

Silver coated glass fibers

MecoFill® silver coated solid glass spheres are highly electrically conductive additives. The high length to diameter ratio allows you to create the highest conductivity and shielding performance with relatively low loadings of MecoFill® additives in your end product.

Using glass as chemically inert base material has enabled us to considerably reduce the amount of costly silver. The special particle design creates the base for an optimum conductivity network. This gives us access to fields of applications that are not open to the use of pure silver or other particle design for reasons of budget constraints.

The silver coating is applied by a unique process that ensures excellent adhesion and uniformity of the silver film. Particle size distribution and the percentage of silver in the powder can be adjusted to meet the end product requirements.

Applications

EMI/RMI shielding
electrostatic discharge
conductive inks
conductive adhesives
conductive TPE

Properties

Silver

Using pure silver as a coating results in low end product resistivity.
The resistivity values range between 10^{-1} - 10^{-3} ohm-cm, depending on the percentage of silver and the amount of MecoFill® used for filling.

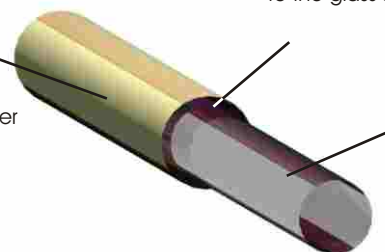
Adhesion

A specially designed coating process ensures an excellent adhesion of the silver coating to the glass surface.

Glass fiber

Chemically inert borosilicate glass tolerates highest temperatures while simultaneously reducing the filler density. The high length to thickness ratio creates the base for an optimum conductivity network

Fiber thickness:
14µm: SG4-19502 and SG4-19505



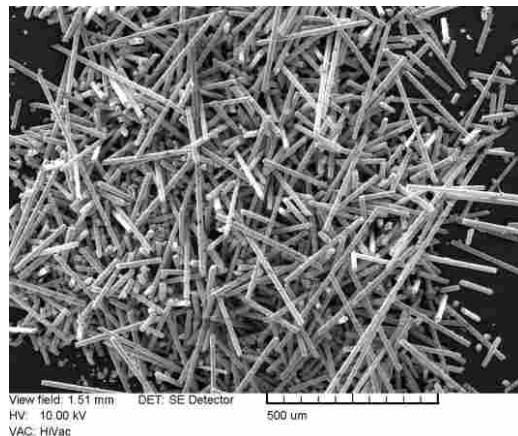
Quality control

- ✓ Powder resistivity
- ✓ Percent silver [%]
- ✓ Silver adhesion
- ✓ Color
- ✓ Density (true + Scott)
- ✓ Particel size distribution

MecoFill® products are subjected to a series of different QC checks in order to ensure that each lot meets our established specifications

Visit our web site:

www.brazel.com



MecoFill SG4-19502

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Product types

Product #	Percent Silver [%]	Powder Resistivity [mohm-cm]	Fiber lenth [μm]			True density [g/cm³]	Scott apparent dens. [g/cm³]
			L10	L90	Mean		
SG4-19502	8	0,5	50	300	190	2,6	0,65
SG4-19505	20	0,2	50	300	190	2,8	0,65

MecoFill® is a registered trademark of Brazel Research GbR.

The physical and chemical properties of these Brazel Technology products are given as typical mean values based on our test results and are within normal manufacturing tolerances. This does not relieve the end user from his or her obligation to examine the suitability of the product for the use intended by him or her.

Brazel Technology does not provide any guarantee for the product suitability in any individual case. Furthermore, the figures provided must not be understood as constituting a recommendation to violate any existing patents or any patents yet to be established in the future. Subject to technical changes.

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