



PRODUCT INFORMATION

TAROMID B 280 G4 X2

Polyamide 6 medium viscosity 20% glass fibres reinforced, flame retardant UL94 V2, good flow and good mechanical properties.

ISO short Form ISO 1043: PA6-GF20 FR(30)
Form Pellets
UL file E143048

Key Features

- Designed for injection moulding applications
- Improved heat resistance
- Glass fibres reinforced
- Flame retardant

Availability

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

Compliance

- UL94 V2 approved all colours at 0,75 mm and UL94 V0 at 3,0 mm. UL746 B approved.

Process

- INJECTION MOULDING

Application

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- General purpose applications
- Electronic
- Electrical

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Volume Resistivity	IEC 60093	Ohm cm	10exp(15)		
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	300		
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm ³	1,39		
Filler content	ISO 3451	%	20	850°C - 1 h	
Granule Humidity	Internal method	%	<0,10		
Water Absorption (24h / +23°C)	ISO 62	%	1,6		
Water Absorption at Saturation	ISO 62	%	7,4		
Mould Shrinkage (Parallel)	Internal method	%	0,40-0,55		
Mould Shrinkage (Normal)	Internal method	%	0,75-1,2		

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Melting temperature (DSC)	ISO 11357	°C	222		
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MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	6400	Speed 1 mm/min	Dry
Elongation at Break	ISO 527-1,2	%	3,4	Speed 50 mm/min	Dry
Tensile Break Strength	ISO 527-1,2	MPa	110	Speed 50 mm/min	Dry
Flexural Modulus	ISO 178	MPa	6000	Speed 1 mm/min	Dry
IZOD Notched Impact	ASTM D256	J/m	50	+23°C	Dry
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m ²	4,4		Dry

THERMAL

Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	204	50°C / h	
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	200	50°C / h	
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	180	120°C / h	
Ball Pressure Test	IEC 60695-10-2	°C	170		
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K ⁻¹	4,2x10exp(-5)	-30°C / +30°C	

FLAMMABILITY

Flame Behaviour (0,75 mm)	UL94	Class	V2	UL approved	
Flame Behaviour (3,0 mm)	UL94	Class	V0	UL approved	
Glow Wire Flammability Index-GWFI (1 mm)	IEC 60695-2-12	°C	960		
Glow Wire Ignition Temperature-GWIT (1,6 mm)	IEC 60695-2-13	°C	775		
Oxygen index	ASTM D2863	%	30		

INJECTION MOULDING

	Value
Drying Temperature (Desiccant Dryer)	80 - 90°C
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Moisture	0,08 %
Suggested Max Regrind	< 10 %
Melt Temperature	230 - 260°C
Feed Temperature	210°C
Rear Temperature	235°C



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Middle Temperature	245°C
Front Temperature	255°C
Nozzle Temperature	250°C
Mould Temperature	70 - 100°C
Injection Rate	Medium to Fast
Injection Pressure	3 - 12 Mpa
Packing Pressure	5 - 15 Mpa
Screw Revolving Speed	50 - 100 rpm
Cushion	> 3 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.