

PRODUCT INFORMATION

**TAROMID B 280 Y0**

Polyamide 6 medium viscosity, halogen free flame retardant UL94 V0, low density, good flow and high tracking resistance.

**ISO short Form** ISO 1043: PA6-FR(30)  
Pellets

**Key Features**

- Designed for injection moulding applications
- Excellent filling qualities
- Good flowability

**Availability**

- W: lubricated
- S: fast injection cycles
- L: UV stabilized
- H: heat stabilized
- All colours

**Process**

- INJECTION MOULDING

**Application**

- Electronic
- Electrical
- Automotive

Property	Method	Unit	Value	Condition	State
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**ELECTRICAL**

Volume Resistivity	IEC 60093	Ohm cm	10exp(15)		
Dielectric Strength	IEC 60243-1	kV/mm	20	2 mm	
Dissipation Factor Frequency	IEC 60250	-	0,030		
Dielectric Constant	IEC 60250	-	4,00		
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	>600		

**PHYSICAL**

Density (+23°C)	ISO 1183	g/cm <sup>3</sup>	1,16-1,18		
Granule Humidity	Internal method	%	<0,10		
Water Absorption (24h / +23°C)	ISO 62	%	1,4-1,8		
Water Absorption at Saturation	ISO 62	%	9,0		
Mould Shrinkage (Parallel)	Internal method	%	1-1,5		

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Mould Shrinkage (Normal)	Internal method	%	1-1,5		
Melting temperature (DSC)	ISO 11357	°C	222		

**MECHANICAL**

Tensile Modulus	ISO 527-1,2	MPa	3400	Speed 1 mm/min	Dry
Tensile Yield Strength	ISO 527-1,2	MPa	80	Speed 50 mm/min	Dry
Elongation at Break	ISO 527-1,2	%	8	Speed 50 mm/min	Dry
Tensile Break Strength	ISO 527-1,2	MPa	65	Speed 50 mm/min	Dry
Flexural Modulus	ISO 178	MPa	3100	Speed 1 mm/min	Dry
Flexural Max Strength	ISO 178	MPa	120	Speed 1 mm/min	Dry
IZOD Notched Impact (+23°C)	ASTM D256	J/m	55		Dry
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m <sup>2</sup>	3,8		Dry
CHARPY Unnotched Impact (+23°C)	ISO 179/1eU	kJ/m <sup>2</sup>	35		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	80	120°C / h	
Deflection Temperature 0,45 MPa (HDT B)	ISO 75B	°C	190	120°C / h	
Ball Pressure Test	IEC 60695-10-2	°C	165		
Continuous service temperature (20.000 h)	UL746 B	°C	70 (100 H)		
Continuous service temperature (short term)	UL746 B	°C	100 (120 H)		
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K <sup>-1</sup>	8x10exp(-5)	-30°C /+30°C	

**FLAMMABILITY**

Flame Behaviour (0,97 mm)	UL94	Class	V0		
Glow Wire Flammability Index-GWFI	IEC 60695-2-12	°C	960	Thickness 0,8 mm	
Glow Wire Ignition Temperature-GWIT	IEC 60695-2-13	°C	750	Thickness 0,8 mm	
Oxygen index	ASTM D2863	%	34		

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<b>INJECTION MOULDING</b>	<b>Value</b>
Drying Temperature (Desiccant Dryer)	80 - 90°C
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Moisture	0,08 %
Melt Temperature	230 - 260°C
Feed Temperature	210°C
Rear Temperature	235°C
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. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry and design.