# YSHIELD® DRY54 | Special shielding paint | Powder for 1 liter

Special paint with a focus on long storage suitability. Delivered in powder form without preservative agents. Up to 84 dB at 40 GHz. TÜV-SÜD certified.



YSHIELD® DRY54







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#### As shielding paint for rooms and buildings

Shielding paint for shielding high-frequency radiation (HF) and low-frequency electric fields (LF). Breathable, plasticizer-free, low-emission and without a preservation agent.

Special paint with a focus on long storage suitability. Delivered in powder form without preservative agents. Shields up to 84 dB at 40 GHz. Shielding attenuation is not as good as with the other paints. Adhesive tensile strength, abrasion resistance and film hardness are also not as good as with the other paints. But: this paint has less packaging waste, lower international shipping costs and a phenomenal price-performance ratio. This paint is coarsely pigmented and low viscous, easy to process and forms an even film.

We first produced a powder paint in 2003, but liquid paints become the established ones. The reason for this was the low performance of an electric screwdriver which was not sufficient for the ingredients that needed to be dispersed – in our production we need more than 100,000 Watt for a professional result. After a longer development time we have now found the perfect formula for powdered shielding paints.

### **Special characteristics DRY54:**

- This powder shielding paint stays nearly as liquid as water while mixing the dust formation
  is extremely limited, as the powder blends immediately with the water. The paint becomes thicker
  after 15 minutes resting time it can be perfectly painted with afterwards and you will get a nice
  flow for an even shielding.
- The **phenomenal price-performance-ratio** is achieved, as the DRY54 only costs half as much as our liquid paints. That is why you can paint two times for the same costs.
- The powder gets bagged and then vacuum-packed three times. Vacuum-packed into one another, using three bags that is why no moisture will get into the powder, even years later.
- The powder needs to be mixed with water what you will need to do so: Digital scales, protective
  mask, safety glasses, our paint stirrer AR42, a bucket for mixing, a drilling machine (electric
  screwdriver) and 15-30 minutes of your time.

#### General advantages of powder paints:

- Has a very long shelf life without water
- No preservatives necessary
- Reduced risk of frost damages
- 50-80 % less plastic waste
- Less delivery costs (up to 60 %)
- More security during transit in case of packaging damages
- Small partial quantities can be taken out of the bag for necessary repair works

### **Screening attenuation**

At a yield of 4 sqm/l:

At 1 GHz: Single layer 36 dB | Double layer 41 dB | Three layer 46 dB

At a yield of 8 sqm/l:

At 1 GHz: Single layer 30 dB | Double layer 36 dB | Three layer 40 dB

### **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.

#### Frost resistance

This product is delivered as a powder and thus frost resistant.

## <u>Ingredients</u>

Untreated natural graphite, carbon black, pure acrylics powder, additives, no preservative agent.

#### **Technical data**

Please find all technical data and the application details in our 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.

#### Groundina

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 spectrums FR1 (600 MHz - 6GHz) and FR2 (24 GHz - 40 GHz).