

MATERIAL SPEZIFIKATION DIN EN 10204 2.1

LAURAMID® TYPE A

Lauramid® Type A 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 | 51-58 | Mpa |
| Elongation at yield stress | DIN EN ISO 527 | 9-13 | % |
| Break strength | DIN EN ISO 527 | 30-40 | Mpa |
| Elongation at break | DIN EN ISO 527 | >200 | % |
| Modulus of elasticity (tensile) | DIN EN ISO 527 | 1800-2000 | Mpa |
| Modulus of elasticity (pressure) | DIN EN ISO 604 | 1400-1800 | Mpa |
| Compressive strength | DIN EN ISO 604 | 54-58 | Mpa |
| Impact strength | DIN EN ISO 179 | (+23 °C) | (N) |
| | | (-30 °C) | (N) |
| Notched impact strength (Charpy) | DIN EN ISO 179 | (+23 °C) | 15-28 |
| | | (-30 °C) | 8-18 |
| 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 | 172-180 | °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 and black color.
Test specimen machined from a semi-finished part, air moisture. (N) = no break.

Lauramid® Type A is characterized by a very low water absorption, a good hydrolysis resistance, a very good dimensional stability, mechanical and chemical resistance. Lauramid® Type A is impact modified.

Applications: Gears, worm gears and chain wheels, rollers, cylinders, propellers and camdisks, semi-finished products with cast-in metal parts, other semi-finished products.

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

Albert Handtmann Elteka GmbH & Co. KG

Marco Baisch B.Sc.
Hubertus-Liebrecht-Straße 21
88400 Biberach
Deutschland

Tel.: +49 7351 342-7136

Fax: +49 7351 342-7159

marco.baisch@handtmann.de

www.handtmann.de/en/plastics/