

Diffundin-Holzfarbe +

Water-thinnable, silk-flat wood paint for covering paint coatings in exteriors. The coating is protected against early algae and fungal infestation thanks to the approved Guard-technology.



Product characteristics

Properties	<ul style="list-style-type: none"> • Integrated isolating effect • Diffusion capable • Very good adhesive strength on timber, NF-metals, zinc, plastics, renders/plasters • Optimal flow • Elastic • High covering power • High yield • Easy to apply • As ALLFAcolor-product many shades can be achieved
Areas of application	Exterior only
Suitable substrates in detail	<ul style="list-style-type: none"> • For woods of limited or non stable dimensions • Non-ferrous metals • Synthetics • Renders/plasters

Material description

Binder	Synthetic dispersion
Ingredients	<ul style="list-style-type: none"> Additives Pigments Fillers
Density	ca. 1.4 kg/l
Water vapour permeability	ca. 0.3 m
Water absorption coefficient (w-value)	ca. 0.02 kg/m ² h ^{0.5}
Maximum particle size	Fine
Average consumption (short text)	approx. 130 - 150 ml/m ²
Average consumption	It is advisable to determine the exact consumption figure by producing a sample area.
Colour shade	<ul style="list-style-type: none"> White Base 1 Base 2 Base 3

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RAL 9005 Tiefschwarz (deep black)
 RAL 7016 Anthrazitgrau (anthracite grey)
 RAL 6005 Moosgrün (moss green)
 RAL 3003 Rubinrot (ruby red)
 RAL 8014 Sepiabraun (sepia brown)
 RAL 7035 Lichtgrau (light grey)
 RAL 5014 Taubenblau (pigeon blue)

Suitable tinting paints	Tinting with system-matching tinting pastes via the ALLFAcolor tinting machine or mixing of the colour shades among each other. Please note that with tinted products the specified properties may change.
Gloss level	Silk-mat
Class accord. to BFS fact sheet no. 26	A
Group accord. to BFS fact sheet no. 26	Groups 1 to 3 depending on colour shade
Storage	Cool, but protected from frost
Thinning	Water

Substrates

Suitable substrates	All kinds of wood and timber derived products Plastics and non-ferrous metals All usual mineral substrates (plasters/renders, concrete, masonry)
Substrate conditions	The substrate must be clean, dry, firm and sound. Follow the building regulations (in Germany VOB, Part C, DIN 18363, Section 3). In addition the guidelines for wood preservation in building construction (in Germany DIN 68800) apply.
Substrate conditions	Wooden components which are not or limitedly dimensionally stable, can be coated. A wood moisture of 18% must not be exceeded. The construction has to be protected against any penetration of humidity. In addition, the guidelines according to BFS Fact Sheet No. 18 apply. With coatings on metallic substrates (e.g. zinc, non-ferrous metals etc), corresponding substrate preparations have to be considered, such as degrease by washing with wetting agent. Corroding substrates must be isolated previously by means of appropriate priming coats. Diffundin Sperrgrund LH can be used as bonding agent. Afterwards Diffundin Holzfarbe+ can be applied onto e.g. down pipes made of zinc, gutters etc. In addition, the guidelines according to BFS Fact Sheet Nos. 5 + 6 apply. With coatings onto synthetic substrates, preliminary works have to be taken into consideration, such as degrease or sanding. Diffundin Sperrgrund LH can be used as bonding agent. Due to the large variety of synthetics, a test area on the concerning substrate is strongly recommended. In addition, the guidelines according to BFS Fact Sheet No. 22 apply.
Substrate preparations	Wooden components Sand/grind wood surfaces in fibre direction, clean thoroughly and remove seeping wood components such as resin and resin galls. Remove sharp edges. Follow BFS-Fact Sheets Nos. 18 and 20. Iron, steel Prepare iron and steel as to match standard purity degree SA 21/2 (abrasive blasting) or ST3 (mechanically) in compliance with DIN EN ISO 12944-4. Zinc, rigid PVC Preparation by ammonia-water solution containing a wetting agent, using a synthetic non-woven abrasive. In compliance with BFS Fact Sheets Nos. 5 and 22 also possible with Gescha MultiStar (universal concentrated detergent) using a non-woven abrasive or by sweep blasting. Aluminium Clean with nitro-cellulose thinner or phosphoric-acid solution using a synthetic non-woven abrasive, in compliance to BFS Fact Sheet No. 6.

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Copper

Prepare with Gescha MultiStar (universal concentrated detergent) at a mixing ratio of 1:5 (with water), using a synthetic non-woven abrasive.

