PRODUCT INFORMATION

TAROMID A 280 Z1

Polyamide 66 medium viscosity elastomer modified, good impact also at low temperature, good chemical resistance to oils, solvents and other chemical substances.

ISO short	ISO 1043: PA66-HI
Form	Pellets

Key Features

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

Availability

- W: lubricated
- L: UV stabilized
- H: heat stabilized
- All colours

Process

- INJECTION MOULDING

Application

- General purpose applications

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Volume Resistivity	IEC 60093	Ohm cm	3x10exp(15)		
Dissipation Factor Frequency	IEC 60250	-	0,027		
Dielectric Constant	IEC 60250	-	3,80		
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	>600		
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm^3	1,12		
Granule Humidity	Internal method	%	<0,15		
Water Absorption (24h / +23°C)	ISO 62	%	1,2		
Water Absorption at Saturation	ISO 62	%	7		
Mould Shrinkage (Parallel)	Internal method	%	1,50-1,70		
Mould Shrinkage (Normal)	Internal method	%	1,80-2,20		
Melting temperature (DSC)	ISO 11357	°C	256		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	10	280°C - 1 kg	

PRODUCT INFORMATION

TAROMID A 280 Z1

MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	1400	Speed 1 mm/min	Cond.
Tensile Modulus	ISO 527-1,2	MPa	3000	Speed 1 mm/min	Dry
Tensile Yield Strength	ISO 527-1,2	MPa	47	Speed 50 mm/min	Cond.
Tensile Yield Strength	ISO 527-1,2	MPa	65	Speed 50 mm/min	Dry
Elongation at Break	ISO 527-1,2	%	92	Speed 50 mm/min	Cond.
Elongation at Break	ISO 527-1,2	%	73	Speed 50 mm/min	Dry
Flexural Modulus	ISO 178	MPa	1200		Cond.
Flexural Modulus	ISO 178	MPa	2300	Speed 2 mm/min	Dry
Flexural Max Strength	ISO 178	MPa	51	Speed 2 mm/min	Cond.
Flexural Max Strength	ISO 178	MPa	92	Speed 2 mm/min	Dry
IZOD Notched Impact (+23°C)	ASTM D256	J/m	130		Cond.
IZOD Notched Impact (+23°C)	ASTM D256	J/m	75		Dry
IZOD Notched Impact (-25°C)	ASTM D256	J/m	50		Dry
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m^2	10		Dry
CHARPY Notched Impact (-25°C)	ISO 179/1eA	kJ/m^2	4,7		Dry

THERMAL

Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	225	50°C / h
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	75	120°C / h
Ball Pressure Test	IEC 60695-10-2	°C	165	
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K^-1	7-10x10exp(-5)	-30°C /+30°C

FLAMMABILITY

Flame Behaviour (0,97 mm)	UL94	Class	HB	

INJECTION MOULDING	Value
Drying Temperature (Desiccant Dryer)	80 - 90°C
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Moisture	< 0,08 %

PRODUCT INFORMATION

TAROMID A 280 Z1

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	2:1 - 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.