Technical Data Sheet



BIOFA Wood Glazes, solvent-free Art. No. 5101, 5161-5185 coloured Art. No. 5175 farblos colourless Art. No. 5190 glaze additive for outside

Properties

These waterdilutable wood glazes contain natural raw materials and mineral UV protectors and are free of organic solvents. Add BIOFA Lasurzusatz (Glaze Additive) 5190 to obtain a weatherresistant film. The silk gloss finish is highly elastic, water-repellent, moisture-vapour permeable and characterised by its limited scratch resistance. It fulfills the Norm for toys EN 71, Part 3 and DIN 53 160 Mortar and Weld Tightness. Successfully tested according to EN 927-3 (outdoor weathering test) by the Institute for Window Technologies ift in Rosenheim, Germany. BIOFA Holzlasuren are suitable for all hard- and softwood outside and inside such as windows, shutters, doors, wooden facades, fences, wall cladding and timber framing. The coating is more colour intense if applied to roughly sawn wood. White wood glaze delays or covers the natural darkening of light-coloured wood inside. Do not use for furniture or in damp rooms exposed to direct water loads. Adhesion to old coatings is good after thorough sanding and careful clean-

BIOFA Holzlasuren colourless (5175) and white (5177) are **not** suitable for outside. **Note:** The final colour shade of the individual BIOFA glaze does not show before it has fully dried.

Attention! BIOFA products for outside are designed to round off the structural protection of wood. According to the BIOFA philosophy we do without hazardous substances in our products as far as possible. This is why the structural protection of wood must always be taken into consideration (DIN 68800-2(4)). In addition to the correct implementation of the construction, the correct choice of the wood type or quality is decisive. To this end, you must adhere to DIN EN 350-2 (Durability Classification) and comply with DIN 68364 (Resistance Classification). Where chemical protective treatment of the wood is unavoidable, please take DIN 68800 into account.

Ingredients:

Wood glaze

Water, linseed oil, ricinen oil, safflower oil, wood oil preparation, Turkish red oil, diatomaceous earth (5175 and 5177 only), fatty acid alcohol ester, boric salt, lactic acid casein, titanium dioxide, polysaccaride, Cobaltbis 2-ethylhexanoat and circonium octoate dryer, pigments depending on colour shade.

Glaze additive for outside

Water, zinc oxide, Turkish red oil, boric salt, polysaccharide.

Instructions for use:

1. Pretreatment

Substrates must be dry (wood moisture below 12%), stable, in good condition, solid, free of grease, oil, wax and dust. Sand and clean well adhering old coatings. Remove old, brittle coatings, sand and clean substrates. In case of wetting problems, rub down surfaces with ethyl alcohol. If protection from blue stain according to DIN 68 805 is required, pretreat surfaces with a standard insulating primer against blue stain. Wooden multilayer boards outside must be primed with a fungicide. Thoroughly wash wood containing tannic acid (e.g. oak) or tropical wood (e.g. framire) with white spirit or ethyl alcohol prior to the initial treatment and allow to fully dry overnight. Then carry out intermediate sanding.

2. Basecoat

Stir BIOFA Holzlasur thoroughly and apply by brush or spraying. Only use soft, long-haired split acrylic varnish or acrylic glaze brushes (no natural fibre bristles). Apply the wood glazes thinly and evenly in the wood's fibre direction and distribute evenly. Eliminate sags and runs immediately. Always finish enclosed areas and surfaces first.

Outside, BIOFA Lasurzusatz (Glaze Additive) for outside Art. No. 5190 must be added and mixed in thoroughly. Add a 40 ml container of BIOFA Lasurzusatz (Glaze Additive) for outside Art. No. 5190 to 750 ml containers of BIOFA Holzlasur,

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add 160 ml of BIOFA Lasurzusatz (Glaze Additive) to 2.5 l containers.

The glaze additive accelerates the drying process and increases the weather resistance of the finish.

Apply wood glaze to all sides of facade boards of exterior cladding prior to their assembly.

Inside, add 10-30% of BIOFA Innengrundierung (Interior Primer) 5005 (mixing up to max. 1:1 is possible) to the wood glazes to improve drying and sandability.

Allow the 1st coat to fully dry, sand the surface with fine abrasive paper (grit size 240) or a fine sanding pad without harming the edges and remove all sanding dust thoroughly.

Coloured wood glazes can be mixed with each other at any desired mixing ratio or, inside, be mixed with colourless wood glaze.

3. Intermediate coat and topcoat

Outside, mix the 2nd and 3rd coat with glaze additive for outside and apply undiluted. Inside, proceed as described above for priming, and apply as many coats as desired. In case of wetting problems of the subsequent coating, sand the surface finely and rub down with ethyl alcohol.

Important: Carry out a preliminary test! Observe VOB (Contract Procedure for Construction Work)! Provide optimum fresh air circulation during product application and drying!

Do not use under 12 °C, in high humidity or influences of humidity or in direct sunlight on hot summer days. Mix containers from different charges before use!

