

Technical Data Sheet

KUNOS Natural Oil Sealer No. 244



Application range	For interior solid timber, e.g. furniture and floors as well as Multiplex. Only to a limited extent suitable for OSB and veneers. Not suitable for plywood, stained wood or cabinet interiors.																					
Technical qualities	Reinforces and deepens the natural color of the wood grain. Produces a matt surface after one coat and a satin glossy finish after 2 - 3 coats. Water-resistant. Complies with the German Industrial Norm DIN 53 160 for color fastness when exposed to perspiration and saliva. Complies with the German Industrial Norm DIN EN 71 Part 3, suitable for toys. Elasticity according DIN 55669. Abrasion resistance according ASTM D 9680. KUNOS Natural Oil Sealer No. 244 was rated as very good in the journal "Ökotest: guidebook construction, housing, renovation" edition 5/2003.																					
Full declaration	Depending on color in different proportions: Linseed oil, linseed oil - stand oil - natural resin ester, linseed oil - wood oil - stand oil, highly transparent iron oxide, titan dioxide, natural resin glycerol ester, linseed oil - stand oil, orange oil, isoaliphates, silicic acid, micronized wax, pine oil, rosemary oil, dehydrated amino sugar and drying agents free of lead Ca, Co, Mn, Zr).																					
Colors	<table><tr><td>002 Clear</td><td>088 Smoked oak</td><td>428 Cherry honey</td></tr><tr><td>054 Mahogany</td><td>089 Antique oak</td><td>429 Cherry intensive</td></tr><tr><td>062 Walnut</td><td>101 Black</td><td>431 White oak</td></tr><tr><td>064 Dark walnut</td><td>204 White</td><td>465 Cherry</td></tr><tr><td>069 Tobacco</td><td>425 Elm</td><td>748 Slate grey</td></tr><tr><td>076 Oak</td><td>426 Elm grey</td><td>794 Agate grey</td></tr><tr><td>082 Rosewood</td><td>427 Elm dark brown</td><td>922 Silver grey</td></tr></table>	002 Clear	088 Smoked oak	428 Cherry honey	054 Mahogany	089 Antique oak	429 Cherry intensive	062 Walnut	101 Black	431 White oak	064 Dark walnut	204 White	465 Cherry	069 Tobacco	425 Elm	748 Slate grey	076 Oak	426 Elm grey	794 Agate grey	082 Rosewood	427 Elm dark brown	922 Silver grey
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Dilution	Ready to use for painting. For spraying add max. 5 – 10 % SVALOS Spray Thinner No. 293. For dipping adjust with max. 10 – 20 % SVALOS Spray Thinner No. 293.																					
Application	Only with a brush, flat brush or shorthair roller for all colored applications. With color clear also possible by spraying, dipping, with a cloth-bale, single disc rotary machine or with an orbital sander/disc-type sander. Usage at temperatures above 16°C (61°F).																					
Coverage	Determine the exact coverage by doing a test coat. First coat: 45 ml/m ² i.e. 1 liter (1.06 quart.) is sufficient for appr. 22 m ² (237 ft ²) Second coat: 11 ml/m ² i.e. 1 liter (1.06 quart.) is sufficient for appr. 90 m ² (968 ft ²) Third coat: 4 ml/m ² i.e. 1 liter (1.06 quart.) is sufficient for appr. 250 m ² /l (2691 ft ²)																					
Cleaning	Clean equipment immediately after use with SVALOS Thinner No. 222 or LEVO Brush Cleaner No. 997.																					
Drying time	At 23°C (73°F) and 50% relative humidity: First coat 12 hours, subsequent coats 24 hours. Final durability is reached after 4 weeks. At higher temperatures, please consider shorter drying times and polish more quickly. At lower temperatures and higher humidity, please consider longer drying times as given above.																					
Specific gravity	Approximately 0.89 g/ml.																					
Safety advice	<p>Ensure good ventilation during and after application. Always be sure to store and then dispose of cleaning cloths, polishing pads, sponges, etc. that are still wet or even slightly moist with KUNOS Natural Oil Sealer No. 244 in an airtight metal container or in water, as there is a danger of spontaneous combustion caused by the plant oil content.</p> <p>The product itself will not combust spontaneously.</p> <p>P102 Keep out of reach of children. P301+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a doctor. EUH066 Repeated exposure may cause skin dryness or cracking. EUH208 Contains limonene, Cobalt (2+) salts. Can cause allergic reactions.</p>																					
Disposal	According to locally regulated laws.																					
Container sizes	0.1 l; 0.25 l; 0.375 l; 0.75 l; 2.5 l; 10 l; 30 l; 200 l.																					
Storage	Cool and dry. Shelf life: unopened at least 4 years. Transfer unused product into a smaller container for storage in order to minimize excess air.																					

