Overview - Shielding paints

YSHIELD® HF-SAMPLES

YSHIELD shielding paints are **electroconductive base coatings** for the protection of large areas against **high-frequency (HF)** radiation and/or against **low-frequency (LF)** electric fields. The typical application is the shielding of rooms and buildings.

Sample set HSF: There is a sample set of all HF-paints with each 0.1 liter, see left picture.

	PRO 54	HSF 54	HSF 64	HSF 74	NSF 34
Brief description	**Technically our best paint. Contains no graphite and does not stain.** Must be applicated in two layers. Low-emission.	**The All-in-One paint. Recommendation interior and exterior.** Frost-resistant for worldwide shipping. Low-emission.	**Ecological compromise.** Dispersion-silicate paint with excellent adhesion. Low-emission.	**Pure silicate paint without preservative agent.** Only recommended with allergies against preservative agents. Low-emission.	**To shield electrical fields (LF) only.** Superior mechanical and chemical properties. Low-emission.
Shielding HF / LF	HF / LF	HF / LF	HF / LF	HF / LF	- / LF
Screening one-layer	25-30 dB (99.9 %)	**37 dB** (99.980 %)	**39 dB** (99.987 %)	**39 dB** (99.987 %)	**40 dB**
Screening two-layer	**35-40 dB** (99.99 %)	44 dB (99.996 %)	46 dB (99.997 %)	45 dB (99.997 %)	
Ecology	Normal	Normal	High	Very high	Normal
VOC content *	**0.2 g/l**	**0.2 g/l**	**0.1 g/l**	**0.1 g/l**	**0.1 g/l**
PAH content **	0.002 mg/kg	0.002 mg/kg	0.002 mg/kg	0.002 mg/kg	0.002 mg/kg
Binding agent	Pure acrylate	Pure acrylate	Silicate, pure acrylate	Silicate	Pure acrylate
Solvent	Water	Water	Water	Water	Water
Screening basis	Carbon	Carbon	Carbon	Carbon	Carbon
Application area	Interior, exterior	Interior, exterior	Interior only	Interior only	Interior, exterior
Coverage one-layer	5 - 7.5 m^2/l	5 - 7.5 m^2/l	5 - 7.5 m^2/l	5 - 7.5 m^2/l	7.5 m^2/l
Coverage two-layer	2.5 - 3.75 m^2/l				
Moisture resistance	**High**	**High**	Normal	Normal	**High**
Substrates	Almost all	Almost all	Almost all	All absorbent	Almost all
Applicable with	Paint roller, airless (nozzle>525)	Paint roller, airless (nozzle>525)	Paint roller, airless (nozzle>525)	Paint roller, airless (nozzle>525)	Paint roller, airless (nozzle>515)
Spatter behavior	**Very low**	**Very low**	Small splatters	Small splatters	Low
Adhesive tensile strength	**4.8 N/mm²**	**2.3 N/mm²**	2.2 N/mm²	1.7 N/mm²	4.1 N/mm²
Viscosity (Brookfield)	2000 mPas	2000 mPas	2500 mPas	2000 mPas	1500 mPas
Rheology	Newtonian	Newtonian	Shear thinning	Shear thinning	Newtonian
Film character	Elastic hard	Elastic soft	Elastic soft	Hard, frail	Elastic soft
Color	Black	Black	Black	Black	Black
Temperature max.	100° C	100° C	100 C	200° C	100° C
Sd-value	0.1 m	0.1 m	0.05 m	0.01 m	0.1 m
pH-value	8	8	12	12	8
Pigmentation size max.	100 µm	100 µm	100 µm	100 µm	10 µm
Density	1.15 kg / l	1.25 kg / l	1.27 kg / l	1.3 kg / l	1.05 kg / l
Solids content	44 %	56 %	52 %	45 %	24 %
MFFT	5° C	5° C	5° C	5° C	5° C
Frost resistance ***	5 frost-/thaw cycles	5 frost-/thaw cycles	No	No	5 frost-/thaw cycles
Delivery sizes	1 / 5 Liter	1 / 5 Liter	1 / 5 Liter	1 / 5 Liter	1 / 5 Liter
Shelf life	12 months	12 months	12 months	12 months	12 months

* Volatile organic compounds. The EU limit value for cat. A/a is 30 g/l (by 2010).
** Polycyclic aromatic hydrocarbons. The nonbinding EU limit value for children toys is 0.2 mg/kg.
*** The given frost resistance is valid liquid in the container, of course on the wall its permanent frost-resistant.