Important notes:

Place brushes in undiluted BIOFA Brush Cleaner 0600 and wash thoroughly with water prior to renewed use during breaks and after work.

The viscosity of wood glazes mixed with glaze additive may increase 2-3 weeks after the application. In this case, add approx. 5-10% of water prior to further treatment.

Do not apply below 12°C, in high air humidity, in case of moisture impact or in direct sunlight on hot summer days.

Check durably elastic sealing compounds (e.g. on window frames) for compatibility.

Apply 3 coats to windows inside and outside.

New wood outside must be provided with a basecoat and intermediate coat within 14 days or prior to its installation. The topcoat must be applied within 4 weeks after the installation.

If the coatings are applied appropriately, the renovation cycle is 2-4 years depending on the stress level. It may be necessary to renovate extremely stressed surfaces earlier.

Attention! As solvent-free wood glazes are purely oil-based, the surface may still be slightly tacky days and weeks after the application although it is completely dry and blocking-resistant. However, this does not affect the coating's quality. Inside, this tack can be eliminated by adding Trocknungsbeschleuniger (Drying Accelerator) 5191 as described above.

Spray application

Only apply by compressed air system and cup spray gun. Air pressure: approx. 3 bar, nozzle diameter: at least 1.7 mm. The wood glaze can be diluted with up to 30 % of water for inside and with up to 10 % of water for outside. It is absolutely necessary to sieve opened containers prior to renewed use.

4. Cleaning of tools

Place tools in undiluted BIOFA Brush Cleaner 0600 immediately after use and wash thoroughly with water the next day. If necessary, repeat the cleaning process until the bristles are completely free of oily residues. Rinse spray guns thoroughly with a mixture of 1 part of Brush Cleaner and 10 parts of water. Use BIOFA Verdünnung (Thinner) 0500 in problematic cases!

5. Cleaning and maintenance of surfaces

Only clean surfaces treated with BIOFA Holzlasur with lukewarm water and mild, diluted cleaner, e.g. NACASA Universalreiniger (Universal Cleaner) 4010. Do not use acrid cleaners, soap suds, ammonium solutions and highly abrasive cleaning agents, detergents or devices (micro fibre)!

We recommend to maintain weathered dimensionally stable components such as windows, doors, with NACASA 4010 once or twice a year from the second year after the application.

Check and immediately remedy any minor damages that are identified. Do not put off any necessary renovating coats too long before damages such as mildew, blistering, fading, flaking, cracking, etc start to occur

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Drying

The coating is dust dry after 6-12 hours, sandable and recoatable after 24 hours ($20 \,^{\circ}\text{C}$ / 50-55% rel. air humidity).

Low temperatures, high air and surface humidity and use on wood containing tannic acid and tropical wood may slow down the drying process.

Consumption/spreading rate per coat

The consumption rate strongly depends on the substrate's absorbency and nature. The following average values apply to smooth, sanded wood:

- 1. Consumption: 80-110 ml/m² or 9-12 m²/l
- 2. Consumption: 60-80 ml/m² or 12-16 m²/l
- 3. Consumption: 55-75 ml/m² or 13-18 m²/l

The consumption rate may be 2-2.5 times higher on roughly sawn wood!

Storage

Cool, dry, above freezing point and sealed airtight. Use up opened containers soon. Skin formation is possible. Remove skin prior to use. If necessary, sieve glaze.

Minimum shelf life of unopened containers: 1 year!

Container size

 $375\ ml\,/\,750\ ml\,/\,2.5\ l\,/\,10\ l$ tin cans or tin buckets varnished inside.

Safety instructions for Wood Glazes 5101, 5161-5185

Warning! Working materials and clothing soaked with product should be stored in an airtight metal container or wet down and left to dry on non-flammable surfaces— (danger of self-ignition!) The product itself is not self-igniting but is flammable.

Contains Cobaltbis(2-ethylhexanoat). The product itself is not self-igniting, but is flammable. Contains cobaltbis(2-ethylhexanoate). Can cause allergic reactions. Keep out of reach of children. Do not inhale vapours or aerosol. Use only in well-ventilated areas. When heating or spraying, explosive vapour/air mixtures can be generated! Wear fine dust mask when sanding or grinding. Wear adequate skin protection when preparing! There may be an odour typical of the natural raw materials!

Disposal Entsorgung for Wood Glazer 5101, 5161-5185 and Glaze Additive 5190

Dispose of liquid product residue at collection points for old paints/varnishes or dispose of according to locally applicable regulations. Small quantities of residue and soaked work materials can be disposed of along with domestic waste after drying.

Only recycle cleaned or completely empty packaging with cured deposits or dispose of according to locally applicable legal regulations. Uncleanable packaging and packaging not emptied appropriately must be treated and disposed of like the product!

VOC identification according to Decopaint Directive and ChemVOCFarbV (Directive on the limitation of emissions of volatile organic compounds due to the use of organic solvents in paints and varnishes): 5101 5161-5185

EU limit value (cat. A/e): 130 g/l (2010) 5161-5185 contains 1 g/l VOC.

Waste Code according to European Waste Catalogue: 08 01 11*

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