



High+low frequency



- for large-scale shielding of high-frequency electromagnetic waves, low-frequency alternating electric fields and dissipation of static charges
- very low-emission shielding color for the interior and external area
- metal-free, physically very stable, durable and non-oxidizing
- high water resistance, soft elastic, frost resistant
- Electrically highly conductive wall coating on a synthetic resin base. The color is vapour-diffusible and does not contain any solvents, plasticisers, semi-volatile organic compounds, formaldehyde, or ammonia.

HF65 holds well on most non-greasy and stable surfaces in the interior area and is easy to paint over (all conventional and biological emulsion and silicate emulsion paints) or wallpaper over.

Painting the existing wallpaper is sensible when the shielding area is set to be removed without residue within a foreseeable time frame.

Coatings:

With high-quality, good covering, plastic bonded dispersion emulsion paints or dispersion silicate paints
 Keim silicate paints (Biosil, Ecosil, Optil)
 Volvox clay paint
 Haga chalk paint

Pure mineral bonded coatings with clay, loam, hark or silicate often adhere bad on the graphite surface of the shielding paints, and therefore should never be used!

Order-no.:	201059	201060
Abbr. des.:	HF65 1.0 liters	HF65 5.0 liters

Required accessories



Ground strap (AEB)



Grounding plate (EGP)

Shielding paint (HF+LF)

HF65

Type	MHz	dB *1	in % *1	dB *2	in % *2
TETRA	450	37	>99.9	44	~99.99
GSM	900	37	>99.9	44	>99.99
GSM	1800	37	>99.9	44	>99.99
DECT	1800	37	>99.9	44	>99.99
UMTS	2000	37	>99.9	44	>99.99
WIFI	2400	37	>99.9	44	>99.99
WIFI 2	5800	37	>99.9	44	>99.99

*1-layer processing - *2-layer processing

Technical data

Container size:	1 liter / 5 liters
Color:	black
SD value: (DIN EN ISO 7783-2)	0.1 m
pH value:	8
Adhesive pull strength:	2,3 N / mm ²
Viscosity:	2000 mPas (thin)
Density:	1.25 kg/Liter
Non-volatile part:	56 %
Composition:	Dissolvent: Water Carbon
Binder:	PAK: 0,002 mg/kg Pure acrylate; VOC: 0,2 g/Liter
Preservative:	MIT (2-Methyl4-isothiazolin-3-on) BIT (1,2-Benzisothiazolin-3-on)
GIS-Code:	M-DF01
Yield interior:	7,5 m ² / liter (single-layer) 3,75 m ² / liter (double-layer)
Yield external:	5 m ² / liter (single-layer) 2,5 m ² / liter (double-layer)
Ground:	stable, non-greasy surfaces, MFT 5°C
Further processing: at temperature:	after about 24 hours >5°C
Durability:	12 months (cool but frost-free (>5° C), avoid direct sunlight)
Basis for inspection:	ASTM D4935-10
Shield attenuation:	37 dB (single-layer) (>99.95 %) 44 dB (double-layer) (>99.99 %)

Scope of application

- Roof area inside
- Wall area inside and outside
- Roof area inside
- (inside: beneath and on wallpaper, on plasterboard panels)

