PRODUCT INFORMATION

TAROMID A 280 Z2

Polyamide 66 medium viscosity elastomer modified, high impact resistance, 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	1,09		
Granule Humidity	Internal method	%	<0,10		
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	252		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	5	280°C - 1 kg	

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MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	1500	Speed 1 mm/min	Cond.
Tensile Modulus	ISO 527-1,2	MPa	2900	Speed 1 mm/min	Dry
Tensile Yield Strength	ISO 527-1,2	MPa	35	Speed 50 mm/min	Cond.
Tensile Yield Strength	ISO 527-1,2	MPa	60	Speed 50 mm/min	Dry
Elongation at Break	ISO 527-1,2	%	85	Speed 50 mm/min	Cond.
Elongation at Break	ISO 527-1,2	%	40	Speed 50 mm/min	Dry
Flexural Modulus	ISO 178	MPa	2300	Speed 1 mm/min	Dry
Flexural Max Strength	ISO 178	MPa	88	Speed 1 mm/min	Cond.
Flexural Max Strength	ISO 178	MPa	38	Speed 1 mm/min	Dry
IZOD Notched Impact	ASTM D256	J/m	80	-20°C	Dry
IZOD Notched Impact (+23°C)	ASTM D256	J/m	300		Dry
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m^2	20		Cond.
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m^2	18		Dry
CHARPY Unnotched Impact (+23°C)	ISO 179/1eU	kJ/m^2	N.B.		Dry
CHARPY Notched Impact (-25°C)	ISO 179/1eA	kJ/m^2	9		Dry
CHARPY Unnotched Impact (-25°C)	ISO 179/1eU	kJ/m^2	N.B.		Dry

THERMAL

Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	216	50°C / h
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	70	120°C / h
Ball Pressure Test	IEC 60695-10-2	°C	125	
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	
Burning Rate (US-FMVSS 302)	ISO 3795	mm/min	<100	Thickness 2 mm

INJECTION MOULDING	Value
Drying Temperature (Desiccant Dryer)	80 - 90°C

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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	2:1 - 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.