - 0,8
Melting temperature (DSC)	ISO 11357	°C	235

MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	9500	Speed 1 mm/min
Elongation at Break	ISO 527-1,2	%	2,4	Speed 50 mm/min
Tensile Break Strength	ISO 527-1,2	MPa	130	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	8200	Speed 2 mm/min
Flexural Break Strength	ISO 178	MPa	180	Speed 10 mm/min
IZOD Notched Impact (+23°C)	ASTM D256	J/m	80	
IZOD Notched Impact (-30°C)	ASTM D256	J/m	50	
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m ²	8	
CHARPY Unnotched Impact (+23°C)	ISO 179/1eU	kJ/m ²	50	

THERMAL

Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	216	50°C / h
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	190	120°C / h
Ball Pressure Test	IEC 60695-10-2	°C	215	
Continuous service temperature (20.000 h)	UL746 B	°C	130	
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K ⁻¹	2,6x10E(-5)	-30°C / +30°C

FLAMMABILITY

Flame Behaviour (0,97 mm)	UL94	Class	HB	
Flame Behaviour (1,6 mm)	UL94	Class	HB	
Glow Wire Flammability Index-GWFI (2 mm)	IEC 60695-2-12	°C	650	
Burning Rate (US-FMVSS 302)	ISO 3795	mm/min	< 80	Thickness > 1,5 mm
Oxygen index	ASTM D2863	%	19	

INJECTION MOULDING

	Value
Drying Temperature (Circulating Air Oven)	80 - 120°C
Drying Temperature (Desiccant Dryer)	80 - 120°C

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Drying Time (Circulating Air Oven)	4 - 8 h
Drying Time (Desiccant Dryer)	2 - 4 h
Suggested Max Moisture	< 0,02
Suggested Max Regrind	< 15%
Melt Temperature	260 - 285°C
Feed Temperature	60°C
Rear Temperature	240°C
Middle Temperature	255°C
Front Temperature	265°C
Nozzle Temperature	275°C
Mould Temperature	80 - 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
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. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry and design.