

Technical data

KEBABLEND / EC FE 170603/4 (DB) **(development product*)**

KEBABLEND / EC FE 170603/4 (DB) is a dryblend material based on PA 6.6 with excellent electrical conductivity. The material was specially developed for applications in the field of electrical engineering and is very well suited for shielding electromagnetic fields. A large application potential lies in the substitution of metal housings (metal replacement/lightweight construction) with regard to EMC-compliant component design. As a housing material, KEBABLEND / EC FE 170603/4 offers the advantage of electromagnetic shielding even in the high-frequency range, without additional surface treatments.

Polymer: PA 6.6

ISO designation: PA666/MEF

Productgroup: Electrically conductive 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:

antistatic, electrically conductive, good chemical resistance, Good electrical properties, good aging behavior, semi-crystalline

Typical areas of application:

Industries:

Physical properties

Density in kg/m ³ ISO 1183-1	1490.00
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Mechanical properties

E-modulus in MPa ISO 527-1	8100
Breaking stress in MPa ISO 527-1	125.0
Elongation at break in % ISO 527-1	2.5
Impact strength (Charpy) at 23°C in kJ/m ² ISO 179-1eU	55.0
Notched impact strength (Charpy) at 23°C in kJ/m ² ISO 179-1eA	10.0

Thermal properties

Fire behavior (0.4 mm wall thickness) IEC 60695-11-10	HB
Fire behavior (0.8 mm wall thickness) IEC 60695-11-10	HB
Fire behavior (1.6 mm wall thickness) IEC 60695-11-10	HB
Fire behavior (3.2 mm wall thickness) IEC 60695-11-10	HB

Electrical properties

Contact resistance in Ohm*m IEC 60093	2e+2
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Electrical properties

Surface resistivity in ohms IEC 60093	2e+6
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Processing instructions:**Pre-drying:**

Dryer type: dry air dryer

Temperature: 80°C

Drying time: 4 – 8 h

Target moisture content: <0,1%

Recommended basic settings:

Melt temperature: 275 – 300°C

Mold temperature: 80 – 120°C

Injection speed: medium – high

Back pressure (spec.): 30 – 70 bar

Machine selection:

Wear protection: wear and corrosion protected according to machine manufacturer's recommendation suitable for processing highly filled compounds

Injection unit: Shot volume = 50-80% of 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 substrate 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.

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