PRODUCT INFORMATION

TAROMID A 280 R1

Polyamide 66 medium viscosity impact modified, good impact resistance in dry-as-moulded state, good chemical resistance to oils, solvents and other chemical substances.

ISO short	ISO 1043: PA66-I
Form	Pellets

Key Features

- Unfilled
- Improved impact resistance
- Designed for injection moulding applications
- Good flowability

Availability

- W: lubricated
- S: fast injection cycles
- LP: laser printable
- L: UV stabilized
- HT: high resistance to heat
- H: heat stabilized
- All colours

Process

- INJECTION MOULDING

Application

- Household
- Furniture
- Electrical
- Consumer
- Automotive

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	550		
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm^3	1,10		
Granule Humidity	Internal method	%	< 0,15		
Water Absorption (24h / +23°C)	ISO 62	%	0,8		
Water Absorption at Saturation	ISO 62	%	6		
Mould Shrinkage (Parallel)	Internal method	%	1,4 - 2,0		

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Mould Shrinkage (Normal)	Internal method	%	1,5 - 2,1		
Melting temperature (DSC)	ISO 11357	°C	256		
Viscosity Number	ISO 307	cm^3/g	165		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	8	280°C - 1 kg	
MECHANICAL					
Tensile Modulus	ISO 527-1,2	MPa	1300	Speed 2 mm/min	Cond.
Tensile Modulus	ISO 527-1,2	MPa	3000	Speed 2 mm/min	Dry
Tensile Yield Strength	ISO 527-1,2	MPa	46	Speed 50 mm/min	Cond.
Tensile Yield Strength	ISO 527-1,2	MPa	68	Speed 50 mm/min	Dry
Elongation at Break	ISO 527-1,2	%	90	Speed 50 mm/min	Cond.
Elongation at Break	ISO 527-1,2	%	70	Speed 50 mm/min	Dry
Flexural Modulus	ISO 178	MPa	1100	Speed 1 mm/min	Cond.
Flexural Modulus	ISO 178	MPa	2200	Speed 1 mm/min	Dry
Flexural Max Strength	ISO 178	MPa	55	Speed 1 mm/min	Cond.
Flexural Max Strength	ISO 178	MPa	95	Speed 1 mm/min	Dry
IZOD Notched Impact (+23°C)	ISO 180/1A	kJ/m^2	10,8		Cond.
IZOD Notched Impact (+23°C)	ISO 180/1A	kJ/m^2	6,5		Dry
IZOD Notched Impact (+23°C)	ASTM D256	J/m	120		Cond.
IZOD Notched Impact (+23°C)	ASTM D256	J/m	70		Dry
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m^2	10,2		Cond.
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m^2	5,2		Dry
CHARPY Notched Impact (-30°C)	ISO 179/1eA	kJ/m^2	4,5		Dry
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	75	120°C / h	
Deflection Temperature 0,45 MPa (HDT B)	ISO 75B	°C	205		
FLAMMABILITY					

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Flame Behaviour (0,97 mm)	UL94	Class	HB
Flame Behaviour (1,6 mm)	UL94	Class	HB
Oxigen index	ASTM D2863	%	24

INJECTION MOULDING	Value
Drying Temperature (Desiccant Dryer)	70 - 80°C
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Moisture	< 0,08 %
Suggested Max Regrind	< 15 %
Melt Temperature	260 - 280°C
Feed Temperature	220°C
Rear Temperature	260°C
Middle Temperature	270°C
Front Temperature	275°C
Nozzle Temperature	270°C
Mould Temperature	70 - 90°C
Injection Rate	Medium
Packing Pressure	30 - 80 Mpa
Back Pressure	As low as possible (0,3 - 0,6 Mpa)
Screw Revolving Speed	50 - 100 rpm
Cushion	3 - 6 mm
Screw L/D Ratio	18 - 22
Screw Compression Ratio	2 - 2,5
Vent Depth	0,02 mm

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