

Polynil P50 FL natural



Plastics Division

PA66, unfilled, nucleated, 2.7 viscosity, fast cycling

	Properties	Conditions	Unit	Standard	Values
Physical	Density	23°C	g/cm³	ISO 1183, ASTM D792	1,14
	Mould shrinkage (parallel)	23°C	%	Euronil	1,1
	Mould shrinkage (normal)	23°C	%	Euronil	1,1
	Moisture absorption in water	23°C - 24h	%	ISO 62 (based on)	1,5
		23°C saturation	%	ISO 62 (based on)	8,5
Mechanical	Notched Izod Impact Strength	23°C	KJ/m²	ISO 180/1A	5,5
		-30°C	KJ/m²	ISO 180/1A	4,0
	Unnotched Charpy Impact Strength	23°C	KJ/m²	ISO 179	n.r/n.b.
		-30°C	KJ/m²	ISO 179	-
	Notched Charpy Impact Strength	23°C	KJ/m²	ISO 179	6,0
		-30°C	KJ/m²	ISO 179	4,0
	Tensile yield stress	23°C	MPa	ISO 527, ASTM D638	85
	Tensile modulus	23°C	MPa	ISO 527, ASTM D638	3000
	Yield strain	23°C	%	ISO 527, ASTM D638	5,0
	Strain at break	23°C	%	ISO 527, ASTM D638	35
	Flexural yield strength	23°C	MPa	ISO 178, ASTM D790	130
		90°C	MPa	ISO 178, ASTM D790	30,0
	Flexural Modulus	23°C	MPa	ISO 178, ASTM D790	2700
		90°C	MPa	ISO 178, ASTM D790	-
Thermal	VICAT - softening temperature	9.8 N	°C	ISO 306, ASTM D1525	255
		49 N	°C	ISO 306, ASTM D1525	240
	HDT - temperature of deflection under load	0.45 N/mm²	°C	ISO 75, ASTM D 648	230
		1.82 N/mm²	°C	ISO 75, ASTM D 648	85
	Heat resistance - Ball test	125°C		IEC 309	OK
		165°C		IEC 309	OK
	Continuous service temperature	20000 h	°C	IEC 216	85
Electrical	Dielectric Strength	2 mm	KV/mm	ASTM D149	-
	CTI - Comparative Tracking Index	3.2 mm, sol. A	V	IEC 112, UL 746A	600
		3.2 mm, sol. B	V	IEC 112, UL 746A	-
Flame behaviour	Oxygen Index		%	ASTM D2863	28
	Flammability rating	3.2 (1.6) mm		UL 94	V2 (V2)
		0.8 (0.4) mm		UL 94	V2
	Needle test	2.0 (1.0) mm		IEC 695-2-2	-
	Glow wire Flammability Index	3.2 (0.8) mm	°C	IEC 695-2-12	850 (750)
	Glow wire Ignition Temperature	3.2 (0.8) mm	°C	IEC 695-2-13	750 (775)
	Flammability rating	355x100x1 mm		FMVSS No.302	-

Technical Data Sheet

The information in this datasheet is given in good faith but without warranty. These data do not release you from the obligation to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you are beyond our control and, therefore, entirely your own responsibility. rev. 01/04/03