

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 colorants. 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 colorants 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 oxidative drying, water-based coating materials on types of wood rich in tanning agents is aggravated by the (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 No. 117, which was launched together with our solvent-free, water-dilutable AURO Aqua products.

This colourless primer is used beneath clear lacquers (Nos.251/261/267), undercoats and gloss paints (Nos. 253/250/260). It simply replaces our Wood primer No. 124 and Hard primer for floors No. 127 prior to wax treatments (Nos. 184/187).

Note: Intermediate sanding only until smooth, avoid "sanding through" as this would reduce the protective effect. Pretreatment with Special primer No. 117 is also required before applying Wood stain No. 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 publication "Subject: Protecting woods from mould and blue stain" should be observed.

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 No. 117 is required.

1. Types of wood without active substances: Special primer No. 117 is not required!

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

2. Types of wood with discolouring active substances and "greasy" woods: Special primer No. 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.

3. Types of wood rich in tanning agents (also including discolouring substances): Special primer No. 117 is required!

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

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 No. 117 is suitable for all types of wood and wooden materials. Compared to our water-dilutable primers No. 124 and No. 127, however, Special primer No. 117 always brings out better the natural grain structure and honey colour of the wood in the case of colourless surface treatments.

More information can be found in the Technical Data Sheet. It can be downloaded from www.auro.com.

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