

MATERIAL SPEZIFIKATION DIN EN 10204 2.1

LAURAMID® FPM TYPE B

Lauramid® FPM Type B is a high molecular, high crystalline, impact modified polyamide 12 made from pure Laurinlactam by lactam casting. The low viscosity melt is cast pressureless into the mold where it polymerizes. The processing of regrind material is not possible due to technical reasons.

PROPERTY	TEST SPECIFICATION	VALUE	UNIT
Density	DIN EN ISO 1183	1.025	kg/m ³
Yield stress	DIN EN ISO 527	56-62	Mpa
Elongation at yield stress	DIN EN ISO 527	7-11	%
Break strength	DIN EN ISO 527	37-50	Mpa
Elongation at break	DIN EN ISO 527	15-22	%
Modulus of elasticity (tensile)	DIN EN ISO 527	2000-2400	Mpa
Modulus of elasticity (pressure)	DIN EN ISO 604	1600-2000	Mpa
Compressive strength	DIN EN ISO 604	54-58	Mpa
Impact strength	DIN EN ISO 179	(+23 °C)	150-200
		(-30 °C)	70-100
Notched impact strength (Charpy)	DIN EN ISO 179	(+23 0°C)	5-10
		(-30 °C)	4-9
Water absorption (with standard climate)	DIN EN ISO 62	0,9	%
Water absorption (with water storage)	DIN EN ISO 62	1.4	%
Vicat B 50	DIN EN ISO 306	185-191	°C
Dielectric strength (50MHz)	DIN IEC 250	3,5	-
Dielectric loss factor [50 Hz]	DIN IEC 250	3,8x10 ⁻⁴	-
Specific contact resistance	DIN IEC 93	3x10 ¹⁴	Ωcm
Surface resistance	DIN IEC 93	6,6x10 ¹⁵	Ω

Average values, not guaranteed, valid for Lauramid® in nature color.
Test specimen machined from a semi-finished part, air moisture. [N] = no break.

Lauramid® FPM Type B is characterized by a very low water absorption, a good hydrolysis resistance, a very good dimensional stability, mechanical and chemical resistance

Applications: Gears, worm gears and chain wheels, runner-, carrier- and guide rollers, sliding bearings, propellers, cleaner parts and parts for pumps, cam, seals

Manufacturing specifics: Cast parts made of Lauramid® are x-rayed

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