# Technical Datasheet





Item no. 5201, 52011

# Wood Varnish Aqua

solvent-free 375 ml - 1 l - 2,5 l - 10 l

















Primer and finishing coat for interior fittings, exterior furniture surfaces, windows, doors and other exterior wooden parts.

For absorbent surfaces made of wood, three-layer boards, FU, MDF and OSB boards.

- Crystal Clear Ingredient Declaration (www.biofa.de)
- Made from natural raw materials
- 96% renewable and mineral ingredients
- Water-dilutable
- Transparent and semi glossy
- Breathable and anti-static
- Water and dirt repellent
- Meets DIN 53160 (fastness to perspiration and saliva)
- Meets En 71,3 (safety of chrildren's toys)







Indoor air emissions

## **Properties:**

The water-thinnable wood varnish contain natural raw materials such as vegetable oils, fatty acids and mineral pigments, are free of organic solvents and consist of at least 96% renewable and mineral raw materials. They form weather-resistant, silk-glossy surfaces, are highly elastic, water-repellent, open to diffusion and have been successfully tested in our own technical weathering facilities and in outdoor weathering. Suitable for hard and soft woods in exterior and interior areas such as windows, doors, wooden facades, fences, half-timbering, interior fittings, exterior furniture surfaces, etc. Also suitable for the outer surfaces of bee hives. On rough sawn wood, the coating becomes more colour intensive. Wood Varnish Agua white delays or covers the darkening of light-coloured woods in interior areas. Do not use on interior furniture surfaces or in damp areas exposed to direct water. Wood Varnish Agua can be tinted ex works in many shades according to the BIOFA Filuc color chart. Glaze 5201 colourless is not suitable for exterior use.

**Notice:** The glaze shades only obtain their final color appearance after complete drying.

Attention! BIOFA products are intended to round off structural wood protection. Since we try to avoid substances that are hazardous to health as far as possible in our products, structural wood protection must always be taken into account during planning and execution (DIN 68800-2(4). In addition to the right construction, the right choice of wood type or quality is decisive (DIN EN 350-2 durability classes and DIN 68364 resistance classes must be observed). Where chemical wood preservation is unavoidable, consider DIN 68800.

# **Ingredients:**

Water, ricin oil, safflower oil, wood oil, binder emulsion based on soya oil fatty acid, Turkish red oil, pigments according to shade, polyhydric alcohol, wetting agent, lactic acid casein, surface additive, thickener, manganese and iron driers, boron salt, silver sulphate.



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# **Processing steps:**

- 1. Pre-treatment: The substrate must be dry (wood moisture below 12%), sound and clean. Sand and clean old coatings with good adhesion and check for suitability. Remove old, loose coats, sand and clean the substrate. Sand greyed, weathered wood surfaces down to the sound, load-bearing wood and clean thoroughly. Remove exuding wood ingredients such as resins or resin galls. Where required or necessary, pre-treat exterior areas with commercially available blue stain barrier primer. Multi-layered exterior wood panels must be primed with a fungicide. Wash off tannic acid-containing woods (e.g. oak) or tropical woods (e.g. framire) thoroughly with turpentine substitute or methylated spirit before initial treatment, allow to dry well overnight and carry out intermediate sanding.
- **2. Priming coat:** Stir BIOFA Wood Varnish Aqua thoroughly and apply by brushing or spraying. Only use soft, long-haired, split acrylic varnish or acrylic glaze brushes (no natural fibre bristles). Apply the wood stain thinly and evenly in the grain direction of the wood and brush out well. Always drive out runners and noses immediately. Always finish painting completed fields and surfaces first. For exterior cladding, apply the wood stain to all sides of facade boards that have not yet been installed.

End-grain wood surfaces should be specially protected against water absorption by painting several times.

In the interior, up to 10% BIOFA Natural Shellac Enhancer 5005 can be added to the wood varnish for better drying and sandability. After the first coat has dried, sand the surface with fine sandpaper (240 grain) or a fine sanding pad without damaging the edges and remove sanding dust well.

The colored wood varnish can be mixed with each other in any ratio or with colorless stain in the interior.

**3. Intermediate and final coat:** For exterior use, apply 2 more coats undiluted. For interior use, apply as required. In case of wetting problems of the next coat, finely sand the surface and rub with methylated spirit

During breaks in painting and after completion of the painting work, place the brush in undiluted BIOFA Brush Cleaner 0600 and rinse well with water before using again.

Check permanently elastic sealing compounds (e.g. for windows) for compatibility.

Windows and other weathered, dimensionally stable components should always be coated three times, both inside and outside. New wood outdoors must receive a primer and intermediate coat within 14 days or before installation. Apply the final coat within 4 weeks after installation.

If the coating is applied optimally, the durability is at least 2 years, depending on the exposure (weather side, type of wood, color shade, environmental influences). In the case of extremely heavily stressed surfaces, it may be necessary to repaint earlier.

