

## The Naturtrend Guide





## Natural products support sustainability and are more popular than ever

### Publication details

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For Zweihorn®, an AkzoNobel brand, sustainability is an important strategic goal and one that is taken into account in all of our product development work. The key factors here are health, safety and environmental protection. All of which means that we actively take responsibility for our common future.

A refreshingly modern approach to sustainability and healthy living is now increasingly influencing popular home furnishing trends. The appeal of high-quality natural flooring is not only its pure and simple lines but also its durability and timelessness. Wood finishes that are vapour-permeable also foster a good indoor climate and a more comfortable living space. Finishing these woods with oils and waxes ensures that none of these positive features are lost, while also making your natural wood surfaces hard-wearing, water-resistant and dirt-repellent.

Modern yet natural interiors – the opposite of shabby chic! Contemporary natural wood interior furnishings feature timeless designs combined with a pleasant haptic appeal, and blend effortlessly and harmoniously into the ambience of any room.

Naturtrend oils and waxes not only give your wood furniture and flooring a high-quality, natural finish but also offer a sustainable and healthy contribution to your living environment: as they are 100% free from harmful and allergenic terpenes, they are a safe choice for any project, including children's toys.

This comprehensive Guide offers you information and valuable tips about using our range of natural products for finishing your wood surfaces. On the following pages, you will find professional guidance to obtaining optimal results – from preparation and treatment with Naturtrend oils and waxes to the correct care and cleaning of wood surfaces. We're also eager to showcase the properties and advantages of natural wood finishes, and to promote these in the context of sustainable interior design.

We hope that this brochure has piqued your interest in the use of natural products, and we hope you enjoy browsing through it and applying its techniques to beautifying your home interiors!

Best regards, your Zweihorn® team

## Technical support

If you have any questions about using our products, please contact your personal adviser from our field sales team. This person will be happy to advise you on any questions related to surface finishing. Phone numbers are shown once you have entered your postcode on our Contact search page on our website at [www.zweihorn.com](http://www.zweihorn.com). In addition to the dealer address, details for Zweihorn® technical support are shown with mobile numbers.

You are also welcome to contact our Applications Engineering department:

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## Basic know-how for natural products

Natural finishes have never been more popular. The reasons for this are varied, and include health, the environment, design choices and practical reasons. Oiled and waxed natural wood finishes help create a healthy living environment and – unlike surfaces finished with paint or varnish – are easy to freshen-up and restore. They also offer a number of other unbeatable advantages. These advantages and the history of the trend towards natural products from its earliest stages to the present day are all covered in detail on the following pages.

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## The concept of “natural products”

Natural products are materials that have been manufactured using **natural resources** such as water, oil, wood, minerals and plants. German product prefixes such as **bio- or eco-** are therefore not technically correct (see below). That said, there is no difference between “bio” and “eco” used in this sense in German – each is a synonym of the other.

Natural materials are typically renewable. In consideration of both **sustainability** and **environmental** protection, therefore, care should be taken to ensure renewable resources are used in product manufacture (see chapter “Sustainability”).

- Nature:** (lat.: natura, from nasci “become, be born”)  
The physical world, including landscape, flora and fauna, its features and products, **which have come about without human agency.**
- Bio:** (from “biology”, ancient Greek bíos “life” and lógos, “study”)  
Describes the branch of science concerned with the general laws of life in its many shapes and forms.
- Eco:** (from “ecology”: Greek oikos “house(hold)” and logos “study”)  
Describes the biological interactions between living creatures and their natural environment.
- Bio/eco product:** A prefix that in Germany can legally be used only for products from **organic agriculture** (i.e. products are made in the most environmentally friendly way and with the greatest possible consideration for ecology and environment)

## Features of oils and waxes used for wood surface finishing

Natural products for wood surface finishing contain four main groups of ingredients: binders, solvents, additives and pigments (for coloured products).

- Binders:** Bond all of the other ingredients together (resins, plant oils). These are the most important group.
- Solvents:** Improve the working properties of the product (white spirit, surgical spirit, essential plant oils, water).
- Additives (ancillary materials):** Substances included in the product to obtain or improve properties such as a satin finish, rapid drying or thickening.
- Pigments:** Used to give colouration and to protect (against UV radiation). These have the form of insoluble powders.

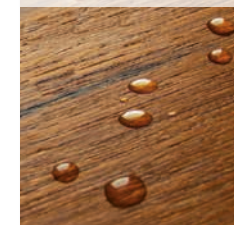
Raw materials are chosen from these four groups so as to give the product its specific characteristics and properties.

### Oils



Oils penetrate as deeply into the wood fibres as their viscosity permits and only slightly fill pores – an oil forms no layer on the untreated wood. This lets surfaces “breathe” (remain permeable to vapour) while making them tough and hard-wearing. Oils provide protection from moisture and dirt. Oils also make the surface hard-wearing and can – if pigmented, or having grain-accentuating properties – can also have the effect of changing the appearance of the wood. Most natural wood oils are also suitable for children’s toys and for furniture surfaces that come into contact with food.

### Waxes



A wax forms a physical coat on the wood surface and has the effect of filling its pores. However, this coating of wax is only moderately water- and dirt-repellent. Accordingly, we therefore recommend time is taken to pre-treat the surface with a hard-wearing oil or an oil/wax combination (e.g. Naturtrend Hard Wax Oil). This nourishes the wood fibres and creates a better protective film. Since many waxes – such as beeswax and carnauba wax – can only be worked when heated (80 °C), they are often offered in the form of a wax/oil mixture. After drying, a wax can be polished to take a high shine.

Even today, non-toxic **solvents** must still be added to hard waxes so that these products can be easily worked. The term “solvent” refers to any liquid that can dissolve other substances without itself undergoing chemical changes. The solvent most commonly used is **water**. There are many others – two familiar ones are **alcohol** and **petroleum**.

Apart from water, manufacturers of natural colourants often use three other groups of solvents to make their natural products usable for surface finishing work: **white spirit, surgical spirit** and **essential plant oils**.

The table below presents a definitive overview of the solvent systems used by natural colourant manufacturers.

## Solvent systems used by natural colourant manufacturers

Current technical requirements mean that solvents are unfortunately a necessary ingredient for some products.

	Aliphatic/aromatic hydrocarbon system	Dearomatised hydrocarbon system	Terpene system	Solvent-free system
Solvent	White spirit (turpentine substitute)	Surgical spirit, aromatic-free white spirit	Essential plant oils, balsam turpentine oil, citrus peel oil	None or water
Raw materials	Mineral oil (raw material with limited renewability) Of animal or plant origin	Mineral oil (raw material with limited renewability) Of animal or plant origin	Balsams of plant origin, fruit peel (renewable resources) Of plant origin	Spring water Naturally-occurring
Manufacturing method	Distillation	Distillation in multiple reaction steps	Distillation	Water purification
Disadvantages	<ul style="list-style-type: none"> <li>Residues contain suspected carcinogens</li> <li>Defatting effect on skin</li> <li>Long-term risks cannot be excluded</li> <li>Risk of damaging the central nervous system if protective personal equipment not worn during coating work (respiratory protection, etc.)</li> <li>Poor solvent for natural resins, so essential oils will typically be additionally needed as solubilisers</li> <li>Allergies to petroleum and aliphates possible</li> <li>Powerful, unpleasant petroleum odour</li> </ul>	<ul style="list-style-type: none"> <li>Defatting effect on skin</li> <li>Low odour due to dearomatisation, so no olfactory warning</li> <li>Risk of damaging the central nervous system if protective personal equipment not worn during coating work (respiratory protection, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Defatting effect on skin</li> <li>Allergic reactions possible</li> <li>Risk of damaging the central nervous system if protective personal equipment not worn during coating work (respiratory protection, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Advantages	<ul style="list-style-type: none"> <li>Cheap, because produced by simple distillation</li> <li>Strong odour acts as a warning</li> </ul>	<ul style="list-style-type: none"> <li>Free of harmful aromatics, such as e.g. benzene (content &lt;1%)</li> </ul>	<ul style="list-style-type: none"> <li>Strong odour acts as a warning</li> </ul>	<ul style="list-style-type: none"> <li>No harmful solvents</li> </ul>
Zweihorn® products		<ul style="list-style-type: none"> <li>Naturtrend Project Oil</li> <li>Naturtrend Hard Wax Oil</li> <li>Naturtrend Wood Design Oil</li> <li>Naturtrend Hard Wax</li> <li>Naturtrend Beeswax Balsam</li> <li>Naturtrend Oil Refresher</li> </ul>		<ul style="list-style-type: none"> <li>Naturtrend Hard Oil (solvent-free)</li> <li>Naturtrend Furniture Cleanser (water-based)</li> <li>Naturtrend Furniture Care (water-based)</li> <li>Naturtrend Parquet Cleanser (water-based)</li> <li>Naturtrend Parquet Care (water-based)</li> </ul>