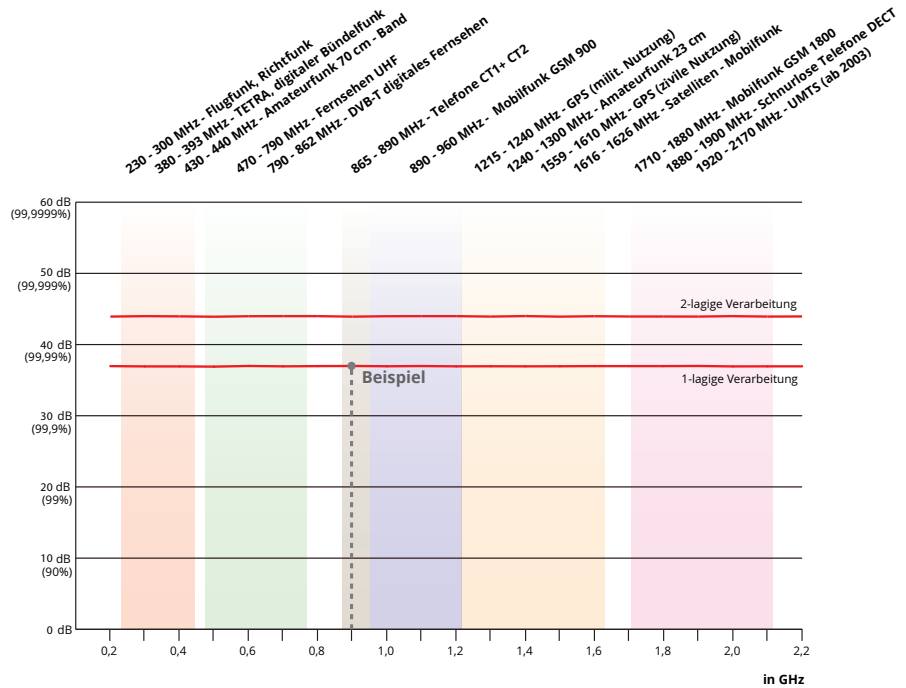


Detailed shielding attenuation curve 200 MHz - 2200 MHz

From bottom to top (y-axis) shielding attenuation in dB (decibel) and the accompanying percentages. From left to right (x-axis), the frequencies of the respective technical applications. The values represent the charge reduction in the respective frequency bands.

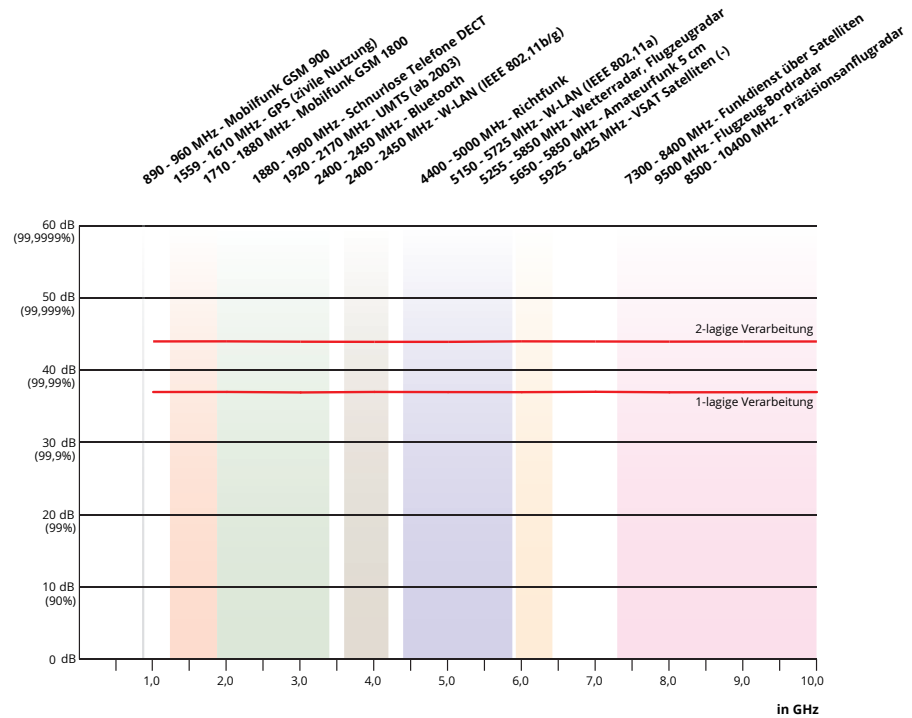
Example (single layer):

Reduction of the load of 900 MHz (GSM 900 - 0.9 GHz) by 37dB (>99.9%).



Detailed shielding attenuation curve 1.0 GHz - 10.0 GHz

All Biologa products are inspected from 200 MHz up to 10 GHz.



***The grounding accessories are not included in the delivery. Please note the "Security warnings and grounding regulations" and the product-specific processing notes in the technical and security data sheet. The shielding color HF60+ must be stirred up for at least 2 minutes with an electric stirrer, or for about 5 minutes by hand, in order to ensure the distribution of carbon particles. Another requirement is the even spreading of the paint. Applying paint with varying levels of thickness leads to different shielding attenuation values. Further information on processing and "grounding" ->equiptential bonding can be found at www.biologa-gmbh.com (search term: "HF60+")