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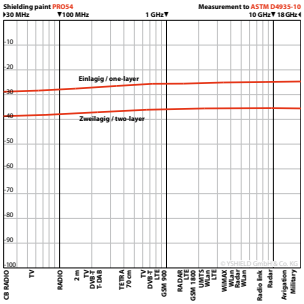
PRO54 - Shielding paint (HF+LF)

TECHNICALLY THE BEST

YSHIELD® PRO54



Characteristics

For the shielding of high-frequency radiation (HF) and low-frequency electric fields (LF).

- **Frost resistant: Suitable for shipping during winter time and for sea freights in containers**
- Breathable, solvent free, **low-emission**, **low odor**
- **Application:** Interior, exterior
- **Attenuation:** 25-30 dB, **two-layer 35-40 dB**

Special feature

Technically our best paint, that is formulated without graphite, which has many advantages:

- Does not stain off while overpainting with white wall paint.
- Impacts against the white covering paint don´t produce black stripes any more.
- The surface of the paint film is microporous rough and offers top coatings a catchy underground for excellent adhesion.
- With 4.8 N/mm² this paint has an extremely high adhesive tensile strenght (adhesive power on the underground) for a wall paint which is two times higher than with our graphite paints.

The lack of graphite has only one disadvantage: The electrical resistance and therefore the shielding attenuation is 10 dB lower per layer. **We always highly recommend a two-layer application with this paint,** to reach the typical 35-40 dB attenuation. The slightly higher costs due to the second coat are compensated by the many advantages.

Underground

Interior and exterior: Excellent adhesion on almost all undergrounds like existing emulsion paints, sheetrock, wallpaper, cement, plaster, masonry, wood, etc.

Top coating

Preferably covered with plastic bonded, **water-based emulsion paints**, dispersion silicate paints, facade paints or silicon resin paints. Not applicable are pure mineral paints (clay, loam, chalk, silicate). Please find appropriate product recommendations in the technical data sheet. Due to the high adhesive tensile strenght (to ETAG 004 for EIFS-systems, minimum 0.08 N/mm²), applicable directly under pure organic plaster, no mineral pasters!

Grounding

Must be grounded! We recommend interior the **grounding strap EB2** plus **grounding set GW or GB**, exterior the **fiber additive AF3** plus the **grounding set GE**.

Frost resistance

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

Screening attenuation

The screening attenuation is **regularly tested in our own EMC laboratory**. We have measurement setups due to the following standards: **ASTM D4935-10, IEEE Std 299-2006, IEEEE Std 1128-1998, ASTM A698/A698M-07**. Please find the test report at our homepage directly on the product page.

Ingredients

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

Optional: Fiber additive AF3

This paint is formulated without long conductive carbon fibers to allow airless spraying. For crack bridging and consequential a better grounding we advise to mix in the fiber additive AF3.

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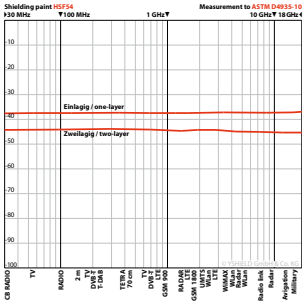
YSHIELD®

HSF54 - Shielding paint (HF+LF)

UNIVERSAL CLASSIC

YSHIELD® HSF54



Characteristics

Our longtime classic was improved again in 2014. Based on a high quality **pure acrylic binder**. For the shielding of high-frequency radiation (HF) and low-frequency electric fields (LF).

