



PRODUCT INFORMATION

**TAROMID A 280 G7 X0**

Polyamide 66 medium viscosity 35% glass fibres reinforced, flame retardant UL94 V0, very good flame proofing also at low thickness, heat stabilized, good processing and good mechanical and thermal properties, low shrinkage and high dimensional stability.

**ISO short Form** ISO 1043: PA66-GF35 FR(17)  
**UL file** Pellets  
 E143048

**Key Features**

- Designed for injection moulding applications
- Glass fibres reinforced
- Flame retardant

**Availability**

- W: lubricated
- LP: laser printable
- H: heat stabilized
- All colours

**Compliance**

- UL94 V0 approved all colours at 0,88 mm. UL746 B approved.

**Process**

- INJECTION MOULDING

**Application**

- Electronic
- Electrical

Property	Method	Unit	Value	Condition	State
<b>ELECTRICAL</b>					
Volume Resistivity	IEC 60093	Ohm cm	10exp(15)		
Dielectric Strength	IEC 60243-1	kV/mm	24	2 mm	
Dissipation Factor Frequency	IEC 60250	-	0,020		
Dielectric Constant	IEC 60250	-	3,70		
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	300		
<b>PHYSICAL</b>					
Density (+23°C)	ISO 1183	g/cm <sup>3</sup>	1,57-1,59		
Filler content	ISO 3451	%	35	850°C - 1 h	
Granule Humidity	Internal method	%	< 0,15		
Water Absorption (24h / +23°C)	ISO 62	%	0,5		
Water Absorption at Saturation	ISO 62	%	4,5		

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Mould Shrinkage (Parallel)	Internal method	%	0,30-0,50
Mould Shrinkage (Normal)	Internal method	%	0,45-0,75
Melting temperature (DSC)	ISO 11357	°C	250-256

**MECHANICAL**

Tensile Modulus	ISO 527-1,2	MPa	9800	Speed 1 mm/min	Dry
Elongation at Break	ISO 527-1,2	%	2,1	Speed 50 mm/min	Dry
Tensile Break Strength	ISO 527-1,2	MPa	160	Speed 50 mm/min	Dry
Flexural Modulus	ISO 178	MPa	9400	Speed 1 mm/min	Dry
Flexural Max Strength	ISO 178	MPa	230	Speed 1 mm/min	Dry
IZOD Notched Impact	ASTM D256	J/m	80	+23°C	Dry
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m <sup>2</sup>	7,5		Dry
CHARPY Unnotched Impact (+23°C)	ISO 179/1eU	kJ/m <sup>2</sup>	30		Dry

**THERMAL**

Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	242	50°C / h
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	240	120°C / h
Ball Pressure Test	IEC 60695-10-2	°C	230	
Continuous service temperature (20.000 h)	UL746 B	°C	90	
Continuous service temperature (short term)	UL746 B	°C	150	
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K <sup>-1</sup>	3x10exp(-5)	-30°C /+30°C

**FLAMMABILITY**

Flame Behaviour (0,88 mm)	UL94	Class	V0	UL approved
Glow Wire Flammability Index-GWFI (1 mm)	IEC 60695-2-12	°C	960	
Glow Wire Ignition Temperature-GWIT (1 mm)	IEC 60695-2-13	°C	850	
Oxygen index	ASTM D2863	%	35	

**INJECTION MOULDING**

	Value
Drying Time (Desiccant Dryer)	2 - 4 h
Suggested Max Moisture	0,02



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Suggested Max Regrind	<10%
Melt Temperature	260 - 290°C
Feed Temperature	230°C
Rear Temperature	260°C
Middle Temperature	270°C
Front Temperature	280°C
Nozzle Temperature	270°C
Mould Temperature	70 - 90°C
Injection Rate	Medium
Injection Pressure	3 - 12 Mpa
Packing Pressure	5 - 15 Mpa

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