## Lifetime of natural finishes

Surfaces treated with oils and waxes can retain their natural appeal and beauty for many years if they are regularly cared for and restored from time to time. Oils penetrate into the wood, which means treated surfaces remain vapour-permeable and not – as with a paint/varnish system – almost completely filled and sealed.

As a result, oiled and waxed surfaces tend to soil rather more easily and therefore have higher maintenance requirements. In other words, regular cleaning and care of natural finishes is important, to ensure that you will continue to enjoy your natural interiors for many years to come.

## Resistances

If surfaces have been treated properly as required, then the following kinds of resistances can be achieved (tests carried out 4 weeks after treatment of the surface):



Resistance to chemicals in accordance with DIN 68861 Part C (no visible alteration of the surface following 10-minute exposure to wine, beer, cola, powdered coffee, black tea, blackcurrant juice, condensed milk, water, disinfectants and cleaning solutions)

**Note:** Can be achieved on waxed surfaces only following appropriate priming with oil, etc.



Heat resistance to 120 °C



Non-slip properties according to BGR 181 and DIN 51130



Dirt-repellent

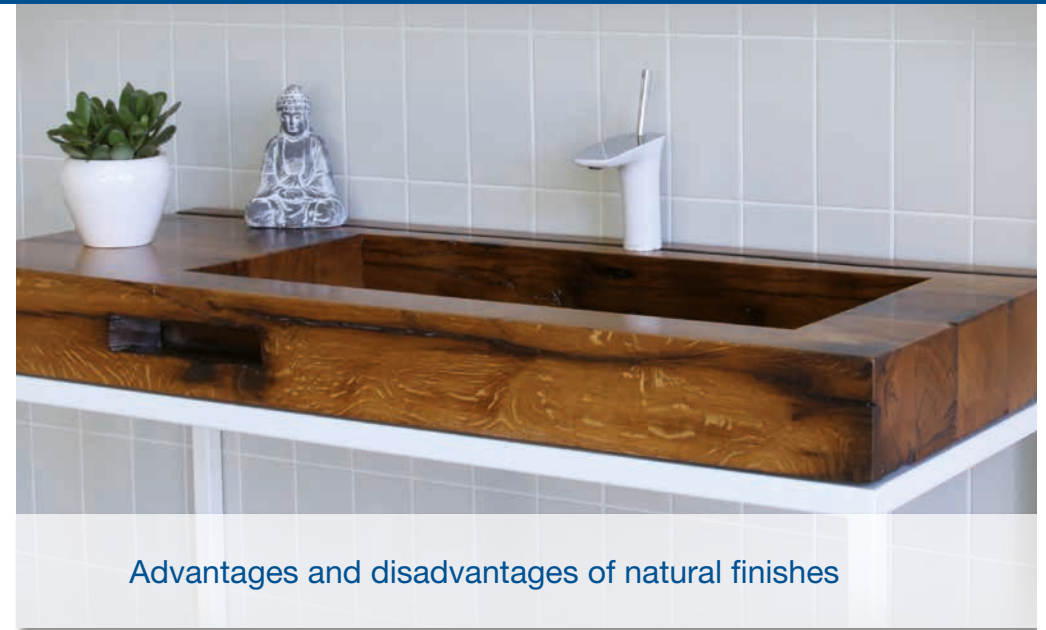


Moisture-repellent (if pooled water is left on the surface for longer periods – e.g. overnight – then water stains may occur; these can typically be removed by rubbing gently with an oil-soaked cloth)



**Tip:**

If stains or signs of wear and tear do appear, these can be repaired without leaving a mark (see chapter “Repairing damage”).



## Advantages and disadvantages of natural finishes

### Advantages

- The wood retains its natural character (grain, haptic appeal, odour)
- The wood can still “breathe” (is permeable), helping to ensure a healthy indoor climate
- Damage can be repaired easily and “invisibly”
- Products are easy to work with
- Zweihorn® Naturtrend products contain no hazardous or poisonous substances (such as lead, barium or terpenes) and are therefore safe for people, animals and the environment
- Oil-based finishes are biodegradable and therefore do not pollute the environment with special waste or pollutants (comply with local regulations!)

### Disadvantages

- Offers wood only moderate protection (discolouration possible from yellowing, effects of chemicals/mechanical wear, water stains)
- Comparatively high level of care/restoration work required (regular care/cleaning by professionals is recommended)
- Products have longer drying times compared to coatings and glazes
- Treated surfaces should be protected from exposure to heavy wear and tear
- Finer sanding is required to achieve an elegant finish



The story of natural colourants

### Earliest origins: from the Stone Age to ancient Egypt

The story of natural colourants goes back all the way to the Stone Age. Archaeologists discovered what are thought to be the oldest cave paintings in Spain and France. Deep in the Chauvet Cave in southern France, impressive paintings can be found on rock walls, which were created around 30,000 years ago (Late Stone Age). These are quite possibly the world's

oldest known cave paintings and drawings. The materials used to depict animals and hunting activities include charcoal, natural ochre and clay.

The Altamira caves in Spain are the site of the world-famous bison cave paintings, which have been dated to around 13000 BC: their black, red, red-dish-yellow and brown colours were created with



charcoal, red chalk and manganese oxide. The paintings on the walls and ceilings of the caves of Lascaux (France), which are around 15,000 years old, also show some of humanity's oldest artistic creations. Around the time the Ancient Egyptians developed their hieroglyphic writing system (3000 BC), burial chambers in the Pyramids were also being painted with natural pigments. Impressive murals of this kind can be found in the burial chambers in Giza. Natural pigments were also used during the embalming of Ancient Egyptian rulers and monarchs: these pigments were extracted by dissolving natural resins and balsams in essential oils.



## The earliest paints and varnishes

The Chinese lacquer tree has been used and cultivated for lacquer production since around 2000 BC. The tree yields a varnish-like sap that can be used to create a very slow-drying film. Natural pigments from Japan have also been known of since the 4th century AD: the sap of the Japanese wax tree was used to produce a lacquer applied in several layers, and which also required a very long time to dry.

In India, surface finishes were made weatherproof by



manufacturing liquid shellac from resin secreted by the lac bug. The term "lacquer" itself comes from "laksha", an ancient Indian Sanskrit word that stands for the number "hundred thousand" – as huge quantities of lac bugs were needed in lacquer production. The oldest German manuscript dealing with coatings is dated to around AD 1100, which talks about a lacquer coating called "Gummi Fornis". This is probably a reference to sandarac, a resin obtained from the bark of a North African cypress-like tree called *Tetraclinis articulata*. In the 16th century, Germany then went out on a linguistic limb and started using "vernis" or "Furniß" (modern German: "Firnis", "varnish"), to refer to boiled linseed oil. Other countries still use varnish to refer to a resin solution. Artists in the medieval period were still expected to prepare their own paints: resins were dissolved according to secret formulas (the famous old Italian violin lacquers) and linseed oil was boiled.