- **Frost resistant: Suitable for shipping during winter time and for sea freights in containers**
- Breathable, solvent free, **low-emission**, **low odor**
- **Application:** Interior, exterior
- **Attenuation: 37 dB**, two-layer 44 dB

Underground

Interior and exterior: Excellent adhesion on almost all undergrounds like existing emulsion paints, sheetrock, wallpaper, cement, plaster, masonry, wood, etc.

Top coating

Preferably covered with plastic bonded, **water-based emulsion paints**, dispersion silicate paints, facade paints or silicon resin paints. Not applicable are pure mineral paints (clay, loam, chalk, silicate). Please find appropriate product recommendations in the technical data sheet. Due to the high adhesive tensile strenght (to ETAG 004 for EIFS-systems, minimum 0.08 N/mm^2), applicable directly under pure organic plaster, no mineral pasters!

Grounding

Must be grounded! We recommend interior the **grounding strap EB2** plus **grounding set GW or GB**, exterior the **fiber additive AF3** plus the **grounding set GE**.

Frost resistance

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

Screening attenuation

The screening attenuation is **regularly tested in our own EMC laboratory**. We have measurement setups due to the following standards: **ASTM D4935-10, IEEE Std 299-2006, IEEEE Std 1128-1998, ASTM A698/A698M-07**. Please find the test report at our homepage directly on the product page.

Ingredients

Pure acylic dispersion, graphite, water, carbon black, additives, preservative (MIT, BIT).

Optional: Fiber additive AF3

This paint is formulated without long conductive carbon fibers to allow airless spraying. For crack bridging and consequential a better grounding we advise to mix in the fiber additive AF3.

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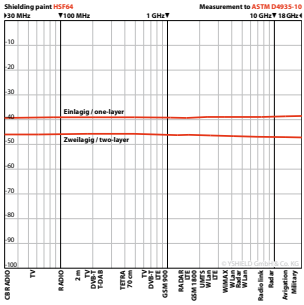
HSF64 - Shielding paint (HF+LF)

ECOLOGICAL COMPROMISE

YSHIELD® HSF64



Characteristics

Ecological compromise. Recommendation for interior use. Based on **potassium silicate** combinded with a **pure acrylic binder** for enhanced adhesion. For the shielding of high-frequency radiation (HF) and low-frequency electric fields (LF).

- **Dispersion-silicate paint with limited moisture resistance, therefore for interior use only**
- Breathable, solvent free, **low-emission**, **low odor**
- Because of a **pH-value of 12** (superalkaline), application only with protective equipment
- **Application:** For interior use only
- **Attenuation: 39 dB**, two-layer 46 dB

Underground

Interior: Excellent adhesion on almost all undergrounds like existing emulsion paints, sheetrock, wallpaper, cement, plaster, masonry, wood, glass, plastic substrates, etc. Not usable on gypsum based substrates!

Top coating

Preferably covered with plastic bonded, **water-based emulsion paints** or dispersion silicate paints. We restricted recommend pure mineral paints (clay, loam, chalk, silicate). Please find appropriate product recommendations in the technical data sheet.

Grounding

Must be grounded! We recommend interior the **grounding strap EB2** plus **grounding set GW or GB**.

Frost resistance

This product is not frost resistant on shipping. At long frost periods during winter time, the shipping can be rescheduled by a few days. Our frost resistant shielding paint HSF54 is our alternative that can always be shipped.

Screening attenuation

The screening attenuation is **regularly tested in our own EMC laboratory**. We have measurement setups due to the following standards: **ASTM D4935-10, IEEE Std 299-2006, IEEEE Std 1128-1998, ASTM A698/A698M-07**. Please find the test report at our homepage directly on the product page.

Ingredients

Potassium silicate, graphite, water, pure acylic dispersion, carbon black, additives, preservative (MIT, BIT).

