



PRODUCT INFORMATION

TARONYL G4

PPO 20% glass fibres reinforced, low shrinkage, very high thermal and electrical resistance, very good water resistance.

ISO short Form ISO 1043: PPO-GF20 Pellets

Key Features

- Designed for injection moulding applications
- Glass fibres reinforced

Availability

- All colours

Process

- INJECTION MOULDING

Application

- General purpose applications
- Consumer
- Building

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Volume Resistivity	IEC 60093	Ohm cm	> 10E15		
Dielectric Strength	IEC 60243-1	kV/mm	23	2 mm	
Dielectric Strength	IEC 60243-1	kV/mm	17	3 mm	
Dissipation Factor Frequency	IEC 60250	-	0,0014		
Dielectric Constant	IEC 60250	-	2,9		
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	225		
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm ³	1,21		
Filler content	ISO 3451	%	20	750°C - 1 h	
Water Absorption (24h / +23°C)	ISO 62	%	0,06		
Water Absorption at Saturation	ISO 62	%	0,14	+23°C	
Water Absorption at Saturation	ISO 62	%	0,32	+100°C	
Mould Shrinkage (Parallel)	Internal method	%	0,3 - 0,5		



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Mould Shrinkage (Normal)	Internal method	%	0,5 - 0,7
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MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	6400	Speed 1 mm/min
Elongation at Break	ISO 527-1,2	%	3	Speed 50 mm/min
Tensile Break Strength	ISO 527-1,2	MPa	100	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	6000	+23°C, speed 1 mm/min
Flexural Modulus	ISO 178	MPa	5000	+90°C, speed 1 mm/min
Flexural Modulus	ISO 178	MPa	5200	+60°C, speed 1 mm/min
Flexural Break Strength	ISO 178	MPa	140	Speed 1 mm/min
IZOD Notched Impact (+23°C)	ASTM D256	J/m	80	
IZOD Notched Impact (-25°C)	ASTM D256	J/m	78	
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m ²	8	

THERMAL

Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	150	50°C/h
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	138	50°C/h
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	130	120°C/h
Continuous service temperature (20.000 h)	UL746 B	°C	120	
Continuous service temperature (short term)	UL746 B	°C	150	
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K ⁻¹	3,5x10E(-5)	-30°C /+30°C

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	750
Oxygen index	ASTM D2863	%	26

INJECTION MOULDING

	Value
Drying Temperature (Desiccant Dryer)	120°C



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Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Moisture	0,02 %
Suggested Max Regrind	< 10 %
Melt Temperature	280 - 300°C
Feed Temperature	60 - 80°C
Rear Temperature	250 - 270°C
Middle Temperature	270 - 290°C
Front Temperature	290 - 310°C
Nozzle Temperature	280 - 300°C
Mould Temperature	80 - 120°C
Injection Rate	MEDIUM
Screw Revolving Speed	As low as possible

Notes For more information regarding processing and/or mold design you may contact our Technical Service team. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry and design.