## Industrialisation

A European coatings industry began to develop at the beginning of the 18th century. Rapid advances in both technology and manufacturing had the effect of driving the development of quick-drying paints and varnishes that required fewer production steps. Pioneers in the early coatings industry were England and the Netherlands, who were forced to find other coatings techniques since climatic conditions in these countries were unsuited to the use of Japanese lacquers. Accordingly, linseed oil was used in place of Chinese tung oil or Japanese urushiol. Techniques for boiling oil with binders were soon developed, establishing the basis of the European coatings industry. Later developments included the boiling of China wood oil with binders to form quick-drying tung oil lacquers, leading to the creation of 6-, 4- and 2-hour lacquers.

From 1913, the production line changed manufacturing forever. The search was on for ever-faster and ever-simpler methods. The airbrush was invented for the rapid application of coatings. With the burgeoning of the German chemicals industry, new materials such as nitrocellulose, cellulose acetate and modern synthetic binders became used to produce coatings.

With the ever-increasing use of solvent-based coatings, demand for natural colourants based on resins, linseed oil and China wood oil continued to decline. Alongside a number of rare essential oils, alcohol and turpentine are known as the oldest solvents used by the coatings industry. White spirit was then added to this list by the petroleum industry. Driven by the new industries of distillation and paints (with I.G. Farben as a key player), a whole host of useful solvents was available by the end of the 19th century. The greatest beneficiaries were the hugely-popular cellulose lacquers: their quick-drying properties and the hard-wearing lacquer coating had the effect of squeezing oil-based finishes out of the market and changing coating technology.

As industrialisation gathered pace, the focus turned to coatings with protective or specialised features (insulating or fire retardant coatings, etc.).

## The trend towards environmental awareness

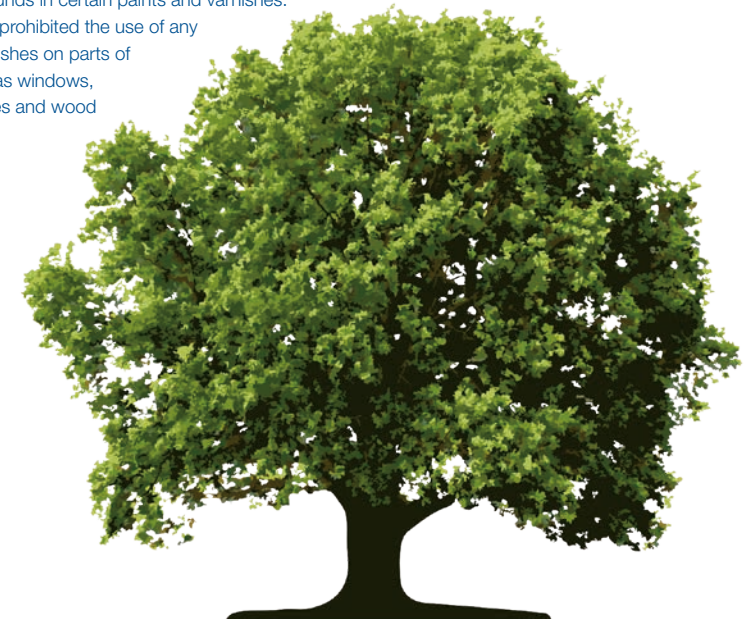
Thanks to their superior ease of working, faster drying times and wide range of hard-wearing properties, solvent-based varnishes made with hydrocarbons, alcohols, glycols, ketones and esters became immensely popular. With the trend towards chemical-based products with improved resistances, demand for natural products declined and they virtually disappeared from the market. While German coatings manufacturers agreed to cut back solvent use in 1983, there was a general disinclination to fully dispense with the advantages of these solvent systems. Over the last ten years, global warming, climate change and ecological disasters have moved environmental aspects to centre stage. Ozone, particulates and CO<sub>2</sub> emissions not only pollute the environment but are also harmful to human health. Allergies, increased environmental awareness and dwindling resources have led to a turnaround: manufacturers are now having to satisfy consumers who are looking for sustainable, non-toxic products that work to conserve natural resources.

In 2007, provisions from the German implementation of EU Directive 2004/42/EC came into effect, limiting the emissions of volatile organic compounds in certain paints and varnishes. This Ordinance prohibited the use of any paints and varnishes on parts of buildings such as windows, doors, staircases and wood

flooring where these coatings exceeded the stated exposure limit values for solvents.

This was intended to limit the content of volatile organic compounds, and so reduce the rate of ozone formation. As a manufacturer, it is therefore important to offer increasingly advanced, low-emission products and to continue to focus on sustainability. Natural products are the most environmentally friendly finishes available: they are made from renewable, natural resources and are much safer than other products. Recently, there has also been a trend towards oil and wax systems in the flooring sector.

Wood flooring itself is now being used not only in private residential properties but also in public buildings and company premises. All of which makes it clear that the move towards oil and wax systems also reflects changing trends in interior design.



## Preparation

To make the most of an oiled or waxed wood surface finish, appropriate preparations are necessary. The right wood for the interior in question must be found, the right type of sanding must be applied, and the appropriate product must be selected for the expected level of wear and tear. Coordinating each of these factors together is the secret to obtaining a truly stunning finish.

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## Selecting the wood

Wood has been used as a material both in construction and interior design for many centuries. Nor is this surprising, given the broad spectrum of possible applications that wood offers with its many properties, features and colours. Wood is also the most natural material to work with, bar none: sustainable management of our forests makes almost unlimited supplies of wood available and,

as an entirely natural material, it makes fully recyclable products. There are key differences between the various types of wood, however. While the average consumer is more interested in the aesthetic appeal of the wood, professionals need to consider other key aspects for the production of furniture or interiors (such as staircases, wood floors, etc.).

Technical properties such as hardness, durability or elasticity will vary considerably from one type of wood to another.

A sound finish can be achieved only by using selected solid woods that have dried properly. Premium wood should be chosen for surfaces constantly on view – such as doors and facades. Veneers have only limited use and should therefore be used only for surfaces not likely to suffer much wear and tear (ceiling cladding, cabinet fronts). As they are only about 0.6 mm thick, they can absorb only a little oil. This means that veneers are necessarily less resis-





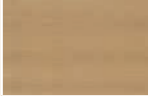

















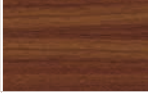

tant to water. Accordingly, a waterproof veneer adhesive must be used (e.g. Keimfix Durolock 270).

The basic colour of the wood, its moisture content, absorbency, constituents (tannins) and wood grain all affect the appearance of the finished wood surface. Accordingly, woods used together must have an appearance that is as uniform as possible. One should also remember that the natural wood texture is greatly emphasised by oils with grain-accentuating properties or pigments, making small defects such as knots and curly grain much more visible.