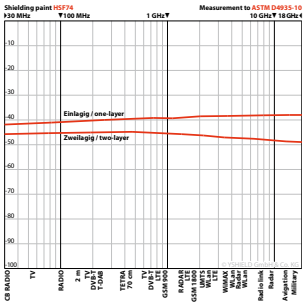
Optional: Fiber additive AF3

This paint is formulated without long conductive carbon fibers to allow airless spraying. For crack bridging and consequential a better grounding we advise to mix in the fiber additive AF3.

HSF74 - Shielding paint (HF+LF)

MAXIMUM ECOLOGY

YSHIELD® HSF74



Characteristics

Pure silicate paint with an absolute modicum of ingredients, also without a preservative agent. To be recommended only with an allergy against preservative agents. Based on **potassium silicate**. For the shielding of high-frequency radiation (HF) and low-frequency electric fields (LF).

- **As a pure silicate paint with limited moisture resistance, therefore for interior use only**
- Higly breathable, solvent free, **low-emission**, **neutral odor, without presevative agent**
- Because of a **pH-value of 12** (superalkaline), application only with protective equipment
- **Application:** For interior use only
- **Attenuation: 39 dB**, two-layer 45 dB

Underground

Interior: Good adhesion on absorbent, untreated, preferably mineral undergrounds like chalk, silicate, clay, etc.. Restricted use on absorbent emulsion paints, wallpapers, etc., please check first! Not usable on gypsum based substrates!

Top coating

Preferably covered with plastic bonded, **water-based emulsion paints** or dispersion silicate paints. We restricted recommend pure mineral paints (clay, loam, chalk, silicate). Please find appropriate product recommendations in the technical data sheet.

Grounding

Must be grounded! We recommend interior the **grounding strap EB2** plus **grounding set GW or GB**.

Frost resistance

This product is not frost resistant on shipping. At long frost periods during winter time, the shipping can be rescheduled by a few days. Our frost resistant shielding paint HSF54 is our alternative that can always be shipped.

Screening attenuation

The screening attenuation is **regularly tested in our own EMC laboratory**. We have measurement setups due to the following standards: **ASTM D4935-10, IEEE Std 299-2006, IEEEE Std 1128-1998, ASTM A698/A698M-07**. Please find the test report at our homepage directly on the product page.

Ingredients

Potassium silicate, graphite, water, carbon black, emulsifier, defoamer, cellulose, no preservative agent.

Optional: Fiber additive AF3

This paint is formulated without long conductive carbon fibers to allow airless spraying. For crack bridging and consequential a better grounding we advise to mix in the fiber additive AF3.

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NSF34 - Shielding paint (LF)

ONLY AGAINST ELECTRICAL FIELDS

YSHIELD® NSF34

Characteristics

Paint against low frequency elektrical fields only. Based on a high quality **pure acrylic binder**. For the shielding of low-frequency electric fields (LF).

- **This paint is frost resistant for shipping in the winter or on pallets in shipping containers**
- Breathable, solvent free, **low-emission**, **low odor**
- **Application:** Interior, exterior
- **Attenuation: 40 dB** (99 %)

Underground

Interior and exterior: Excellent adhesion on almost all undergrounds like existing emulsion paints, sheetrock, wallpaper, cement, plaster, masonry, wood, etc.

Top coating

Preferably covered with plastic bonded, **water-based emulsion paints**, dispersion silicate paints, facade paints or silicon resin paints. Not applicable are pure mineral paints (clay, loam, chalk, silicate). Please find appropriate product recommendations in the technical data sheet. Due to the high adhesive tensile strenght (to ETAG 004 for EIFS-systems, minimum 0.08 N/mm^2), usable directly under pure organic plaster, no mineral pasters!

Grounding

Must be grounded! We recommend interior the **grounding strap EB2** plus **grounding set GW or GB**, exterior the **fiber additive AF3** plus the **grounding set GE**.

Frost resistance

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

Screening attenuation

The screening attenuation is **regularly tested in our own EMC laboratory**. We have measurement setups due to the following standards: **ASTM D4935-10, IEEE Std 299-2006, IEEEE Std 1128-1998, ASTM A698/A698M-07**. Please find the test report at our homepage directly on the product page.

