

Beki-Shield® stainless steel filler material

Protection in any shape

Benefits

- ① High conductivity (EMI/ESD)
- ② Freedom of design
- ③ Compatible with any color additive
- ④ High surface durability

Beki-shield® stainless steel fibers are an ideal filler solution for electrically conductive or shielding thermoplastics and elastomers. Adding Beki-Shield® fibers to the compound creates an electrically conductive network that prevents electrostatic charging and discharging or provides shielding against electromagnetic interference without affecting the mechanical and physical properties of the final product. Beki-shield® is available in continuous bundles or grains and is suitable for compounding and injection molding processes.



Why choose Bekaert?

Experience in metal fiber technology

Bekaert is the pioneer in designing, developing and producing metal fiber products for a wide range of applications. Our experience of over 40 years has given us the flexibility and technical know-how to provide you with a solution that perfectly matches your quality and performance requirements.

Developing for tomorrow

To keep up with industries' evolving needs, we are strongly committed to innovation. Together with customers, independent research partners and in-house research facilities we are constantly creating new solutions.

Your partner in innovation

From drawing ultra-fine diameters to tailor-made bundles and grains, Bekaert is able to fine-tune its product range to meet your exact requirements.

EMI shielding and ESD protection efficiency

Volume % fibres	Weight % fibers (*)	Volume resistivity (Ohm.cm)	Performance (30-1000 MHz range of shielding)
0,25 - 0,5	4	< 10 ²	ESD protection
1	8	0,5 - 2	30 - 50 dB EMI shielding
1,5	11	0,1 - 0,5	50 - 60 dB EMI shielding
> 1,5	> 11	< 0,1	> 60 dB EMI shielding

Discover the benefits

Beki-Shield® offers high conductivity at low load levels. This translates into a number of advantages:

- ① **High conductivity (EMI/ESD)** – Beki-Shield® achieves shielding levels of 30 to 70 dB as well preventing static build-up in plastic and rubber compounds.
- ② **Freedom of design** – Compounds containing Beki-Shield® are easy to mold into any shape or design, no matter how challenging or complex.
- ③ **Compatible with any color additive** – Beki-Shield® hardly affects the coloring of the compound, allowing the application of almost any color.
- ④ **High surface durability** – Beki-Shield® creates a conductive matrix throughout the compound resulting in a durable performance and surface.
- ⑤ **Cost-efficient** – Because Beki-Shield® does not affect forming and coloring processes, fewer post-processing steps are needed.
- ⑥ **Light-weight design** – Rubber or thermoplastic components made with Beki-Shield® compounds, are significantly lighter and thinner compared to alternative solutions.

Discover the potential

Beki-Shield® has a long-running track-record with polymer composites. Today, this range of fibers is also increasingly proving its merits in elastomer solutions. The low weight and high sustainable conductivity is particular beneficial to the automotive, e-mobility, electronics and pharmaceutical industries.

Typical applications include, but are not limited to:

ELASTOMERS



Safety shoes



Hoses



Gaskets



Tires

THERMOPLASTICS



Caster wheels



Antistatic floors



Camera bodies



Sensors

Contact us

More
Information?

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