#### Processing by spraying

Only apply with a pure compressed air system and a cup gun. Air pressure approx. 3 bar, nozzle diameter min. 1.7 mm. The wood stain can be diluted with water up to 30 % for interior use and up to 10 % for exterior use.

**Important:** Carry out preliminary tests! Ensure thorough ventilation during application and drying indoors. Do not apply at temperatures below 12 °C, in high humidity or under the influence of moisture, or in direct sunlight on hot summer days. Mix containers with the same colour shade from different batches before application! Do not bring into contact with plasticised plastics, sealants or sealing profiles! The coatings are thermoplastic and therefore only have limited stackability and block resistance at elevated temperatures and pressures!

- **4 Cleaning the tools:** Immediately after use, place the tools in undiluted Brush Cleaner 0600 and rinse thoroughly with water the next day. If necessary, repeat the washing process until the bristles are free of oily residues. Thoroughly rinse sprayers with a mixture of 1 part brush cleaner and 10 parts water. In stubborn cases, use BIOFA Thinner 0500.
- **5. Cleaning and care of the surfaces:** Clean the glaze surfaces only with lukewarm water and a mild diluted cleaning agent, such as BIOFA NACASA Universal Cleaner 4010. Sharp cleaners, soap suds, ammonia solutions as well as strongly abrasive cleaning agents and equipment (microfibres) must be avoided at all costs.

We recommend checking weathered dimensionally stable components such as windows, doors, etc. 1-2 times a year from the 2nd year after cleaning with NACASA 4010 and repairing minor damage immediately. Do not postpone necessary renovation coats for too long before damage such as fungal attack, blistering, greying, flaking, cracking, etc. occurs.

To achieve a longer durability of the glaze surfaces, we recommend maintenance with BIOFA Glaze Refresher 5295 (please refer to the Technical Data Sheet for 5295).

# **Recommended Equipment:**





- **1. 009909 / 009910 /** Flat brush , professional quality 40 mm / 60 mm for waterbased products
- **2.0600**BIOFA Brush Cleaner for cleaning working equipment

# Technisches Merkblatt





Art. Nr. **5201, 52011** 

### **Drying:**

The coating is dust-dry after 5-8 hours and sandable and recoatable after 16-24 hours (20°C and 50-55 % relative humidity). Drying delays are possible due to low temperatures, high air or substrate humidity as well as on woods containing tannic acid and tropical woods.

## Consumption/yield per coat

The consumption quantity is strongly dependent on the absorbency and condition of the substrate. On smooth, sanded wood, the following average values result:

1st application: 80-110 ml/m2 or 9-12 m2/l 2nd application: 60- 80 ml/m2 or 12-16 m2/l 3rd application: 55-75 ml/m2 or 13-18 m2/l

On rough-sawn wood the consumption can be 2-2.5 times higher!

### **Storage:**

Store in a cool but frost-free, dry and tightly closed place. Use opened containers as soon as possible. Skin formation possible. Remove before using again. Sieve the stain if necessary!

Minimum shelf life of unopened containers: 2 years!

#### **Container:**

Metal can

## **Disposal:**

Deposit liquid product leftovers at collection point for old paints/old varnishes, and/or dispose in compliance with statutory regulations. Minor leftovers and soaked processing materials can be disposed in the household waste after drying out. Only recycle fully emptied and cleaned containers. Not completely emptied and cleaned containers must be treated and disposed like the product!

German Waste Classification Directive [Abfallverzeichnis Verordnung - AVV] waste code iaw. European waste classification: 08 01 12

# Hazard warnings and safety instructions:

Caution! Spraying may produce hazardous respirable droplets. Do not inhale aerosol or mist.

Water work materials and clothing soaked with product and allow to dry spread out on a non-combustible surface - (risk of spontaneous combustion due to high content of drying oils!). Product itself is not self-igniting! Keep out of the reach of children. If medical advice is needed, have packaging or label ready. Protect eyes and skin from contact. In case of contact with eyes or skin, wash off with plenty of water. When spraying, do not inhale the spray mist and wear suitable respiratory protection (combi filter A2/P2) and protective goggles. Use respiratory protection (dust filter P2) for grinding work. Do not allow to enter drains, water courses or soil. A typical odour of the natural raw materials is possible!

Safety data sheet available on request.

VOC labeling law. Decopaint directive and ChemVOCFarbV:

EU threshold (Cat. A/e): 130 g/l (2010) 5201, 52011 contains max. 15 g/l VOC

**GISCODE:** BSW 10

# **SHI** product passport:

Healthy living - find products - certify buildings

All relevant product qualities regarding health compatibility and environmental impact of the product, which are required to achieve sustainable building certifications, can be found in the SHI product passport.

This QR code will take you to the SHI product passport for BIOFA Wood Varnish Aqua 5201, 52011:



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