Ingredients

Pure acylic dispersion, graphite, water, carbon black, additives, preservative (MIT, BIT).

Optional: Fiber additive AF3

This paint is formulated without long conductive carbon fibers to allow airless spraying. For crack bridging and consequential a better grounding we advise to mix in the fiber additive AF3.

Overview - Powder products

YSHIELD® DRY65 / DRY69

YSHIELD **powder products based on carbon** are new in our range of products. They are **electroconductive base coatings** for the protection of large areas against **high-frequency (HF)** radiation and/or against **low-frequency (LF)** electric fields. The typical application is the shielding of rooms and buildings.

	DRY 65	DRY 69
Brief description	**Shielding paint with good attenuation and high ecology.** Dispersion-silicate paint with excellent adhesion. Low-emission.	**Shielding plaster with very high attenuation and high ecology.** Dispersion-silicate plaster with excellent adhesion. Low-emission.
Form of delivery	Powder	Powder
Shielding HF / LF	HF / LF	HF / LF
Screening one-layer	**35 dB** (99.97 %)	-
Screening two-layer	43 dB (99.995 %)	-
Screening 1 mm	-	**60 dB** (99,9999 %)
Screening 2 mm	-	**70 dB** (99,99999 %)
Ecology	**High**	**High**
VOC content *	**0.1 g/l**	**0.1 g/l**
PAH content **	0.002 mg/kg	0.002 mg/kg
Binding agent	Silicate, acrylate	Silicate, acrylate
Solvent	Water	Water
Screening basis	Carbon	Carbon
Application area	Interior, exterior	Interior, exterior
Coverage one-layer	5 - 7.5 m^2/l	1 m^2/l at 1 mm
Coverage two-layer	2.5 - 3.75 m^2/l	-
Moisture resistance	Normal	Normal
Substrates	All absorbent	All absorbent
Applicable with	Paint roller	Plaster equipment
Spatter behavior	Small splatters	-
Adhesive tensile strength	**4.6 N/mm^2**	1.0 N/mm^2
Viscosity (Brookfield)	2000 mPas	-
Rheology	Shear thinning	Strong pasty
Film character	Elastic hard	Elastic hard
Color	Black	Black
Temperature max.	100° C	100 C
Sd-value	0.1 m	0.1 m
pH-value	12	12
Pigmentation size max.	100 µm	100 µm
Density	1.15 kg / l	1.20 kg / l
Solids content	45 %	50 %
MFFT	5° C	5° C
Frost resistance ***	Yes	Yes
Delivery sizes	Powder for 5 liter	Powder for 20 liter
Shelf life	24-48 months	24-48 months

* Volatile organic compounds. The EU limit value for cat. A/a is 30 g/l (by 2010).
** Polycyclic aromatic hydrocarbons. The nonbinding EU limit value for children toys is 0.2 mg/kg.
*** The given frost resistance is valid liquid in the container, of course on the wall its permanent frost-resistant.

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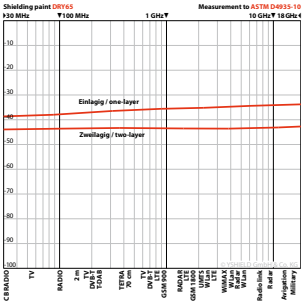
DRY65 - Shielding paint (HF+LF)

YSHIELD® DRY65


YSHIELD® DRY65



Characteristics

Shielding paint delivered as a powder. Dispersion silicate paint with **potassium silicate** as binder and under 5 % synthetic content. For the shielding of high-frequency radiation (HF) and low-frequency electric fields (LF).

- **Delivered as a powder to mix yourself**
- Half shipping weight
- Shelf life for years
- Breathable, solvent free, low-emission, low odor
- **Attenuation: 35 dB**, two-layer 43 dB
- **Coverage:** One-layer 5 - 7.5 qm/l. two-layer 2.5 - 3.75 qm/l
- **Packaging size:** 2.7 kg powder for **5 liters** of paint.

