BARLOG Plastics
Mehr aus Polymer.

Technical data
KEBABLEND / MW FE 200102 PA12 (Development product*)

KEBABLEND / MW FE 200102 PA12 is a development product based on PA12 for the production of soft magnetic components. The achievable permeability is 17 (at 1MHz) and the saturation flux density is 1200 mT.

Polymer: PA 12

ISO designation: PA12-MED

Productgroup: Magnetic compounds, Functionalized compounds

Brief description of the product family:
KEBABLEND is a wide range of functional compounds, often tailor-made to customer requirements. Under the trade name KEBABLEND, we market magnetizable, thermally or electrically conductive compounds, high-density injection molding materials, compounds for radiation protection applications, detectable plastics and much more.

Properties:

dimensionally stable, semi-crystalline, soft magnetic, PFAS-free

Typical areas of application:

Pumps and motors, Rotors

Industries:

Automotive, Electrical and electronics industry, Household appliances, Mechanical Engineering

Physical properties

Density in kg/m³ | ISO 1183-1	5300

Mechanical properties

Tensile modulus in MPa | ISO 527-1	5300
Stress at break in MPa | ISO 527-1	20
Strain at break in % | ISO 527-1	0.4
Impact strength (Charpy) at 23°C in kJ/m² | ISO 179-1eU	2.7

Thermal properties

Melting temperature (DSC, 10°C/min) in °C | ISO 11357-1/-3	178

Processing instructions:

Pre-drying may be necessary to achieve perfect processability in the injection molding process:

Recommendation:
Dryer type: dry air dryer
Temperature: 80 °C
Drying time: 3 – 6 h

Recommended basic settings:

Melt temperature: 250 – 280 °C
Mold temperature: 60 – 80 °C
Injection speed: medium – high
Back pressure: 40 – 80bar (spec.)

Machine selection:

Screw: special injection units for magnetic compounds; low compression screws with non-return valve
Nozzle: Open nozzle
Wear protection: Wear and corrosion protected according to machine manufacturer’s recommendation suitable for processing magnetic compounds
Injection unit: Shot volume = 50 – 80% of the maximum metering volume

Further important processing information:

The residence time of the melt in the screw antechamber should be kept as short as possible. If this is not observed, segregation can occur due to the large difference in density between the filler and the carrier material if the downtimes are too high. The ideal here is metering time = cooling time. A medium back pressure leads to optimum homogenization. Due to the high filler content, the spraying equipment must be equipped with wear and corrosion protection.

Legal notices:

The information in this data sheet is based on our current knowledge and experience. Due to the wide range of possible influences during processing and application of our products, they do not exempt the processor from carrying out his own tests and trials. A legally binding assurance of certain properties or suitability for a specific application cannot be derived from our information.

* FE products are development products which are still in the trial phase. Technical data may still change in the course of product and process development. No final decision has yet been made on the commercialization of FE products. We reserve the right to discontinue the manufacture of FE products without giving further reasons.

Created at: 23.05.2026

Am Weidenbach 8-10
51491 Overath

Telefon +49 (0)2206 90851-100
Telefax +49 (0)2206 90851-199

E-Mail: kontakt@barlog.de
Web: www.barlog.de