Polynil P50 FL natural

NILIT Plastics
Engineering compounds

PA66, unfilled, internally lubricated,viscosity 2.7 , fast cycling.UL94 listed V2@0,75mm.

	Properties	Conditions	Unit	Standard	Values(*)
Physical	Density	23°C	g/cm³	ISO 1183	1.14
	Mould shrinkage (parallel)	23°C	%	ISO 294-4	1.10
	Mould shrinkage (normal)	23°C	%	ISO 294-4	1.10
	Moisture absorption in water	23°C - 24h	%	ISO 62	1.50
		23°C saturation	%	ISO 62	8.50
Mechanical	Notched Izod Impact Strength	23°C	KJ/m²	ISO 180/A	5.0
		-30°C	KJ/m²	ISO 180/A	4.0
	Unnotched Charpy Impact Strength	23°C	KJ/m²	ISO 179/1eU	n.r./n.b.
		-30°C	KJ/m²	ISO 179/1eU	n.r./n.b.
	Notched Charpy Impact Strength	23°C	KJ/m²	ISO 179/1eA	4.5
		-30°C	KJ/m²	ISO 179/1eA	3.5
	Tensile yield stress	23°C	MPa	ISO 527	85
	Tensile modulus	23°C	MPa	ISO 527	3300
	Tensile yield strain	23°C	%	ISO 527	5.0
	Tensil strain at break	23°C	%	ISO 527	35.0
	Flexural yield stress	23°C	MPa	ISO 178	130
		90°C	MPa	ISO 178	35
	Flexural Modulus	23°C	MPa	ISO 178	3000
		90°C	MPa	ISO 178	850
Thermal	VICAT - softening temperature	49 N	°C	ISO 306	245
	HDT - deflection temperature under load	0.45 N/mm²	°C	ISO 75	230
		1.82 N/mm²	°C	ISO 75	85
	Heat resistance - Ball test	125°C		IEC 60309-1	OK
		165°C		IEC 60309-1	OK
	Continuous service temperature	20000 h	°C	IEC 216	85
Electrical	Dielectric Strength	2 mm	KV/mm	IEC60 243	18
	Surface resistivity	23°C	ohm	IEC 60093	_
	Volume resistivity	23°C	ohm/m	IEC 60093	10*13
	CTI - Comparative Tracking Index	3.2 mm, sol. A	V	IEC 60112	600
Flame behaviour	Oxygen Index		%	IEC 4589	28
	Flammability rating	3.2 (1.6) mm		UL 94	V2 (V2)
		0.8 (0.4) mm		UL 94	V2
	Needle flame test	2.0 (1.0) mm		IEC 60695-11-5	_
	Glow wire Flammability Index	3.2 (0.8) mm	°C	IEC 60695-2-12	850 (750)
	Glow wire Ignition Temperature	3.2 (0.8) mm	°C	IEC 60695-2-13	750 (775)
	Flammability rating	355x100x1 mm		FMVSS No.302	SE

(*) Mechanical properties: values "dry as moulded" [values with moisture content at the equilibrium if available]

UL Listed

Technical Data Sheet

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