## Types of wood

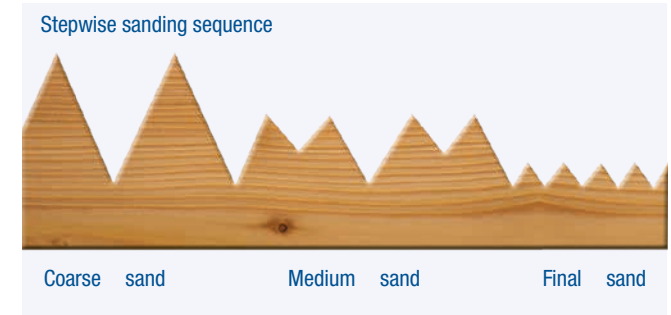
- Hardwood** Typically used for wood flooring but also the preferred wood for work surfaces, tables and staircases, since it is very resistant to wear and tear. Hardwood's high fibre content and compact vascular structure (high density) makes it strong and heavy, and therefore much more hard-wearing. Hardwood timber species such as oak, ash and alder can also be used for solid wood tables.
- Softwood** Much more open vascular structure and therefore also much lighter. Since softwoods are highly absorbent, using a colourless primer on the wood before treating with a pigmented oil is strongly recommended, to avoid stain formation. Softwoods are typically not recommended for areas of very high traffic. Interior use is normally confined to shelving, cupboards, wall panelling and ceiling cladding.
- Tropical wood** Another hardwood, whose cell walls contain large quantities of lignin, a structural molecule intrinsic to the tree. Some tropical woods, such as bangkirai or teak, are very popular choices for garden furniture, decking and other outdoor structures and objects. An important point here is that woods used outdoors should be given a surface finish with a pigmented product, since the wood will otherwise be damaged due to direct sunlight and will take on a greyish tone.

The table below lists and categorises the most important and popular types of timber:

Hardwoods:					
					
Maple	Birch	Pear	Beech	Oak	Alder
					
Ash	Chestnut	Cherry	Walnut	Poplar	Elm
Softwoods:					
					
Douglas fir	Spruce/fir	Pine	Larch	Cedar	Swiss pine
Tropical woods:					
					
Bangkirai	Bilinga	Eucalyptus	Mahogany	Rosewood	Teak

## Sanding to perfection

To achieve an optimal finish – especially on woods that will be oiled and not sealed by a coat of varnish – careful sanding is required, and in the right sanding sequence. The process of sanding removes unevenness and soiling, so as to give the wood surface the best-possible preparation for the chosen finishing technique. We therefore always recommend sanding



to bare wood – both for the first finish and restoration work. As a rule, the coarseness of the sandpaper should match the roughness of the wood. Start with sandpaper with a grit of P100 or P120. If the wood surface is already relatively smooth, then paper with a P180 grit can be chosen for the first sand. To ensure the best-possible result, the wood surface should always be sanded several times, using a different grit size each time.

The exact number will depend on the unevenness and soiling present on the surface. Where wood is pre-sanded or when using wood materials supplied from a wood wholesaler, only a final sand (or preliminary sand and final sand) is needed. Gaps between sandpaper grades should not be too large: we recommend moving to finer sandpapers in steps of no more than 60 to 80 grits at a time. As a rule of thumb: the finer the final sand, the more appealing and uniform the final wood finish will be. Do not exceed a grit size of P320 before first applying oil, however.

The sandpaper should always remain clean and sharp while you are working. If the paper becomes clogged, then fibres are no longer sanded but simply pressed flat. These fibres are then raised up again by oiling and the surface becomes rough. You are therefore advised to change sandpaper in good time while working.

Always sand in the direction of the wood grain and only with a light, even pressure. Then brush or blow the sanding dust off and out of the wood surface: if wood flour is left in the wood pores, this can cause greying after the finish has been applied.

**Note:** While our sanding instructions are based on years of experience, they are not to be considered as exhaustive. Good sanding results always depend on the relevant local conditions.

### i

#### Tips:

- If the wood surface has been well prepared, we recommend a stepwise sanding sequence of P180/P240/P320
- Sharp edges – such as on a table top – should be chamfered, i.e. the sharpness of these edges should be reduced. Here, always work in the direction of the edge and not at a 90° angle. Take care not to cause any new damage to the wood in this area.

## Finishing

Finishing your wood with oil or wax gives the surface a natural appearance and haptic appeal while also making it hard-wearing by protecting and nourishing the wood. Naturtrend from Zweihorn® offers you a complete range of high-quality oils and waxes for wood finishes, including a carefully coordinated selection of products for the cleaning, care and restoration of your natural wood surfaces. Whether you're looking to match a style or cope with wear and tear, Naturtrend has the right product.

**Note:** For an overview of Naturtrend products by wood surface type, see pp. 42 and 43.

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## Application instructions for natural products

### Techniques for working with oils

A range of application techniques are available when working with your oil. The following pages list and explain the commonest working techniques used when treating wood surfaces with oil.



#### Brush/roller application

Before starting work, tip the oil that you think you'll need into a different container, and use this oil for your brush or roller (otherwise you'll contaminate the rest of the oil in the tin). When applying the oil, use a suitable natural bristle brush or oil-resistant foam roller and apply "wet to wet", i.e. until the wood surface is fully saturated (cannot absorb more oil). For wood flooring, you can use special floor brushes or foam rollers with a telescopic handle.



#### Trowel/squeegee application

With the trowel/squeegee technique, you tip the estimated amount of oil directly out of the tin onto the surface to be treated. Using a clean rubber or plastic squeegee or plaster trowel (colourfast and not too hard), apply the oil to the pores and joints. Work at different angles and create an even film. Diagonal movements are the most effective here. If necessary, tip and apply more oil to the wood surface to create an even, glossy, even wet coat of oil without any dull patches.



#### Spraying

Most oils can also be applied using a spray-gun technique. Low-pressure or normal compressed-air spraying is possible. Continue applying until the surface is glossy and fully saturated.



#### Dipping/flowcoating

Dipping or flowcoating is not a typical manual method, as it is usually confined to industrial manufacturing. Single pieces are either immersed in oil or a gravity flow system is used. Natural-rend oils can also be used for this method.



#### Hot spraying

Some oils can also be applied using the hot spraying technique, with a special hot oil spray gun. This method heats the oil in a metal container. With this method, take care not to exceed the product's maximum working temperature.



#### Sanding-in

With sanding-in, you apply the oil to the surface in the estimated amount needed and sand it in using a suitable random orbit sander, working in the direction of the wood's grain. Sanding is continued until all of the oil has fully penetrated into the wood. After the sanding step is complete, you then massage the product evenly into the surface using a lint-free wad of cloth.

### Techniques for working with waxes

We recommend applying wax to pre-oiled surfaces only, since the wax does not offer any protective features by itself. As finishes and refreshers, however, waxes can be used with the following methods of application to add the final touch to a surface.



#### Brush/wad application

Apply the wax evenly using a paintbrush (not too soft) or other brush, or a lint-free wad of cloth. First apply the wax at 90° to the grain, and then follow the grain. If applying with a wad of cloth, massage in with a circular motion. Depending on the product, you can hand polish the entire surface with a fine sanding pad or use a machine with a lambswool disc or natural bristle disc after allowing a drying time of 5–8 hours.



#### Hot spraying

Wax can also be applied using the hot spraying technique. With this method, take care not to exceed the product's maximum working temperature. Don't apply the wax too thickly, since this will make polishing more complicated. Two thin coats are better than one thick one.



#### Caution:

Most oils leave an excess that must be removed afterwards, since it will otherwise form a sticky film. A final treatment with wax is also possible.

Oiling

Waxing

Disposal

## Naturtrend Hard Oil

- Suitable for all interior wood surfaces
- Also for cork, parquet and wood staircases
- Saturates well
- Accentuates wood grain
- Solvent-free
- Contains no allergenic terpenes



Naturtrend Hard Oil is a solvent-free natural product with excellent penetration that creates a permeable finish accentuating wood grain. Containing only 100% pure natural oils, it is water-repellent and offers superior saturation. Naturtrend Hard Oil also contains no allergenic terpenes (such as citrus terpene, balsam turpentine, etc.) or toxic substances. Naturtrend Hard Oil can be used to treat any interior wood surface subject to heavy usage – including cork and wood flooring, wood staircases, furniture, worktops and wood surfaces in rooms with high humidity.

Naturtrend Hard Oil contains boiled linseed oil, nut oil, sunflower oil, poppyseed oil, safflower oil, rapeseed oil, tung oil and lead- and barium-free metal soaps (see “Health and safety”).

