



## Technical Data Sheet

# KUNOS Natural Oil Sealer No. 244

<b>Application range</b>	For interior solid timbers such as furniture and floors. Only partially suitable for OSB, Multiplex and veneers. Not suitable for plywood, stained wood or cabinet interiors.		
<b>Technical qualities</b>	Reinforces and deepens the natural color of the wood grain. After 1 coat a mat surface and after 2 - 3 coats it produces a silky-glossy film. Water-resistant according to German Industrial Norm DIN 68 861 part 1. Complies with DIN 53 160, fast to perspiration and saliva. DIN EN 71 part 3 certified, suitable for toys. KUNOS Natural Oil Sealer No. 244 was rated <b>very good</b> by the German magazine "Ökotest: Ratgeber Bauen, Wohnen, Renovieren" edition 5/2003.		
<b>Full declaration</b>	Depending on color in different proportions: Linseed oil, linseed oil - stand oil - natural resin ester, linseed oil - wood oil - stand oil, highly transparent iron oxides, titanium 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).		
<b>Colors</b>	002 clear 054 mahogany 062 walnut 064 dark walnut 069 tobacco 076 oak	082 rosewood 088 smoked oak 089 antique oak 101 black 204 white 425 elm	426 elm grey 427 elm dark brown 428 cherry honey 429 cherry intensive 431 white oak 465 cherry
<b>Dilution</b>	SVALOS Thinner No. 292.		
<b>Application method</b>	With a brush, spreading with an applicator or with a short haired roller. By spraying, dipping, with a wadded cloth, or with a polishing machine (roller coater), or an eccentric sander at temperatures above 16°C (61°F).		
<b>Coverage</b>	To be determined by doing a test application. First coat: 45ml/m <sup>2</sup> , i.e. 1 liter (1.06 quart.) is sufficient for approx. 22 m <sup>2</sup> (237 ft <sup>2</sup> ) Second coat: 11ml/m <sup>2</sup> , i.e. 1 liter (1.06 quart.) is sufficient for approx. 90 m <sup>2</sup> (968 ft <sup>2</sup> ) Third coat: 4ml/m <sup>2</sup> , i.e. 1 liter (1.06 quart.) is sufficient for approx. 250 m <sup>2</sup> /1 (2 690 ft <sup>2</sup> ) For spraying, add max. 5-10 % SVALOS Dipping and Spray Thinner No. 293. For dipping, use max. 10-20% SVALOS Dipping and Spray Thinner No. 293.		
<b>Cleaning</b>	Clean equipment immediately after use with SVALOS Thinner No. 222 or LEVO Brush Cleaner No. 997.		
<b>Drying time</b>	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.		
<b>Specific gravity</b>	Approximately 0.89 g/ml.		
<b>Safety advice</b>	Provide enough ventilation after application. <div style="background-color: #e0e0e0; padding: 5px;">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.</div> The product itself will not combust spontaneously. Contains limonene, wood oil and Cobalt (2+) salts. Can cause allergic reactions. S 2 Keep out of the reach of children. S 62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.		
<b>Disposal</b>	According to locally regulated laws.		
<b>Container sizes</b>	0.1 l; 0.25 l; 0.75 l; 2.5 l; 10 l; 30 l; 200 l.		
<b>Storage</b>	Cool and dry. Shelf life: unopened at least 3 years. Transfer unused portion of product to 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, absorbent, clean, free of resin and dust. Brush large-pored wood such as oak, ash, chestnut, elm, mahogany or teak carefully, to clean pore grooves.

Sand **furniture** gradually with sandpaper up to 240 grain (exception oak use 180 grain). Sand **floors** gradually up to 120 grain with a roll grinder (a sanding machine with sanding paper), and then up to 180 grain with a grit.

#### Application:

Stir thoroughly before use. Remove possible skin formed on surface. Test application is recommended. Depending on surface requirement, absorbency and the type of wood, apply 1 to 3 thin coats, until a coating layer has developed. For an especially smooth and heavy-duty surface, sand in between after the first application. On furniture, use a pad (fleece or approx. the same) of at least 280 grain. On floors, use a non-abrasive pad (beige pad or else felt).

Polish in the wet film with the first 2 coats after 10 – 15 minutes with a polishing machine, eccentric sander or a lint-free cotton cloth. The 3<sup>rd</sup> coat must be polished in immediately after drop by drop application of approx. 1 teaspoon of KUNOS per m<sup>2</sup>. On floors and heavy-duty surfaces apply at least 3 coats, spreading with an applicator or with a short haired roller, or with a machine.

### OSB

After pre-sanding with sanding paper with a 120 – 180 grain (not a roll grinder as too much will be taken off the surface layer), apply 3 x KUNOS very thinly. The 1<sup>st</sup> and 2<sup>nd</sup> coats can after 10 – 15 minutes be polished in with an eccentric sander, a single pad machine or a lint free cloth. The 3<sup>rd</sup> coat should after spreading about 1 teaspoon of oil per m<sup>2</sup> drop-by-drop be polished in immediately. The necessary amount of KUNOS Natural Oil Sealer No. 244 must be determined by doing a test application. The characteristics of the surface are the same as mentioned above, but the German Industrial Standard (DIN) is not reached.

### Renovation of old furniture

Pore-clogged coatings (oil-based paint, lacquers, coating varnishes), wax finishes must also must be sanded or stripped until there is no old residue. Open-pored old coatings must be cleaned; if necessary, sanded and tested whether KUNOS Natural Oil Sealer No. 244 can be applied and absorbed. Then follow the regular instructions for preparation and application as described under the heading wood above.

### Cleaning and care

Clean with TRENA pH-Neutral Cleaner No. 556 (add a maximum of 10 ml in 10 l of water). Wipe it with a moist, but not wet cloth. Every 4<sup>th</sup> to 5<sup>th</sup> cleaning should be done with GLANOS Natural Liquid Wax Cleaner No. 559 instead of TRENA. If the wooden surface looks matt, apply a thin layer of KUNOS Floor Maintenance No. 1862 and polish or rub it into the surface. Otherwise, the KUNOS Maintenance No. 1893 is an alternative.

### Important tips

Fine sanding reduces the quantity of KUNOS required. This also reduces the tendency of “wear and tear” and soiling of the surface. When sanding too coarse, the surface becomes too water vaporized and the possibility of greening increases.

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

Wood not completely saturated with KUNOS Natural Oil Sealer No. 244, or oak wood exposed to water may develop stains or discolor.

A more homogeneous surface appearance is achieved by applying a final coat of SOGO Universal Hard Wax No. 307, or ALISA Hard Wax No. 302.

Wood veneers, with a minimum of 0.5 mm after sanding, the 1<sup>st</sup> coat is to be applied very thinly, and the wet film to be removed after 5 minutes. For glued crosscut wood or wood veneers, with a surface coat of smaller than 0.5 mm, the KUNOS is not suitable. Adhesives and glues have to be completely dry before treatment with the 1<sup>st</sup> KUNOS Natural Oil Sealer No. 244 coat.

Cutting edges and joints of Multiplex are to be oiled very sparingly, because otherwise the glue layer might be etched.

When using **colored tones**, make sure to sand evenly and apply sparingly.

When using KUNOS Natural Oil Sealer No. 244 white as an initial treatment, it preserves the natural wood tone, particularly on light colored wood species such as maple and birch. It is only for limited use on ash and oak. KUNOS white must be wiped away thoroughly after 10 minutes to prevent pigment traces or white spots from forming, or streaks building. Afterwards apply two coats of KUNOS Natural Floor Sealer No. 241-002 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. 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.**