Existing paint layers

Existing paint layers have to be sanded/grinded and/or leached. Non-sound paint layers must be removed.

Application

Application method

Application by brush, roller or spraying

Spraying data

Spray pressure in bar: 180 (150) / spraying angle: 50° - 60° / nozzle size in inch: 0,019 - 0,021 / sieve size in mesh: 60 / approx. thinning: unthinned.

Coating system

Wooden structure of new, dry spruce, indirectly exposed to weathering (e.g. lower parts). Preparation of the substrate in compliance with BFS Fact Sheet No. 18. Untreated wood which is prone to blue-stain must previously be treated with Diffundin-Bläueschutz (blue-stain inhibiting primer). Priming coat with Diffundin-Holzfarbe+ intermediate and finishing coat with Diffundin-Holzfarbe+. With saline impregnations and in case of doubt, use Diffundin-Sperrgrund LH as priming coat.

Wooden structure of new wood, prone to blue-stain.

Preparation of the substrate in accordance with BFS Fact Sheet No. 18. Apply Diffundin-Bläueschutz to untreated wood. Priming coat with Diffundin-Sperrgrund LH (respect intermediate sanding and flash-off time); apply Diffundin-Holzfarbe+ as intermediate and finishing coat.

Wooden structure of new wood, insensitive to blue-stain

Preparation of the substrate in accordance with BFS Fact Sheet No. 18. Priming coat with Diffundin-Sperrgrund LH (respect intermediate sanding and flash-off time); apply Diffundin-Holzfarbe+ as intermediate and finishing coat.

Wooden structure of matt, weathered paint layer.

Grind thoroughly: In case of houses prone to blue-stain, use Diffundin-Bläueschutz as impregnation of damaged areas which then have to be primed with Diffundin-Sperrgrund LH. Apply Diffundin-Holzfarbe+ as intermediate and finishing coat. BFS Fact Sheet No. 18 applies.

Solid and sound old paint layer. Grind thoroughly. Apply Diffundin-Holzfarbe+ as intermediate and finishing coat.

Wood structure of old wood (stripped, sanded or burned-off. Impregnation with Diffundin-Bläueschutz; priming coat with Diffundin-Sperrgrund LH (respect intermediate sanding and flash-off time); apply Diffundin-Holzfarbe+ as intermediate and finishing coat. BFS Fact Sheet No. 18 applies.

Zinc. Pretreatment according to BFS Fact Sheet No. 5;

Rigid PVC. Pretreatment according to BFS Fact Sheet No. 22; priming-, intermediate- and finishing coat with Diffundin-Holzfarbe+.

Application

The material can be applied by roller or spraying device. When painting, pay attention to spread the material liberally and homogeneously, in order to achieve a coat thickness which is necessary for the durability.

In order to achieve an optimized flow of the paint it is advisable to use appropriate tools, such as a whitewash brush with synthetic bristles for water lacquers (e. g. Krex or M3 Aqua).

Note

Check tinted paint for colour accuracy prior to the application. Objections regarding the colour shade cannot be accepted after the application.

The figures given for parameters are average values. Due to the use of natural raw materials in our products, the actual value determined on the individual supplied product may differ slightly without affecting its suitability. These data refer to the white respectively standard product. Tinting may cause deviations.

Plasto-elastic joints should not be coated as the higher elasticity of the sealing mass might cause cracks or discoloration of the coating. In individual cases tests have to be carried out to judge the suitability.

Compatibility

Do not mix with other products.

Practical hints

Masking Works

Always use UV-resistant adhesive tapes for exterior works. On completion of the coating, particularly with dispersion paints and / or higher layer thicknesses, immediately remove adhesive tapes, in order to avoid untidy contours.

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Repairs

Touching up surfaces may be more or less visible, even with using the original coating material. Traces are unavoidable according to BFS Fact Sheet No. 25. Whether a repair is considered as optically disturbing is depending on many parameters, like colour shade, gloss level, layer thickness, substrate, illumination etc. It is advisable to apply a test coating on inconspicuous places.

Washing out with early Moisture Load

After the application, an early exposure to moisture (dew, fog, rain) may result in a washing out of additives or emulsifiers off the still not dry coating. This will be visible on the surface as transparent traces with a slightly glossy shine. These additives are water-soluble and disappear under the influence of rain, once the coating is dry. If such surfaces must be directly coated, the traces should be washed off thoroughly.