### Application instructions:

0.75 l are enough for approx. 6–11 m<sup>2</sup> per application (2–3 recommended). With 5 l, you can treat a surface of about 40–75 m<sup>2</sup> per application (2–3 recommended), depending on the absorbency of the wood surface. Shake or stir thoroughly before use! Working temperature: max. 80 °C.

### Shelf life:

24 months in sealed original container. Keep between +10 °C and +30 °C for storage and transportation. **Sensitive to frost!**

For information about techniques for finishing wood flooring with Naturtrend oils, please see the Zweihorn® parquet finishing guide (available from your Zweihorn® stockist or as a download from “Leaflets and guides” on [www.zweihorn.com/en/downloads](http://www.zweihorn.com/en/downloads)).



Available in 25 l, 5 l and 0.75 l containers.



For information about testing standards, see page 70.

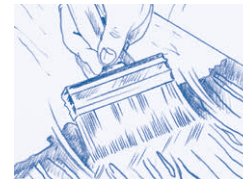
Oiling

Waxing

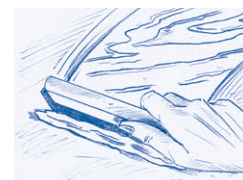
Disposal



**1.** Before you start oiling, you need to sand down the surface as described in chapter 2 (preparation). Then vacuum off the surface to remove wood dust.



**2.** Shake or stir the oil thoroughly before use. Apply Naturtrend Hard Oil with an oil-resistant paintbrush or roller evenly “wet to wet” to the surface. The wood will absorb the oil (the rate will depend on the wood type). Apply more oil again immediately to any areas of wood that appear dry. Repeat this step until a wet and even film of oil can be seen on the surface of the wood. Start by working away from the light, so you can immediately see where the wood is absorbing oil more quickly and needs re-oiling.



**3.** After waiting around 40–60 minutes, any excess oil must be completely removed from the surface! The best approach here is to wipe down the surface with a clean, colourfast squeegee, window wiper or wad of cloth.



**4.** As a final step, the surface is then massaged using a wad of cloth or a machine (random orbit sander with a white or green pad) in a circular motion, until the surface appears dry. At this stage, no oil film should be visible on the surface! Leave to dry overnight and then repeats steps 2 to 4. Now leave to dry for 24 hours. As a final step, the oiled surface can then be polished by hand or by using a random orbit sander with a white pad. This gives the surface a high shine.

**i**

### Tips:

- Take care to ensure that all excess is properly removed: the surface will otherwise dry only partially and sticky patches can result.
- If you want to use the roller or paintbrush for the next application of oil, you must carefully rinse these off using white spirit or turpentine substitute. (If you want to use the exact same product again later, then you can also stow the brush or roller away in an airtight plastic bag.)

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## Naturtrend Project Oil

- For cork, parquet, wood staircases and furniture
- Suitable for residential and commercial use
- Wax ingredients provide a satin shine
- Easy to work with
- Fast-drying
- Contains no allergenic terpenes
- Promotes a healthy indoor climate



Naturtrend Project Oil is a quick-drying, natural product that penetrates deeply into the wood for superior saturation. Wood retains its natural permeability and appearance (does not accentuate grain). Surfaces treated with Naturtrend Project Oil are water-repellent, and free from toxic substances and allergenic terpenes (e.g. citrus terpenes, balsam turpentine, etc.). Naturtrend Project Oil can be used to finish furniture surfaces, flooring and staircases in residential and commercial properties that are exposed to higher levels of wear and tear. Note that regular cleaning, maintenance and timely re-oiling will also be required, however! Naturtrend Project Oil is easy to work with and fast-drying. Wax ingredients provide a satin shine.

Naturtrend NPO contains aromatic-free hydrocarbons, safflower oil, poppyseed oil, nut oil, colza oil, soy oil, sunflower oil, beeswax, candelilla wax and carnauba wax, as well as lead- and barium-free metal soaps (see "Health and safety").

### Application instructions:

5 l are enough for 40–75 m<sup>2</sup> per application (2–3 recommended) and 0.75 l is enough for approx. 6–11 m<sup>2</sup> per application (2–3 recommended), depending on wood absorbency. Shake or stir thoroughly before use! Working temperature: max. 35 °C.

### Shelf life:

24 months in sealed original container. Keep between +10 °C and +30 °C for storage and transportation. **Sensitive to frost!**

For information about techniques for finishing wood flooring with Naturtrend oils, please see the Zweihorn® parquet finishing guide (available from your Zweihorn® stockist or as a download from "Leaflets and guides" on [www.zweihorn.com/en/downloads](http://www.zweihorn.com/en/downloads)).



For information about testing standards, see page 70.

Available in a 5 l and 0.75 l container.

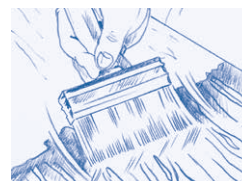
Oiling

Waxing

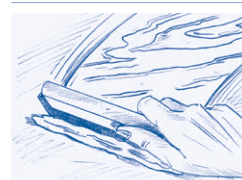
Disposal



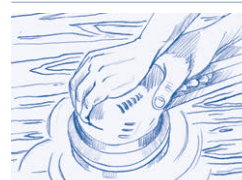
**1.** Before you start oiling, you need to sand down the surface as described in chapter 2 (preparation). Then vacuum off the surface to remove wood dust.



**2.** Shake or stir the oil thoroughly before use. Apply Naturtrend Project Oil with an oil-resistant paintbrush or roller evenly "wet to wet" to the surface. The wood will absorb the oil (the rate will depend on the wood type). Re-apply oil immediately to any places where the wood appears dry. Repeat this step until a wet and even film of oil can be seen on the surface of the wood. Start by working away from the light, so you can immediately see where the wood is absorbing oil more quickly and needs re-oiling.



**3.** After a waiting time of about 30–45 minutes, any excess oil must be completely removed. The best approach here is to wipe down the surface with a clean, colourfast squeegee, window wiper or wad of cloth.



**4.** As a final step, the surface is then massaged using a wad of cloth or a machine (random orbit sander with a white or green pad) in a circular motion, until the surface appears dry. At this stage, no oil film should be visible on the surface! Leave to dry overnight and then repeats steps 2 to 4. Now leave to dry for 24 hours. As a final step, the oiled surface can then be polished by hand or by using a random orbit sander with a white pad. This gives the surface a high shine.

**i**

### Tips:

- For the second coat of oil, one option is to spread the oil in a thin and even coat with a paintbrush and then leave it in a film on the floor surface; this creates a more hard-wearing protective coat. When spreading the oil with the brush, dab the brush off on a cloth now and again to ensure any excess oil can be taken up properly.
- If you want to use the roller or paintbrush for the next application of oil, you must carefully rinse these off using white spirit or turpentine substitute. (If you want to use the exact same product again later, then you can also stow the brush or roller away in an airtight plastic bag.)

Basic know-how  
Natural products

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Health and safety

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- Oiling
- Waxing
- Disposal

## Naturtrend Hard Wax Oil

- Suitable for all interior wood surfaces
- Also for cork, parquet and wood staircases
- Wax ingredients provide a satin shine
- Easy to work with
- Fast-drying
- Highly moisture-repellent
- Suitable for use in rooms with high humidity
- Contains no allergenic terpenes



Naturtrend Hard Wax Oil is a surface protection product with a natural wood appearance (does not accentuate grain/texture) based on high-quality oils and waxes. It has good filling properties, excellent absorbency and gives the surface a premium appearance combined with an especially pleasant, natural haptic appeal. It is easy to work with, moisture-repellent, hard-wearing and can be applied to any interior wood surface. Naturtrend Hard Wax Oil contains no toxic substances or allergenic terpenes (e.g. citrus terpenes, balsam turpentine, etc.). It consists of non-aromatic hydrocarbons, sunflower oil, rapeseed oil, safflower oil, soy oil, shellac wax, candelilla wax, carnauba wax, microcrystalline wax and lead-free siccatives (see chapter "Health and safety").

