Technical Information



Staining: Smoking oak

Products required:

Liquid ammonia BZ 840 / HBV 241

Description/features:

Smoking oak is a method of treating oak that has been known for hundreds of years. It has become particularly well-known due to the gradual browning of oak furniture in farmhouses, which comes about as a result of the ammonia gases from the animal excrement.

The smoking method works in a comparable way to lye-treatment, the difference here being the typical colouring which is achieved exclusively due to the ammonia gas. The resulting colour tone and textural, positive effect is only caused by the activation of wood contents containing tannin. As a result, only sought-after tannin-rich European white oak is suitable for smoking. Red oak and many American oak species cannot be used on account of the fact that their tannin content is too low. Sapwood must be removed without leaving any residues.

Smoking has a number of advantages over lye-treatment:

- no roughening of the wood, as it is not made damp/wet
- easier control of the depth of colour by extending/reducing the application time
- coating with Hydro lacquers also possible
- no alkaline residues remaining in the wood after sufficient "degassing time"
- substantially deeper penetration into the wood, from several millimetres to centimetres depending on the application time

Areas of use:

The smoking method is still used today for the treatment of living room furniture and seating furniture.

Treatment:

Personal protective equipment:

Rubber apron, gloves and safety goggles.

Wood pre-treatment:

- remove any sapwood
- sand with grain 100 120
- remove dust

Special instructions:

- Apply a test coating following the complete procedure on the raw wood used!
- When using liquid ammonia, the safety information in the safety data sheet and trade association regulations must be observed!

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Smoking:

- The parts to be smoked are placed, separated from one another, in a sealable space (e.g. crate covered with PE film).
- All metallic parts must be removed on account of the risk of discolouration.
- The liquid ammonia BZ 840 / HVB 241 is poured into large plastics bowls and the space is sealed.
- The smoking process is carried out until a sufficient depth of colour is achieved and is ended by ventilating the space and removing the parts.
- Before further treatment, the smoked parts should be left in a well-ventilated location for several days to allow evaporation in order to expel excess ammonia gas.

Coating:

Lacquer coating can be performed in the usual way with PUR lacquers. Before treating with furniture wax, it is recommended that the wood be impregnated with a diluted, dull matt PUR lacquer in order to achieve sufficient water-resistance.

AC-lacquers and other acid-hardening lacquers must not be used.

Note:

This information is for advice and is based on the best knowledge available and careful research in line with the current state of the art. This information cannot be held as legally binding. We also refer you to our terms and conditions of business.

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

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