

The topical subject

Universal pretreatment of woods rich in active substances



AURO Special primer No. 117

Wood: a vast empire of substances

Wood is a natural material with a complex structure. Besides the main components cellulose, lignin and tannin, to be found in all types of wood, wood also contains a large number of other components depending on its type and origin, e.g. tanning agents and colourants. Due to such natural wood substances, certain peculiarities must be taken into account when coating wood with water-based coating materials such as stains or lacquers.

Colour in wood: both a blessing and a curse

The colouring components of some (usually dark) types of wood are often soluble in water. As opposed to solvent based coating materials, these colourants are etched in the wood by the impact of water-based paints and lacquers and colour the coating. This may become highly visible in the case of light colour shades (especially white and pastel colours). This results in more or less strong yellowish, reddish or brownish discoloration which is very hard to cover up, even with repeated application of coating materials.

Some wood resists coatings and drying

Moreover, some types of wood are extremely "greasy" and thus very difficult to impregnate. This may cause wetting and adhesion problems if water-based coating materials are applied to such woods. In addition, the use of oxidatively drying, water-based coating materials on types of wood rich in tanning agents is aggravated by (sometimes drastically) longer drying times. This is caused by a "blockade" of the drying agents in the coating by the tanning agents.



Problem solution: special primer

The appropriate coating of woods rich in active substances therefore requires a special undercoat to prepare the surfaces for the application of AURO Aqua products. The ideal solution is our solvent-based AURO Special primer (117), which was launched together with our solvent-free, water-dilutable AURO Aqua products. This colourless primer is used beneath **AURO clear lacquers (251/261/267)**, **AURO gloss paints (Nos. 253/250/260)**. It simply replaces our **Hard primer (127)**. Note: Intermediate sanding only to smoothen the surface, avoid "sanding through" as this would reduce the protective effect. Pretreatment with Special primer (117) is also required before applying **Wood stain (160)** to woods rich in active substances.

Compatibility with AURO Aqua guaranteed

Although diluted with solvent, the primer is based on the same binders as our Aqua products, so that compatibility with these products is guaranteed. Like all AURO products, No. 117 is free of biocides, which is why the notes in the Topical subject sheet "Protecting woods from mould and blue stain" should be observed.

As always: the proof of the pudding is in the eating!

Preliminary tests should be carried out on all other types of wood and wooden materials (e.g. medium-density hardboard, OSB boards) of unknown origin and on materials whose origin or pretreatment is unknown. In general, Special primer (117) is suitable for all types of wood and wooden materials. Compared to our water-dilutable **Hard primer (127)**, however, Special primer (117) always brings out better the natural grain structure and honey colour of the wood in the case of colourless surface treatments.

Examples of woods poor and rich in active substances

The following (incomplete) list of domestic and "exotic" woods will help you to decide whether Special primer (117) is required.

Types of wood without active substances

Special primer (117) is not required!

Maple, Birch, Beech, Alder, Victorian Oak, Spruce, Pine, Robinia, Sipo, Fir, Elm.

Types of wood with discolouring active substances and "greasy" woods

Special primer (117) is recommended (especially for light-coloured subsequent coatings)!

Ash, Bangkirai, Red Cedar, Oregon Pine, Hemlock, Larch, Meranti (Dark Red), Merbau, Niangon, Pitch Pine, Teak.

Types of wood rich in tanning agents (also including discolouring substances)

Special primer (117) is required!

Afzelia, Oak (also Cork), Framiré, Iroko, Chestnut, Cherry, Okume ("Gaboon"), Redwood, Cedar.

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