

# YSHIELD® PRO54 | Special shielding paint | 1 liter

Special paint with a focus on hardness without staining, by using carbon fibres. Shields up to 93 dB at 40 GHz. TÜV-SÜD certified.



## As shielding paint for rooms and buildings

Shielding paint for shielding high-frequency radiation (HF) and low-frequency electric fields (LF). Breathable, solvent-free, plasticizer-free and low-emission.

**Special paint with a focus on hardness without staining, by using carbon fibres. Shields up to 93 dB at 40 GHz. TÜV-SÜD certified. Shields nearly as well as our standard paint HSF54. Due to being formulated based on carbon fibres it is harder and adheres significantly better to the substrate than other paints: 12 N/mm. As it completely lacks graphite, it does hardly stain. The paint is easy to process and forms an even film.**

### Screening attenuation

At a yield of 4 sqm/l:

**At 1 GHz:** Single layer **43 dB** | Double layer **49 dB** | Three layer **55 dB**

At a yield of 8 sqm/l:

**At 1 GHz:** Single layer **36 dB** | Double layer **40 dB** | Three layer **45 dB**

### Underground

Excellent adhesion on almost all substrates interior and exterior.

### Top coating

Preferably covered with plastic bonded water-based emulsion paints, dispersion silicate paints, facade paints or silicon resin paints.

### Grounding

Must be grounded! We recommend interior the grounding strap GSX plus grounding plate GS / GF, exterior the fiber additive AF3 plus the grounding plate GF4.

### Optional: Fiber additive AF3

For crack bridging and a better grounding we advise our fiber additive AF3 with long conductive carbon fibers.

### Frost resistance

This product is frost resistant (proved for 5 frost-/thaw cycles) and can be shipped throughout the year by air cargo or ship.

### Ingredients

Water, pure acrylics dispersion, carbon fibers, carbon black, additives, preservative (BIT, INN, MIT).

### Technical data

Please find detailed data in the table overview and the technical data sheet.

### No nanotechnology

Our shielding paints are developed in accordance with strict ecological criteria. We use, for example, the carbon black with the lowest emission possible on the market and untreated natural graphite. **We consciously do not use graphene**, a nanomaterial where the hazard potential is still completely unknown.

### TÜV-SÜD certification

**We have our shielding paints monitored by TÜV-SÜD.** The whole production process including quality control, emission behaviour and economical use of preserving agents is subject to monitoring. **Please find the certificate above at the downloads.**

### Grounding

This product with an electrically conductive surface **has to be integrated into the functional-equipotential bonding (FEB)**. Please find suitable grounding accessories under "Grounding".

### Shielding attenuation HF & LF

This product **shields high frequency electromagnetic fields (HF)**. Unless otherwise stated, the indicated dB-values apply to 1 GHz. Measurement from 600 MHz to 40 GHz according to standards ASTM D4935-10 or IEEE Std 299-2006.

This product with an electrically conductive surface **shields low-frequency alternating electric fields (LF)**.

### Laboratory & expert report of shielding attenuation up to 40 GHz

We have already invested in our **own professional EMV laboratory** years ago. We not only use it to create our laboratory screening reports but also to check each batch daily. Additionally, we have all our products checked by an **independent, well-respected expert**. Double checked for twice the safety. **Please find the reports above at the downloads.**

### Ready for 5G

Some companies offer "special" 5G-products. **This products shields all 5G-frequencies, even without advertising this!** Find two gray bars in all shielding diagrams with the 5G frequency spectrum's FR1 (600 MHz – 6 GHz) and FR2 (24 GHz – 40 GHz).

