PRODUCT INFORMATION

TAROMID A 280 MT8

Polyamide 66 medium viscosity 40% mineral filled, high dimensional stability, high stiffness, good mechanical and thermal properties, good surface appearance.

ISO short ISO 1043: PA66-MD40
Form Pellets

Key Features

- High stiffness
- Designed for injection moulding applications
- Mineral filled
- High dimensional stability

Availability

- W: lubricated
- LP: laser printable
- L: UV stabilized
- HT: high resistance to heat
- H: heat stabilized
- FA: food approval
- All colours

Process

- INJECTION MOULDING

Application

- Furniture
- Electronic
- Electrical
- Sports
- Consumer
- Building
- Automotive

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Volume Resistivity	IEC 60093	Ohm cm	10E15		
Dielectric Strength	IEC 60243-1	kV/mm	24	2 mm	
Dissipation Factor Frequency	IEC 60250	-	0,018		
Dielectric Constant	IEC 60250	-	3,80		
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	500		

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PHYSICAL

Density (+23°C)	ISO 1183	g/cm^3	1,49		
Filler content	ISO 3451	%	40	750°C - 1 h	
Granule Humidity	Internal method	%	< 0,10		
Water Absorption (24h / +23°C)	ISO 62	%	1		
Water Absorption at Saturation	ISO 62	%	5		
Mould Shrinkage (Parallel)	Internal method	%	0,7 - 1,2		
Mould Shrinkage (Normal)	Internal method	%	0,7 - 1,2		
Melting temperature (DSC)	ISO 11357	°C	256		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	10	280°C - 1 kg	

MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	6400	Speed 1 mm/min	Dry
Elongation at Break	ISO 527-1,2	%	3,5	Speed 50 mm/min	Dry
Tensile Break Strength	ISO 527-1,2	MPa	95	Speed 50 mm/min	Dry
Flexural Modulus	ISO 178	MPa	5900	Speed 2 mm/min	Dry
Flexural Break Strength	ISO 178	MPa	125	Speed 10 mm/min	Dry
IZOD Notched Impact (+23°C)	ASTM D256	J/m	65		Dry
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m^2	3,8		Dry
CHARPY Unnotched Impact (+23°C)	ISO 179/1eU	kJ/m^2	26		Dry

THERMAL

Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	235	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	205	
Continuous service temperature (20.000 h)	UL746 B	°C	120	H version
Continuous service temperature (20.000 h)	UL746 B	°C	80	
Continuous service temperature (short term)	UL746 B	°C	160	H version
Continuous service temperature (short term)	UL746 B	°C	120	

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Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K^-1	3x10E(-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	750
Oxigen index	ASTM D2863	%	27

INJECTION MOULDING	Value
Drying Temperature (Circulating Air Oven)	80 - 90°C
Drying Temperature (Desiccant Dryer)	80 - 90°C
Drying Time (Circulating Air Oven)	3 - 6 hours
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Moisture	<0,08 %
Suggested Max Regrind	<15 %
Melt Temperature	280 - 310°C
Feed Temperature	100°C
Rear Temperature	275°C
Middle Temperature	290°C
Front Temperature	295°C
Nozzle Temperature	285°C
Mould Temperature	80 - 120°C
Injection Rate	Medium to Fast (50 - 150 mm/sec)
Injection Pressure	80 - 130 Mpa
Packing Pressure	30 - 80 Mpa
Back Pressure	0,3 - 0,7 Mpa
Screw Revolving Speed	50 - 100 rpm
Cushion	2 - 6 mm
Screw L/D Ratio	18 - 22
Screw Compression Ratio	2:1 - 3:1
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 or extruder size, part geometry and design.