



PRODUCT INFORMATION

TAROLOX 900 G3

PET medium viscosity 15% glass fibres reinforced, good temperature resistance, very good chemical resistance, very good mechanical, thermal and electrical properties, low moisture absorption, very good dimensional stability. High colour stability suitable for household applications.

ISO short Form ISO 1043: PET-GF15 Pellets

Key Features

- High mechanical properties
- Glass fibres reinforced
- Good flowability
- Good dimensional stability

Availability

- W: lubricated
- L: UV stabilized
- H: heat stabilized
- all colors

Process

- INJECTION MOULDING

Application

- Household
- Electronic
- Electrical
- Consumer
- Automotive

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Dielectric Strength	IEC 60243-1	kV/mm	34	1 mm	
Dissipation Factor Frequency	IEC 60250	-	0,02		
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	250		
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm ³	1,40-1,42		
Filler content	ISO 3451	%	15	750°C - 1 h	
Granule Humidity	Internal method	%	<0,05		
Water Absorption (24h / +23°C)	ISO 62	%	0,06		
Mould Shrinkage (Parallel)	Internal method	%	0,3 - 0,5		



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Mould Shrinkage (Normal)	Internal method	%	0,7 - 0,9
Melting temperature (DSC)	ISO 11357	°C	252

MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	5500	Speed 1 mm/min
Elongation at Break	ISO 527-1,2	%	3,5	Speed 50 mm/min
Tensile Break Strength	ISO 527-1,2	MPa	90	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	5000	Speed 1 mm/min
Flexural Break Strength	ISO 178	MPa	115	Speed 1 mm/min
IZOD Notched Impact	ASTM D256	J/m	50	+23°C
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m ²	6,5	
CHARPY Unnotched Impact (+23°C)	ISO 179/1eU	kJ/m ²	32	

THERMAL

Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	220	50°C / h
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	218	120°C / h
Ball Pressure Test	IEC 60695-10-2	°C	245	
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K ⁻¹	3,6x10exp(-5)	-30°C / +30°C

FLAMMABILITY

Flame Behaviour (0,97 mm)	UL94	Class	HB
Glow Wire Flammability Index-GWFI (2 mm)	IEC 60695-2-12	°C	750
Oxygen index	ASTM D2863	%	22

INJECTION MOULDING

	Value
Drying Temperature (Circulating Air Oven)	120 - 140°C
Drying Time (Circulating Air Oven)	2 - 4 h
Suggested Max Moisture	0,01%
Suggested Max Re grind	20%
Melt Temperature	270 - 290°C
Feed Temperature	40 - 60°C
Rear Temperature	260 - 270°C



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Middle Temperature	270 - 280°C
Front Temperature	280 - 290°C
Nozzle Temperature	270 - 290°C
Mould Temperature	135- 145°C
Injection Rate	Fast
Injection Pressure	60 - 90 Mpa
Packing Pressure	30 - 50 Mpa
Back Pressure	1 - 2 Mpa
Screw Revolving Speed	50 rpm @ Diameter 55 mm
Screw Revolving Speed	65 rpm @ Diameter 40 mm
Screw Revolving Speed	80 rpm @ Diameter 25 mm
Peripheral screw speed	max. 0,3 m/sec
Cushion	2 - 6mm

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