



PRODUCT INFORMATION

TAROMID A 280 Z4

Polyamide 66 medium viscosity elastomer modified, very high impact resistance also at low temperature.

ISO short Form ISO 1043: PA66-HI 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	10E10		Cond.
Volume Resistivity	IEC 60093	Ohm cm	10E14		Dry
Dielectric Strength	IEC 60243-1	kV/mm	26		Cond.
Dielectric Strength	IEC 60243-1	kV/mm	26		Dry
Surface Resistivity	IEC 60093	Ohm	10E11		Cond.
Surface Resistivity	IEC 60093	Ohm	10E15		Dry
Dielectric Constant	IEC 60250	-	3,20		Dry
Dissipation Factor Frequency (100 Hz)	IEC 60250	-	0,18		Cond.
Dissipation Factor Frequency (100 Hz)	IEC 60250	-	0,005		Dry
Dissipation Factor Frequency (1 MHz)	IEC 60250	-	0,35		Cond.
Dissipation Factor Frequency (1 MHz)	IEC 60250	-	0,10		Dry
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	> 600		Dry

PHYSICAL

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Density (+23°C)	ISO 1183	g/cm ³	1,07		Dry
Granule Humidity	Internal method	%	< 0,15		
Water Absorption (24h / +23°C)	ISO 62	%	1,2		Dry
Water Absorption at Saturation	ISO 62	%	6		Dry
Mould Shrinkage (Parallel)	Internal method	%	1,50 - 1,90		Dry
Mould Shrinkage (Normal)	Internal method	%	1,80 - 2,20		Dry
Melting temperature (DSC)	ISO 11357	°C	256		Dry
Melt Flow Rate (MFR)	ISO 1133	g/10 min	4	280°C - 2,16 kg	Dry

MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	900		Cond.
Tensile Modulus	ISO 527-1,2	MPa	1900	Speed 1 mm/min	Dry
Elongation at Yield	ISO 527-1,2	%	25	Speed 50 mm/min	Cond.
Elongation at Yield	ISO 527-1,2	%	5	Speed 50 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	50	Speed 50 mm/min	Dry
Elongation at Break	ISO 527-1,2	%	> 50	Speed 50 mm/min	Cond.
Elongation at Break	ISO 527-1,2	%	40	Speed 50 mm/min	Dry
Tensile Break Strength	ISO 527-1,2	MPa	50	Speed 50 mm/min	Cond.
Tensile Break Strength	ISO 527-1,2	MPa	45	Speed 50 mm/min	Dry
Flexural Modulus	ISO 178	MPa	800	Speed 1 mm/min	Cond.
Flexural Modulus	ISO 178	MPa	1800	Speed 1 mm/min	Dry
IZOD Notched Impact (+23°C)	ASTM D256	J/m	900		Dry
IZOD Notched Impact (-25°C)	ASTM D256	J/m	600		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	80		Dry
CHARPY Unnotched Impact (+23°C)	ISO 179/1eU	kJ/m ²	N.B.		Dry
CHARPY Notched Impact (0°C)	ISO 179/1eA	kJ/m ²	32		Dry

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CHARPY Notched Impact (-25°C)	ISO 179/1eA	kJ/m ²	20	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	214	50°C / h	Dry
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	62	120°C / h	Dry
Deflection Temperature 0,45 MPa (HDT B)	ISO 75B	°C	150		Dry
Ball Pressure Test	IEC 60695-10-2	°C	125		Dry
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K ⁻¹	1,5x10E(-4)	-30°C / +30°C	Dry
Coefficient of linear thermal expansion (transversal)	ISO 11359-1,-2	K ⁻¹	1,2x10E(-4)		Dry

FLAMMABILITY

Flame Behaviour (0,97 mm)	UL94	Class	HB
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INJECTION MOULDING

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



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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.