Colour Accuracy / Metamerism

The perception of colour shades is influenced by various parameters, such as light, gloss, angle, structure. Substrates of different degrees of irregularities may have different effects despite having been coated with the same material. Coating materials of the same hue but of different gloss levels also appear to be different. Various materials of the same colour shade that appear to be matching by daylight may show strong deviations in artificial light (metamerism effect). In case of increased requirements on matching colours of different building parts, materials and / or surfaces, the BFS Fact Sheet No. 25, section 4.2.2. can be taken into consideration.

Horizontal surfaces

Exterior horizontal surfaces such as mural crowns, cornices, windowsills etc. must be professionally protected with appropriate covering material, e.g. from metal or stone, in order to prevent dirt stains and moisture damage of the coating.

Recoating of Joint Sealing Compounds

Basically and if possible do not coat elastic joint sealing compounds. If however required, the coating is only possible provided that the sealing compound and coating material are suitable and compatible according to DIN 52452-4 (in Germany). The higher elasticity of the sealing compound may produce hairline cracks in the coating as well as discolouration of the paint. Due to the large variety of products available on the market, we recommend to produce test areas.

Block Resistance of Diffundin Holzfarbe*

Due to the product's elasticity, the pressure contact of two Diffundin paint-layers may cause contact adhesion (no adhesion connection to other materials like varnish etc.). Therefore window- and door rabbets should preventively be coated with another material.

Brilliant and intensive colour shades

Brilliant and intensive colour shades, due to the pigments employed, normally have a lower covering power. The application of a first coat in a similar defined pastel tint (shown in online price recommendations and the ALLFAcol- or tinting machine) normally avoids having to apply a layer on top of the standard rule of coating.

Temperature limit	Between + 5° C and + 30° C for substrate and ambient air during processing and drying.
Drying time	At + 20° C for substrate and ambient air and 65% relative humidity (RH), dust-dry after approx. 2 - 3 hours. Recoatable after approx. 4 - 5 hours. Lower temperature or a higher humidity extend the drying time.
Tool cleaning	Immediately after use with water

Information

Hazard statements and safety advice	May cause an allergic skin reaction. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Do not get in eyes, on skin, or on clothing. Wear protective gloves/ eye protection. If on skin: Wash with plenty of soap and water. Contains: 1,2-benzisothiazol-3(2H)-one, 2-methyl-2H-isothiazol-3-one, mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1). According to European Regulation 528/2012 this product is defined as a "treated article" (not a biocidal product) and contains the following biocidal substances: pyriithione zinc (CAS-No. 13463-41-7).
Declaration of ingredients	Polyacrylic resin, titanium dioxide, barium sulphate, water, additives, Preservative, film preservatives
Observe safety data sheets	Further details: See Safety Material Data Sheet (MSDS)
Category VOC	d

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VOC content (in gram per litre) 25

WHC 1 (weakly water-polluting)

Waste disposal Only completely emptied containers should be given for recycling. Dispose containers with residues of liquid product via waste collection point accepting old paints and enamels. Dispose dried hardened product residues as construction site/demolition/ municipal or domestic waste.

Container size

Content		EAN code	Article no.
10 L	RAL 9005 Tiefschwarz	4002822003302	957630
9,6 L	Basis 2	4002822003463	957676
2,5 L	RAL 7016 Anthrazitgrau	4002822003265	957628
2,4 L	Basis 1	4002822003425	957674
10 L	Weiß	4002822003067	957616
1 ST	Weiß	4002822003371	957663
2,4 L	Basis 3	4002822003562	957680
2,5 L	RAL 7035 Lichtgrau	4002822003227	957625
1 ST	Basis 1	4002822003449	957675
2,5 L	Weiß	4002822003081	957617
1 ST	Basis 3	4002822003586	957681
10 L	RAL 8014 Sepiabraun	4002822003289	957629
9,6 L	Basis 1	4002822003395	957673
2,5 L	RAL 3003 Rubinrot	4002822003241	957627
9,6 L	Basis 3	4002822003548	957679
2,5 L	RAL 8014 Sepiabraun	4002822003203	957624
2,4 L	Basis 2	4002822003487	957677
2,5 L	RAL 5014 Taubenblau	4002822003135	957620
2,5 L	RAL 9005 Tiefschwarz	4002822003180	957623
1 ST	Basis 2	4002822003517	957678
2,5 L	RAL 6005 Moosgrün	4002822003159	957621

System specific and system completing products

Diffundin-Sperrgrund LH

Diffundin-Bläueschutz

This data sheet cannot deal with all types of application arising in practice. Therefore, we cannot be held responsible for their content. These instructions do not release the purchaser / applicator from his responsibility of professionally examining the substrate and determining the suitability of the product in consideration of the project characteristics. In case of queries please request the technical assistance of ALLIGATOR FARBERWERKE.