How to use

KUNOS Natural Oil Sealer No. 244

Wood

Preparation

Wood must be dry (moisture content below 12 %), solid, able to absorb, free of resin and dust. Sand gradually and in accordance with the gradation of the sandpaper grain, for **furniture** up to 240 grain, exception for oak up to 180 grain, for **floors** up to 120 grain with a roller grinder (grinding device with sandpaper roller), and then up to 180 grain with grit.

Application

Stir thoroughly. Remove possible skin formed on surface. Test application! Depending on surface requirement, absorbency and kind of wood: apply 1 - 3 thin coats until a coating layer has developed. Sand after the 1st coat to reach an especially smooth and high impact surface, by furniture with a pad, a fleece or something similar to at least 280 grain. For floors use a grain less pad (e.g. beige or a felt pad).

The wet films of the 1st (generous) and the 2nd coat should be polished in with an orbital sander, single disc rotary machine or a lint-free cotton cloth after about 10 to 15 minutes. The 3rd coat should, after spreading little drops, approx. 1 teaspoon per m², be polished in immediately. On floors and high impact surfaces, 3 coats should be applied with a flat brush, a shorthair roller, or a single disc rotary machine.

All colored applications are to be done only with a brush or roller. Do not polish and spread excess oil after 15 minutes onto still absorbent areas.

OSB

After pre-sanding with a sanding grit 120 – 180 grain (not with a roll grinding machine, as too much of the functional surface will be milled away), apply 3 very thin coats of KUNOS Natural Oil Sealer No. 244 clear or colored. Determine the exact amount needed by doing a test application.

Renovation of old floors

Pore-clogged coatings (oil-based paints, lacquers, multi-layered coatings) and wax coatings must be sanded or stripped until there is no old residue. Open-pored old coatings must be cleaned and, if necessary, slightly sanded. Test the surface for absorbency and sustainability. Preparation and application are according to the wood description above.

Cleaning and care

Clean with TRENA pH-Neutral Cleaner No. 556 diluted in water. Wipe it with a moist, but not wet cloth. Every 4th to 5th cleaning should be done with GLANOS Natural Liquid Wax Cleaner No. 559 instead of TRENA.

After-treatment with KUNOS Maintenance No. 1862 or KUNOS Maintenance No. 1893, if the surface looks matt.

Important tips

The more finely the sanding, the lower the coverage. This also reduces the tendency of “wear and tear” and soiling of the surface. When sanding too coarse, the surface tends to water-sensitivity and the possibility of green coloration increases.

The longer KUNOS No. 244 has a chance to interact, the stronger is the reinforcing and deepening of the natural color of the wood grain. In the grooves, KUNOS Oil No. 244 should be completely removed.

Discoloration is possible by water if the wood is not completely saturated with KUNOS Natural Oil Sealer, or where a coating layer did not form.

A more homogeneous surface appearance is achieved with an after-treatment with ALISA Hard Wax No. 302.

For veneers, with a minimum layer thickness of 0.5 mm after sanding, the 1st coat is to be applied sparingly, and the wet film has to be removed after 5 minutes. KUNOS is not suitable for veneers with a thickness less than 0.5 mm.

Adhesives and glues have to be completely dry before applying the 1st coat.

To preserve the color of light woods like maple or birch, the first coat is done with color white. Thereafter 2 applications with KUNOS Natural Oil Sealer Nr. 244-002 clear.

These directions are the result of long years of research and practical testing. They are backed by our most current expert information. New findings may invalidate this information. The latest version is available on our website at www.livos.de. This data sheet is meant to serve as information and instruction. No legal liability should be interpreted from it. In case of doubt, please contact the retailer, wholesaler, or manufacturer.

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