Safety instruction

This product with a pH-value of 12 contains potassium silicate powder. Stirring is only allowed with protective equipment! We urgent recommend our safety-set DRY99, see accessories.

Usage

Preferrably interior. Due to the good moisture resistance even exterior.

Preparation

Stir the 2.7 kg powder in a bucket with 3.3 liters of water. Preparation time appr. 40 minutes.

Underground

We recommend a surface preparation with our primer concentrate GK5 or another primer. **Excellent adhesion on almost all absorbent undergrounds.** Not applicable on gypsum based undergrounds, potassium silcate peels off from gypsum!

Final coating

Normally on the graphite surface only **organic dispersion paints or dispersion silicate paints** adheres well. For pure mineralic coatings we recommend an aftertreatment with our primer concentrate GK5 or another for the coating suitable primer. Don´t use gypsum based coatings, gypsum peels off from silicate coatings!

Grounding

Must be grounded! We recommend interior the **grounding strap EB2** plus **grounding set GW or GB**, exterior the **grounding set GE**.

Frost resistance

This product is frost resistant several times, can be shipped throughout the year by air cargo or ship.

Screening attenuation

The screening attenuation is **regularly tested in our own EMC laboratory**. We have measurement setups due to the following standards: **ASTM D4935-10, IEEE Std 299-2006, IEEEE Std 1128-1998, ASTM A698/A698M-07**. Please find the test report at our homepage directly on the product page.

Ingredients

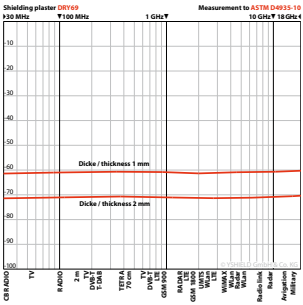
Graphite, potassium silicate powder, carbon black, acrylics powder, additives.

DRY69 - Shielding plaster (HF+NF)

OUR RECOMMENDATION

YSHIELD® DRY69

YSHIELD® DRY69



Characteristics

Shielding plaster delivered as a powder. Dispersion silicate plaster with **potassium silicate** as binder and under 5 % synthetic content. For the shielding of high-frequency radiation (HF) and low-frequency electric fields (LF).

- **Delivered as a powder to mix yourself**
- Low shipping weight
- Shelf life for years
- Breathable, solvent free, low-emission, low odor
- **Attenuation: 60 dB at 1 mm thickness**, 70 dB at 2 mm thickness.
- **Coverage:** 20 m^2 at 1 mm thickness. 10 m^2 at 2 mm thickness
- **Packaging size:** 12 kg powder for **20 liters** of plaster.

Special features

1) This shielding plaster contains no long carbon fibers for shielding, **which is why it shields equally well in all polarisation directions**.

2) This plaster has a relatively high **diminution of 50 %** while drying. This is very important for the high attenuation. It should only be used on smooth undergrounds as unevenness can't be smoothed with this plaster.

3) **Carbon pigments are black, in which shielding plaster would you trust?**

Instead of cheap filler materials, we use costly carbons exclusively, see the right sample in the picture. Thereby we don´t reach only 24 dB attenuation, but **sensational 60 dB**.

Safety instruction

This product with a pH-value of 12 contains potassium silicate powder. Stirring is only allowed with protective equipment! We urgent recommend our safety-set DRY99, see accessories.

Usage

As a thin layer plaster with a thickness from 1 mm to 2 mm preferrably interior. But due to the good moisture resistance even exterior.

Preparation

Stir the 12 kg powder in a bucket with 12 liters of water. Preparation time appr. 70 minutes.

Underground

We recommend a surface preparation with our primer concentrate GK5 or another primer. **Excellent adhesion on almost all absorbent undergrounds.** Not applicable on gypsum based undergrounds, potassium silcate flake off from gypsum!

