

High+low frequency



- for large-area shielding of high-frequency electromagnetic waves, low-frequency alternating electric fields and dissipation of static charges
- best shielding effectiveness with the improved high frequency shielding paint HiFreq-Premium-Liquid.
- very good tensile adhesion in comparison to the Biologa Danell shielding paint HiFreq-Standard-Powder + -Liquid, can therefore also be used under tiles, for example
- very low-emission shielding paint for indoor and outdoor use
- metal-free, physically extremely stable, durable and non-oxidising, frost-resistant
- high water resistance, elastically soft
- highly electrically conductive wall coating based on synthetic resin. The paint is vapour diffusible and contains no solvents, plasticisers, low-volatile organic compounds, formaldehyde or ammonia.

HiFreq Premium Liquid adheres well to most non-greasy and load-bearing surfaces indoors and outdoors and can be easily painted or wallpapered over. Can be used under organic plasters after priming.

Painting over existing wallpaper is advisable if the shielding surface is to be removed without leaving any residue in the foreseeable future.

Possible top coats:

- plastic-bonded dispersion paints Dispersion
- silicate paints (KEIM - Ecosil, Biosil, Optil)
- clay paints: Volvox clay paint
- lime paints: Haga lime paint

Top coats only with prior test:

- mineral coatings (plasters) such as clay, lime or pure silicate

Order-No.: 201060

Short-Desc.: HiFreq-Premium-Liquid 5.0 litre

Required accessories



Ground strap (AEB)



Grounding plate (EGP)

Shielding paint (HF+LF)

HiFreq-Premium-Liquid - 5 litre

Type	MHz	dB1	dB2	dB3
DVB-T2	470 - 690	44	52	59
LTE / 5G wide	700 - 750	44	52	59
GSM, LTE	920 - 960	44	52	60
GSM, LTE	1800 - 1880	44	53	60
DECT	1880 - 1900	44	53	62
LTE, 5G wide	2110 - 2170	44	54	63
W-LAN 2400	2400 - 2500	44	55	64
5G fast	3400 - 3600	44	58	66
W-LAN 5200	5150 - 5350	44	62	70

dB1-single layer - dB2-double layer - dB3-triple layer -- [4 m² per litre]

Technical data

container size:	5 litre
color:	black
SD value: (DIN EN ISO 7783-2)	0.1 m
pH value:	8
adhesive pull strength:	7,5 N/mm ²
viscosity:	1400 mPas
density:	1.25 kg/Liter
composition:	water, natural graphite, pure acrylic dispersion, carbon black, additives, preservative (BIT, INN, MIT),
binder:	VOC: 0.18 g/litre
preservative:	64 ppm BIT
GIS-Code:	34 ppm INN 3 ppm MIT
yield interior:	4 sqm / litre 8 sqm / litre
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)
frost resistance	5 cycles
basis for inspection:	IEEE Standard 299™-2006
fire behaviour	DIN EN 13501-1
Shield attenuation: 4 sqm per litre	max. ~ 52 dB (single layer) max. ~ 82 dB (double layer) max. ~ 84 dB (triple layer)
Shield attenuation: 8 sqm per litre	max. ~ 39 dB (single layer) max. ~ 60 dB (double layer) max. ~ 74 dB (triple layer)

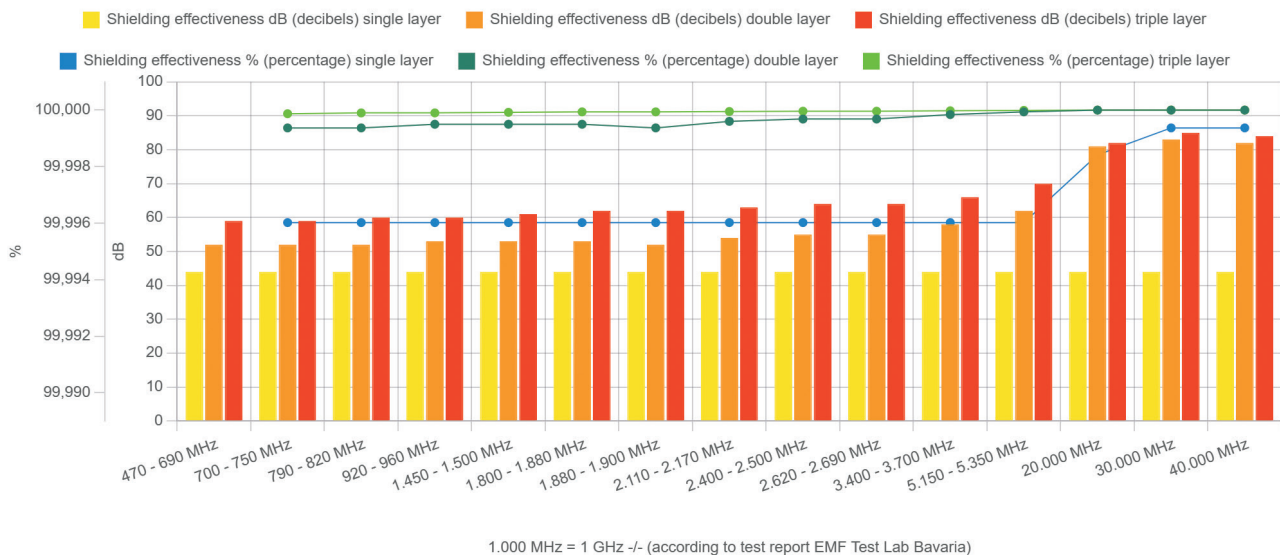
Scope of application

roof, ceiling and wall areas inside + outside

Art	MHz	Beschreibung
DVB-T2	470 - 690	digital video broadcasting – terrestrial, 2nd generation, TV via antenna
LTE / 5G wide	700 - 750	from 4G, now 5G NR without beamforming / MIMO
GSM, LTE	920 - 960	from 2G - D1, now 5G NR without beamforming / MIMO
GSM, LTE	1800 - 1880	from 2G - D2, E network, now 5G NR without beamforming / MIMO
DECT	1880 - 1900	wireless phone
LTE, 5G wide	2110 - 2170	from 3G, formerly UTMS, now 5G NR without beamforming / MIMO
W-LAN / WiFi 2400	2400 - 2500	wireless LAN
5G fast	3400 - 3700	5G NR - new frequency band with beamforming / MIMO
W-LAN / WiFi 5200	5150 - 5350	wireless LAN

Shielding values according to test report: EMF Test Lab Bavaria

Shielding effectiveness - HiFreq-Premium - 4 sqm per Litre - 470 MHz to 40.000 MHz (40 GHz)



Shielding effectiveness - HiFreq-Premium - 8 sqm per Litre - 470 MHz to 40.000 MHz (40 GHz)

