

Nylon12
POLIAMIDA TÉCNICA DE CALIDAD

(Poliamida 12)

GRILON®
EMS

Especificaciones del Monofilamento

Diámetro (Ø)	Tolerancia	Ovalidad
1.75 mm	± 0,02mm con un 99% y ±0.03 con el 1% de Nivel de Confianza	≥97 %
2.85 mm	± 0,04mm con un 99% y ±0.05 con el 1% de Nivel de Confianza	≥97 %

Propiedades de la Materia Prima más relevantes

Descripción	Método	Valor Típico	
Densidad	ISO 1183	1.01	Gr/Cm ³
Absorción de Agua	Sim. a ISO 62	1.5	Gr/10 min.

Mechanical Properties	dry / cond	Unit	Test Standard
Tensile Modulus	1400 / 1100	MPa	ISO 527-1/-2
Yield stress	45 / 40	MPa	ISO 527-1/-2
Yield strain	5 / 12	%	ISO 527-1/-2
Nominal strain at break	>50 / >50	%	ISO 527-1/-2
Stress at break	55 / 50	MPa	ISO 527-1/-2
Charpy impact strength (+23°C)	N / N	Kj/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	N / N	Kj/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	6 / 7	Kj/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	7 / 6	Kj/m ²	IISO 179/1eA

Mechanical Properties (TPE)	dry / cond	Unit	Test Standard
Shore D hardness (15s)	-/70	-	ISO 868

Thermal Properties	dry / cond	Unit	Test Standard
Melting temperature (10°C/min)	178 / -	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	50 / -	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	125 / -	°C	ISO 75-1/-2
Coeff. of linear them. expansion (parallel)	120 / -	E-6/K	ISO 11359-1/-2
Coeff. of linear them. expansion (normal)	140 / -	E-6/K	ISO 11359-1/-2
Burning Behav. at thickness h	HB / -	class	IEC 60695-11-10
Thickness tested	0.8 / -	mm	IEC 60695-11-10
Max. usage temperature (long term)	110	°C	EMS
Max. usage temperature (short term)	150	°C	EMS

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Electrical Properties	dry / cond	Unit	Test Standard
Volume resistivity	-/1E11	Ohm*m	IEC 60093
Surface resistivity	-/1E12	Ohm	IEC 60093
Electric strength	-/32	kV/mm	IEC 60243-1
Comparative tracking index	-/600	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
Water absorption	1.5/-	%	Sim. to ISO 62
Humidity absorption	0.7/-	%	Sim. to ISO 62
Density	1010/-	Kg/m ³	ISO 1183

Rheo/Phys Properties	dry / cond	Unit	Test Standard
Molding shrinkage (parallel)	0.8/-	%	ISO 294-4, 2577
Molding shrinkage (normal)	0.8/-	%	ISO 294-4, 2577