Final coating

Sand and smooth elevations and coarse burrs as usual. Normally on the graphite surface only **organic dispersion paints or dispersion silicate paints** adheres well. For pure mineralic coatings we recommend an aftertreatment with our **primer concentrate GK5** or another for the coating suitable primer. Don´t use gypsum based coatings, gypsum peels off from silicate coatings!

Grounding

Must be grounded! We recommend interior the **grounding strap EB2** plus **grounding set GW**, exterior the **grounding set GE**.

Frost resistance

This product is frost resistant several times, can be shipped throughout the year by air cargo or ship.

Screening attenuation

The screening attenuation is **regularly tested in our own EMC laboratory**. We have measurement setups due to the following standards: **ASTM D4935-10, IEEE Std 299-2006, IEEEE Std 1128-1998, ASTM A698/A698M-07**. Please find the test report at our homepage directly on the product page.

Ingredients

Graphite, potassium silicate powder, carbon black, acrylic powder, additives.

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Accessories

AF3 - Fiber additive

YSHIELD® AF3

Characteristics

Special additive for mixing with our shielding paints. All our shielding paints are formulated without crack-bridging carbon fibers for airless spray application. In case of cracks forming in the substrate, this additive contains long, electrically conductive carbon fibers which guarantee the grounding even without using the grounding strap.

Processing

Stir in the additive (90 ml) **into 5 liter shielding paint**. Use an electro mixer that all mixes homogeneously .

Ingredients

Water, carbon black, carbon fibers, additives, preservative (MIT, BIT)

GK5 - Primer concentrate

YSHIELD® GK5

Characteristics

Special coordinated high quality primer concentrate for surface preparation with our shielding paints. For priming of solid old coats of paint, brittle, chalky and absorbent substrates. Consolidating, adhesion promoting, good penetration, regulates the absorbency. Also recommended on our smearing graphite shielding paints, if problematic (mineralic) coatings should be applied.

Preparation

Mix the concentrate (1 liter) with 4 liters of water. Gives 5 liters of primer. If you use tap-water, process within 48 hours.

Processing

Use a first-class paint roller. Do not work at temperatures below 5°C/41°F.

Consumption

The consumption depends on the character and absorbency of the underground. Typical **interior productivity: 7.5 m^2/l**. Typical **exterior productivity: 5 m^2/l**.

Ingredients

Pure-acrylic binder, additives, preservative (MIT, BIT).

DRY99 - Safety set for powder products


YSHIELD® DRY99

Safety instruction

Our **powder products DRY65 und DRY69** with a pH-value of 12 contain potassium silicate powder. **Stirring is only allowed with protective equipment (especially the safety glasses).**

Content of the set

- **Safety glasses** (also suitable for spectacle wearers)
- Breathing **protection mask**
- 3 pairs of **gloves** L
- **Protection sheath**

AR40 - Paint stirrer

IMPORTANT FOR OUR 1-LITER BINS

YSHIELD® AR40

Characteristics

Paint stirrer to mix up our shielding paints. Our **1-liter paint containers have an opening of 40 mm** diameter. None of the usual paint stirrers will fit in this opening. That´s why we have developed a stirrer by ourselves. Our paint stirrer is mixing up shielding paints quickly and consistently, even in slim and high paint containers.

DKL90 - Dispersion glue

FOR OUR NETTINGS AND FLEECES

YSHIELD® DKL90

Characteristics

Special coordinated dispersion glue for binding our sheet materials to walls, ceilings, floors, doors, etc.. High quality class water-resistant special glue based on acrylics, breathable, low-emission and solvent-free. **Electrically conductive**, that the materials don´t get isolated for grounding.

Processing

The application is identical to a wallpaper glue! Avoid bucklings and wrinkles in the materials! The wall surface and the backside of the material is primed with a painter's roller. The material is inserted wet-on-wet and fixed by hand (with disposable gloves) or with a pressure roller. Work quickly and strip by strip so that the glue won´t get dry.