### Application instructions:

0.75 l is enough for approx. 7.5–15 m<sup>2</sup> per application (2–3 recommended). Accordingly, 5 l are enough for an area of approx. 50–100 m<sup>2</sup> per application (2–3 recommended), depending on the absorbency of the wood. Shake or stir thoroughly before use! Working temperature: max. 45 °C.

### Shelf life:

24 months in sealed original container. Keep between +10 °C and +30 °C for storage and transportation. **Sensitive to frost!**

For information about techniques for finishing wood flooring with Naturtrend oils, please see the Zweihorn® parquet finishing guide (available from your Zweihorn® stockist or as a download from "Leaflets and guides" on [www.zweihorn.com/en/downloads](http://www.zweihorn.com/en/downloads)).



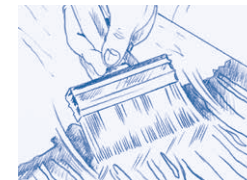
For information about testing standards, see page 70.

Available in a 5 l and 0.75 l container.

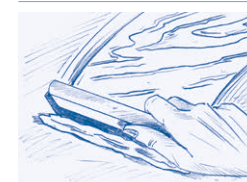
- Oiling
- Waxing
- Disposal



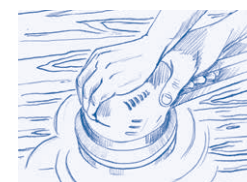
**1.** Before you start oiling, you need to sand down the surface as described in chapter 2 (preparation). Then vacuum off the surface to remove wood dust.



**2.** Shake or stir the oil thoroughly before use. Apply the oil with an oil-resistant paintbrush or roller evenly to create a wet, saturated film on the wood. The wood will absorb the oil (the rate will depend on the wood type). Re-apply oil immediately to any places where the wood appears dry. Repeat this step until a wet and even film of oil can be seen on the surface of the wood. Start by working away from the light, so you can immediately see where the wood is absorbing oil more quickly and needs re-oiling.



**3.** After a waiting time of about 10–15 minutes, any excess oil must be completely removed. To do so, scrape the surface off with a clean, colourfast squeegee or window wiper. (Absolutely no oil film must be visible on the surface!)



**4.** Leave to dry overnight and then perform an intermediate sanding step (320/400-grit or a fine sanding sponge). Now apply a second, thin coat of the oil, and then polish the surface using a random orbit sander with a white pad.

**Caution:** For surfaces subject to heavy wear and tear (e.g. in bathrooms), more than 2 coats will be needed.

### i

#### Tips:

- For the second coat of oil, one option is to spread the oil in a thin and even coat with a paintbrush and then leave it in a film on the floor surface. This creates a more hard-wearing protective coat. When spreading the oil with the brush, dab the brush off on a cloth now and again to ensure any excess oil can be taken up properly. This is especially recommended for vertical surfaces.
- If you want to use the roller or paintbrush for the next application of oil, you must carefully rinse these off using white spirit or turpentine substitute. (If you want to use the exact same product again later, then you can also stow the brush or roller away in an airtight plastic bag.)

Oiling

Waxing

Disposal

## Naturtrend Wood Design Oil

- For all interior and exterior wood surfaces
- For initial application, freshening-up and maintenance
- Easy to work with
- Fast-drying
- Ultrafine pigments provide UV protection
- Contains no allergenic terpenes



Naturtrend Wood Design Oil is a naturally-tinted product for finishing interior and exterior surfaces that penetrates deeply and leaves wood permeable. The formulation uses protective, weatherproof oils and ultrafine pigments to create a barrier to UV radiation and safeguard the wood from its effects. Depending on the type of wood, the surface is either finished with a subtle and elegant natural white or stone grey colour, or teak, mahogany and walnut accents are used to bring out the grain. All colour shades can be mixed together in any ratio.

Surfaces treated with Naturtrend Wood Design Oil are water-repellent, and free from toxic substances and allergenic terpenes (e.g. citrus terpenes, balsam turpentine, etc.).

Naturtrend Wood Design Oil contains aromatic-free hydrocarbons, refined natural oils based on soy, sunflower and colza oil, lead-free siccatives and natural pigments (see "Health and safety").

### Application instructions:

0.75 l is enough for approx. 15 m<sup>2</sup> per application (2–3 recommended). Accordingly, 2.5 l are enough for treating an area of approx. 50 m<sup>2</sup> per application, depending on the absorbency of the wood.

### Shelf life:

24 months in sealed original container. Keep between +10 °C and +30 °C for storage and transportation. **Sensitive to frost!**

For information about techniques for finishing flooring with Naturtrend oils, please see the Zweihorn® parquet finishing guide (available from your Zweihorn® stockist or as a download from "Leaflets and guides" at [www.zweihorn.com/en/downloads](http://www.zweihorn.com/en/downloads)).

Naturtrend Wood Design Oil colour shades		
10 Natural white	11 Stone grey	20 Teak
30 Mahogany	60 Walnut	70 Basalt black



Available in a 2.5 l and 0.75 l container.



For information about testing standards, see page 70.

Oiling

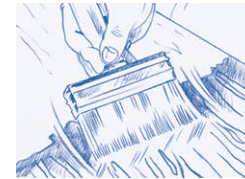
Waxing

Disposal

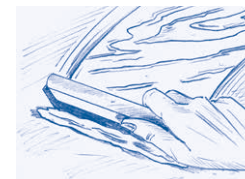
## Interior application



1. Before you start oiling, you need to sand down the surface as described in chapter 2 (preparation). Then vacuum off the surface to remove wood dust.



2. Shake or stir the oil thoroughly before use. Apply Naturtrend Wood Design Oil with an oil-resistant paintbrush or roller evenly "wet to wet" to the surface. The wood will absorb the oil (the rate will depend on the wood type). Re-apply oil immediately to any places where the wood appears dry. Repeat this step until a wet and even film of oil can be seen on the surface of the wood. Start by working away from the light, so you can immediately see where the wood is absorbing oil more quickly and needs re-oiling.



3. After a waiting time of about 30 minutes, any excess oil must be completely removed. To do so, scrape the surface off with a clean, colourfast squeegee or window wiper – absolutely no oil film must be visible on the surface! – and then leave the wood surface to dry overnight. Steps 2 and 3 can be repeated as required.

### i

#### Tips:

- Since fine-textured woods (e.g. spruce, fir, cherry, beech, maple) are highly absorbent and soak up oil unevenly, we recommend priming the surface before treating with Naturtrend Project Oil.
- To protect pigments against abrasion, we also recommend a final application of colourless Naturtrend Project Oil.
- Coloured Naturtrend Wood Design Oil can be given a brighter hue by thinning it with Naturtrend Project Oil.
- To make final colours more vibrant, apply the second coat of Naturtrend Wood Design Oil by spreading thinly with the brush to leave a film on the surface. Take care to dab the brush off on a cloth now and again, so as to ensure any excess oil can be taken up properly from the surface.
- If you want to use the roller or paintbrush for the next application of oil, you must carefully rinse these off using white spirit or turpentine substitute. (If you want to use the exact same product again later, then you can also stow the brush or roller away in an airtight plastic bag.)

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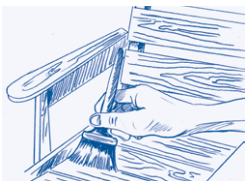
Waxing

Disposal

### Exterior application



**1.** Before you start oiling, you need to sand down the surface as described in chapter 2 (preparation). Then vacuum off the surface to remove wood dust. Algae, grease, dirt and other forms of soiling should be removed mechanically with a pad, sanding sponge or sandpaper. Wood already showing signs of weathering should also be thoroughly sanded down until its natural appearance is restored.



