Technical Information



Wood stains: classic solid oak treatment using wood lye

Description/properties:

- Wood lye is used to create a typically classic lye effect.
- A complex reaction between the wood lye and the tannin in the oak creates a natural, attractive grain.
- The shade and effect which results from using the lye depends greatly, therefore, on the quality of the wood and the work technique.

Applications:

- Wood lye is mainly used to treat household and seating furniture, and is also used for interior design.
- Kitchen and wet room furniture as well as surfaces that are walked on, such as parquet flooring and steps, cannot be stained with lye due to the high rate of deterioration of these surfaces. If the coating film deteriorates, this may lead to water damage (from water used to clean, condensation, water vapour) which can reactivate the remaining lye in the wood and cause the coating to peel away and make the wood turn grey.
- Only European white oak is used. Red oak, or oak from American states, is unsuitable because they do not contain tannin.
- Veneer cannot usually be treated with wood lye due to the special treatment process required for wood lye and other classic lyes. The aggressivity of the wood lye can also cause the veneer to peel away either immediately or later. Further, it is possible that water used to clean the wood may soak into the open sides/edges of the substrate begin used (chipboard, MDF) which can affect the accuracy of the furniture's dimensions.
- If it is not possible to avoid using veneer, special wood lyes can be used, such as HWD 211/BL 4-20023, which are less aggressive and do not have to be washed afterwards. The characteristic wood lye effect is, however, less prominent when using this kind of wood lye.
- Apart from where a special wood lye is needed, HWD 204/BL 4-20022 is usually the preferred wood lye.

1 litre of wood lye is enough for approx. $5-6 \text{ m}^2$.

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Treatment:

Personal protective gear:

• Rubber apron, gloves and goggles.

Wood preparation:

- Remove any sapwood
- Sand down using 100-120 grit sandpaper
- Remove dust

Important notice:

Test how you want to apply the wood lye to the raw timber!

Apply wood lye:

- Apply HWD 204/BL 4-20022 wood lye using a plastic sponge and leave it soak in for 15 minutes.
- Then wash away the remaining lye using a high pressure cleaner.

Drying:

About 24 hours at room temperature.

Further treatment:

- Due to the chemical properties of the wood lye, it is certainly advisable to varnish the wood using PUR varnish (only with a lightfast hardener).
- Oils and other "acidic" systems are not suitable for coating the wood.

For highly strict criteria:

- 2 x UNA-PUR DE 550 mixture ratio 10:1 with PU Hardener DR 4070
- after allowing it to dry for 5 hours, sand down using 280 grit sandpaper

For a natural effect:

- 1 x UNA-PUR DE 550 mixture ratio 10:1 with PU Hardener DR 4070
- Leave to dry overnight.
- Sand down lightly using 400 grit sandpaper
- Then apply a thin coat of 1 x GE 100 Proterra CERA Wachsbalsam using a gauze ball.

Brush down once dry.

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Possible variation in shade:

• Lightening the wood lye by thinning the mix out with water, as is possible with other water-based lyes, is usually ruled out in this case (loss of or reduced lye effect).

The following method can be used:

- Apply the wood lye as described under "apply wood lye".
- Leave to dry overnight.
- Then apply BW 831 lightening agent using a plastic sponge.
- Once dry, see "further treatment"
- Note: If the wood is not light enough, repeat the process.
- Important: Test the wood stain first!

Bring out the shade:

- The shade of bleached wood changes due to light and biological processes.
- This needs to be taken into account when you want to nuance certain shades using wood stain and/or coloured varnishes, so that the look of the wood does not appear strange or unnatural.
- Therefore, we recommend choosing shading that is similar to the shade of the wood lye used.
 - Premium BE 5 oak wood stain is suitable for staining the wood before adding wood lye to oak.
 - Once dry (approx. 3-4 hours) apply the wood lye as described under "apply wood lye".
 - Different wood stains can be mixed together to create other shades.
 - So that you avoid getting too far away from the effect the wood lye and stain should create, it is advisable to dilute coloured wood stains with water before treating the wood.
 - It is also possible to create minor nuances in shade once you have bleached the wood by using diluted premium oak wood lye in the right colour, for example, or by gently colouring the varnish system with the shade of the wood lye.
- For suitable varnishes, see "further treatment".
- Important: Test the wood stain or varnish beforehand!

Please note:

The present information is advisory in nature. It is based on the best knowledge and on careful inspections in accordance with the current level of technology. Legal obligation cannot be derived from this information. We also refer to our terms and conditions.

The Material Safety Data Sheet according to the regulation (EC) No. 1907/2006 is available.

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