Technical data

- **Specially for the following materials:** HNG80, HNG100, NCV95
- **Delivery sizes**: 5 liter
- **Coverage**: 17.5 m^2 - 25 m^2, depending on the underground
- Ingredients: Acrylic binder, water, carbon black, additives, preservative (MIT, BIT)
- Color: Black
- Surface conductivity: 400 ohm (square resistance R☐)

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Common characteristics

Easy handling and processing

YSHIELD shielding paints **can exceedingly be applied for all purpose**. Compared to wallpapers, fleeces or nettings they are easy to apply, even in structured rooms with bays, pitched roofs and dormers. Painters recommend our shielding paints for **ease of application**. All paints are best applied with a paint roller.

Perfect corrosion resistance

Many metalliferous shielding products are not resitant to corrosion. Our shielding paints do not contain any metals but a mixture of carbons instead. That´s why our shielding paints are **chemically stable and permanent corrosion-free,** even in damp environment.

Emissions VOC / PAH

Our shielding coatings are tested regularly from the **TÜV-SÜD** on the content of VOC (volatile organic compounds) and PAH (polycyclic aromatic hydrocarbons). 1) The actual **VOC limit** is 30 g/l, our paints contain only 0.1 g/l to 1 g/l. 2) The recommended **PAH limit** (for category 1) is 0.2 mg/kg. Our paints contain 0.002 mg/kg, so they are **100 times below the limit for children toys**.

Preservation

Any kind of aqueous paint must be preserved. Controversial discussed is the use of Isothiazolinone- compounds, refering to CIT only. CIT is not contained in our paints. Further to this we reject preservation with BIT/silver, like utilized in eco-paints, as we don´t want to use nanosilver. **Our preservation with MIT/BIT has a very low allergenic potential, which is regularly confirmed by MCS-customers.** As an alternative, our shielding paint HSF74, is free from any kind of preservatives.

Sustainability

Due to its **paint-typical holohedral structure without holes**, our shielding paints provide a nearly linear attenuation up to very high frequencies, regardless of the direction of signal polarization. Prooved up to 18 GHz they are very **future-proof**.

Carefully selected ingredients

YSHIELD shielding paints **do not contain solvents, plasticisers or any other problematic ingredients.** All ingredients were **carefully selected, regardless of price** and according to their high quality and safety.

Grounding instructions

Please find more information about the necessary grounding at „grounding“.

Handling and processing

Please find detailed handling instructions in our **technical data sheets on our website** on the product pages! Upon request we will be happy to send this data sheets to you!

Project examples

Shielding data center (60-80 MHz), Germany

Shielding industrial building (airless), Germany

Shielding semi-detached house (2648 µW/m² → 10.2 µW/m²), Germany

Shielding multifamily building complex, Hungary

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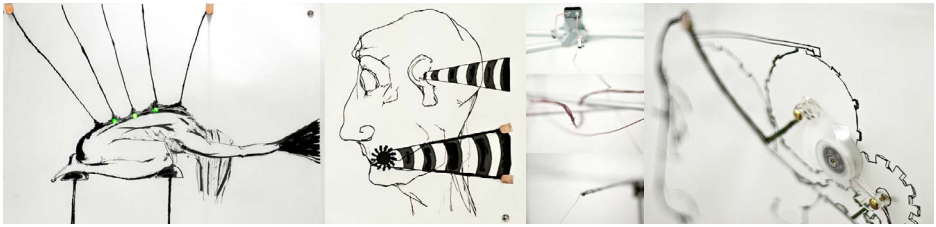
Project examples

Shielding one-family house (194 µW/m² → 0.01 µW/m²), Austria

Shielding one-family house (604 µW/m² → 0.26 µW/m²), Australia

Shielding one-family house, Australia

Art installation with conductive paint HSF54, Great Britain



Project examples

Shielding airport terminal, Asia

Shielding development department at Asus-computer, Taiwan

Shielding apartment houses, Greece

Shielding BAUFRITZ framehouses, Germany

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Project examples

Shielding one-family house, Germany




Shielding one-family house (616 µW/m² → 0.5 µW/m²), Hawaii



Shielding student project school building, Austria



Shieldings recording studios, Taiwan