**2.** For a weatherproof layer, Naturtrend Wood Design Oil is applied thinly without being wiped down afterwards. Spread the Naturtrend Wood Design Oil evenly, and dab the paintbrush onto a cloth now and then to remove any excess oil from the surface. Leave the surface to dry overnight and then repeat the above step. We recommend applying three coats to achieve a weather-resistant surface.

### Colour shade matching for Naturtrend Wood Design Oil

10 Natural white	11 Stone grey	20 Teak	30 Mahogany	60 Walnut	70 Basalt black
Maple	Maple	Bangkirai	Bangkirai	Douglas fir	Ebony
Bamboo	Bamboo	Bilinga	Bubinga	Ebony	Oak
Beech	Bangkirai	Eucalyptus	Cocobolo	Oak	Ash
Oak	Beech	Larch	Iroko	Chestnut	Bog oak
Alder	Oak	Limba	Mahogany	Bog oak	Teak
Ash	Alder	Macassar ebony	Macassar ebony	Walnut	Wenge
Spruce	Ash	Rosewood	Meranti	Wenge	
Pine	Spruce	Robinia	Merbau		
	Pine	Teak	Redwood		
		Zebrano	Cedar		



**Tips:**

- With woods that absorb strongly yet unevenly, we recommend a transparent coat of Naturtrend Project Oil to “even out” the surface.
- For long-term protection, we recommend treating the wood surface once a year with Naturtrend Wood Design Oil.
- To protect pigments against abrasion, we also recommend a final application of colourless Naturtrend Project Oil.
- If you want to use the roller or paintbrush for the next application of oil, you must carefully rinse these off using white spirit or turpentine substitute. (If you want to use the exact same product again later, then you can also stow the brush or roller away in an airtight plastic bag.)

Oiling

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### Sample mixing ratios for Naturtrend Wood Design Oil



30+60 1:1 Spruce



30+60 1:2 Spruce



30+60 2:1 Spruce



60+20 1:1 Spruce



60+20 1:2 Spruce



60+20 1:3 Spruce



20+30 1:1 Spruce



20+30 1:2 Spruce



20+30 2:1 Spruce



10+60 1:1 Spruce



10+60 1:2 Spruce



10+60 1:3 Spruce



10+11 1:1 Spruce



10+11 1:2 Spruce



10+11 2:1 Spruce



70+10 1:1 Oak



70+10 2:1 Oak



70+11 1:1 Oak



70+20 1:1 Teak



70+30 1:1 Mahogany



70+60 1:1 Walnut

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- Waxing
- Disposal

## Naturtrend Hard Wax

- Suitable for all interior wood surfaces
- Can be combined with Naturtrend oils
- Contains no allergenic terpenes
- Antistatic effect
- Ideal for hot spray application



Naturtrend Hard Wax is an outstanding natural product for achieving high-quality wax finishes and can also be applied by hot spraying. It gives surfaces a bright and vibrant shine, while also emphasising the natural grain of the wood. Naturtrend Hard Wax contains no toxic substances or allergenic terpenes (e.g. citrus terpenes, balsam turpentine, etc.).

Naturtrend Hard Wax contains aromatic-free hydrocarbons, shellac wax, paraffin wax, ceramimbi wax, carnauba wax, candelilla wax, Japan wax, microcrystalline wax and beeswax (see "Health and safety").

### Application instructions:

0.5 l are enough for approx. 15–30 m<sup>2</sup>, depending on the surface quality. For the second coat, only roughly half the original amount is needed. Working temperature: max. 80 °C.

### Shelf life:

24 months in sealed original container. Keep between +10 °C and +30 °C for storage and transportation. **Sensitive to frost!**



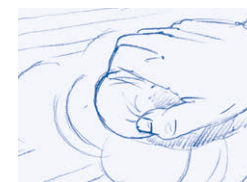
For information about testing standards, see page 70.

Available in a 2.5 l and 0.5 l container.

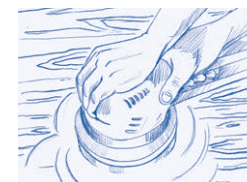
- Oiling
- Waxing
- Disposal



**1.** Before you start waxing, you need to sand down the surface as described in chapter 2 (preparation). Then vacuum off the surface to remove wood dust. We recommend pre-treatment with Naturtrend Hard Oil, Project Oil or Hard Wax Oil for heavily used surfaces such as tables, worktops, wood floors or stairs, and for rooms with high humidity (bathrooms, kitchens). For coloured surfaces, apply a coat of Naturtrend Wood Design Oil first (see page 34/35).



**2.** Apply a thin coat of Naturtrend Hard Wax to the surface, using a slightly harder paintbrush or other brush, or a lint-free wad of cloth. First apply the wax at 90° to the grain, and then follow the grain. If applying with a wad of cloth, massage in with a circular motion.



**3.** Leave to dry for about 5 hours, and then use a brush, a soft white abrasive felt or a lambswool disc to polish the surface to a high shine. Where flooring has seen a lot of usage, a second coat will be needed (steps 2 + 3).

**Caution:** The wax finish will gradually wear off surfaces that see a lot of usage. Accordingly, apply Naturtrend Hard Wax to these surfaces as part of routine maintenance.

### i

#### Tips:

- If you need to work more quickly, Naturtrend Hard Wax can also be applied using a hot spray gun (max. working temperature 80 °C).
  - Depending on the level of usage, surfaces treated with Naturtrend Hard Wax will need to be given another coat of the same wax after a while.
- Caution:** Painted or varnished surfaces treated with wax can be painted or varnished again only after careful removal of the old wax coat!

- Oiling
- Waxing
- Disposal

## Naturtrend Beeswax Balsam

- Suitable for all interior wood surfaces
- For freshening-up and maintenance
- Antistatic effect
- Easy to work with
- Contains no allergenic terpenes



Naturtrend Beeswax Balsam is a refined beeswax preparation made from all-natural ingredients that protects surfaces from moisture and soiling while giving them an elegant shine; it also has an antistatic effect. Naturtrend Beeswax Balsam contains no toxic substances or allergenic terpenes (e.g. citrus terpenes, balsam turpentine, etc.).

Naturtrend Beeswax Balsam contains aromatic-free hydrocarbons, beeswax, carnauba wax, paraffin wax, Japan wax, candelilla wax und microcrystalline wax (see "Health and safety").

### Application instructions:

0.75 l are enough for approx. 11 m<sup>2</sup>, depending on the surface quality. For the second coat, only roughly half the original amount is needed. Working temperature: max. 35 °C.

### Shelf life:

24 months in sealed original container. Keep between +10 °C and +30 °C for storage and transportation. **Sensitive to frost!**



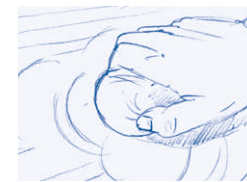
For information about testing standards, see page 70.

Available in a 0.75 l and 5 l container.

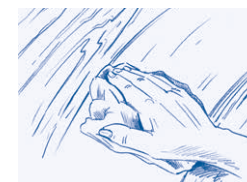
- Oiling
- Waxing
- Disposal



**1.** Before you start waxing, you need to sand down the surface as described in chapter 2 (preparation). Then vacuum off the surface to remove wood dust. We recommend pre-treatment with Naturtrend Hard Oil, Project Oil or Hard Wax Oil for heavily used surfaces such as tables, worktops, wood floors or stairs, and for ceiling cladding in rooms with high humidity (bathrooms, kitchens). For coloured surfaces, apply a coat of Naturtrend Wood Design Oil first (see page 34/35).



**2.** Work Naturtrend Beeswax Balsam into the surface using a paintbrush or other brush, or a lint-free wad of cloth. First apply the wax at 90° to the grain, and then follow the grain. If applying with a wad of cloth, massage in with a circular motion.



**3.** Leave for 15–30 minutes and then wipe off any excess with a soft cloth in the direction of the grain. After being left to dry for a few hours, the surface can then be polished to a high shine. Polish using a brush, white abrasive felt or a lambswool disc. If you want a more vibrant finish, you can repeat steps 2 and 3 as many times as required.

**Caution:** The wax finish will gradually wear off surfaces that see a lot of usage. Accordingly, apply Naturtrend Beeswax Balsam to these surfaces as part of routine maintenance.

### i

#### Tips:

- Naturtrend Beeswax Balsam can also be used to care for your oiled wood finishes.
- Naturtrend Beeswax Balsam can be polished to a high shine and is also suitable for treating and caring for painted/varnished furniture that has grown dull.
  - Caution:** Once treated with wax, painted/varnished surfaces cannot be repainted/revarnished!
- Naturtrend Beeswax Balsam can also be applied using hot spraying (max. working temperature 35 °C).

Basic know-how  
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**Product overview by wood surface type**

		Interior								Exterior			
		Cork floor	Wood floor	Stone floor (unglazed)	Wood stairs	Furniture, wood objects (toys, bowls, etc.)	Work-tops, tables	Doors	Humid rooms (bathroom, kitchen)	Wall panelling, ceiling cladding	Decking	Garden furniture	Garden fences, sheds, carports
													
100% oil	<b>Hard Oil</b>	○	○	○	○	●	●	●	○	●			
	<b>Hard Wax</b>	●	●	○	●	●	●	●	●	●			
Oil/wax combination	<b>Project Oil</b>	●	●	●	●	●	●	●	○	●			
	<b>Wood Design Oil</b>					●	●	●	○	●	●	●	
Wax	<b>Hard Wax</b>					●	○*	●		●			
	<b>Beeswax Balsam</b>					●		●		●			

● Our recommendation ○ Only recommended in some circumstances \* Only for surfaces pre-treated with Naturtrend oils

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		Types of wood		Exotic hardwoods							Others						
		Hardwoods (e.g. oak)	Softwoods (e.g. spruce)	Bangkirai	Bilinga	Eucalyptus	Ipe	Makore	Mahogany	Rosewood	Teak	Bamboo	Thermally modified wood	WPC (wood-polymer composite)	OSB	Tiles, stone (unglazed)	Terracotta
Hard Oil	Exterior																
	Interior	●	●	○	○	○	○	○	○	○	○	○		○	●	○	
Hard Wax	Exterior																
	Interior	●	●	○	○	○	○	○	○	○	○	●		●	●	○	
Project Oil	Exterior																
	Interior	●	●	○	○	○	○	○	○	○	○	●		●	●	○	●
Wood	Exterior	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
	Interior	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hard Wax	Exterior																
	Interior	●	●	○	○	○	○	○	○	○	○						
Beeswax Balsam	Exterior																
	Interior	●	●	○	○	○	○	○	○	○	○						

● Our recommendation ○ Only recommended in some circumstances

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- Oiling
- Waxing
- Disposal



### Empty, dry containers

Empty containers that are completely dry (do not drip when upended) can be simply disposed of in household waste.

### Empty containers, not dry

If the oil or wax contents have been used up but product residues in the container are still liquid, the containers must be brought to a special waste depot. These product residues could otherwise become mixed with other substances or could leak, and result in unforeseen hazards (such as fires, etc.). Accordingly, please take these containers to a special waste depot as required by local waste regulations (e.g. collection point for old paint tins) or let them dry out and dispose of them in household waste.

- Oiling
- Waxing
- Disposal



### Full or opened, half-full containers

Liquid oil products must not be poured away down sinks or drains or tipped into household rubbish. Collect product remnants and residues in sealed, marked receptacles, and bring these to a special waste depot for disposal, observing any local regulations (e.g. collection point for used paint tins). Take care to ensure that residues of different products are not mixed together – these should be collected separately and kept apart.

### Oil-soaked cleaning cloths and pads

Any cloths or pads that have come into contact with oil and wax and have not fully dried out are special waste and must be disposed of in accordance with local regulations (e.g. taken to a collection point for used paint tins). Until they are disposed of, these cloths/pads must be stored in an absolutely air-tight container, since there is otherwise a risk of spontaneous combustion.

To minimise this risk of spontaneous combustion, we therefore recommend cloths or pads used for oiling or waxing are hung on a washing line after use (stretched out to their fullest extent). Once the cloths/pads are completely dried out, they can then simply be disposed of in household waste.

If you want to re-use cloths/pads, you can do so if you keep them in an airtight container (such as a sealed plastic bag, for example).



## Preservation

Since surfaces finished with natural products require a comparatively higher level of maintenance than painted/ varnished surfaces, routine cleaning and upkeep of oiled or waxed areas is necessary to ensure they preserve their natural beauty for longer. Gentle cleaning carefully calibrated to the needs of the specific finish removes stains, dust and everyday dirt that could possibly cause scratches. Plain water or common household detergents are too aggressive and their long-term use ultimately damages the finish.

Emulsion-based care products restore many valuable materials to the finish, so as to retain its durability and shine. Even so, oiled surfaces also need re-oiling from time to time to prevent permanent patches of wear from appearing.

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Care	52–53
Freshening-up	54–55
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Cleaning

Maintenance

Freshening-up

## Naturtrend Furniture Cleanser

- A natural, concentrated cleaning and care product
- For all oiled and waxed surfaces
- No artificial fragrances added

Naturtrend Furniture Cleanser is a gentle, concentrated cleaner based on natural raw materials. Specially developed for the cleaning of oiled and waxed wood surfaces, it guarantees the gentle removal of soiling and dirt while also nourishing the wood surface at the same time. Naturtrend Furniture Cleanser contains no non-natural fragrances and leaves a wafer-thin protective film. Naturtrend Furniture Cleanser contains water, coconut oil, surfactants, soy lecithin and potash (see "Health and safety").

### Application instructions:

Add 25 ml to 1 l water. 500 ml produces 20.5 l of ready-to-use cleaning solution.

### Shelf life:

24 months in sealed original container. Keep between +10 °C and +30 °C for storage and transportation. **Sensitive to frost!**

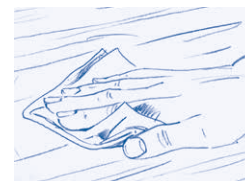


Available in a 500 ml container.

Cleaning

Maintenance

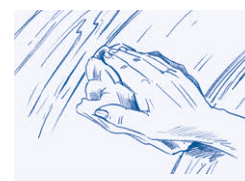
Freshening-up



1. Before starting cleaning, first dust the surface off using a dry or slightly damp, lint-free cloth.



2. Then prepare the cleaning solution by adding 25 ml (about 3 table-spoons) of Naturtrend Furniture Cleanser to 1 l of water.



3. Slightly dampen a soft felt cloth with the cleaning solution and use this to wipe down the entire surface.  
**Caution:** To avoid later problems with water stains, never let the cleaning solution collect in pools on the surface. Once treated, the surface must not be cleaned with plain water later – this removes the product's protective film.



### Tips:

- To freshen up the finish on surfaces, a maintenance emulsion needs to be applied roughly every 2–3 months after cleaning. To perfectly complement cleaning with Naturtrend Furniture Cleanser, we recommend maintenance with Naturtrend Furniture Care (see next page).
- Day-to-day cleaning of object surfaces can be performed with a dry, lint-free cloth (e.g. a non-woven cloth).
- Do not perform wet cleaning, maintenance or freshening-up work on furniture in the first 10 days after oil or wax treatments. During this time, the oil is binding to the wood and the wax is achieving its final hardness.
- Never use aggressive, strongly alkaline or solvent-based cleaning or scouring products. These kinds of cleaning products attack the natural finish and may even dissolve it.
- Never use any microfibre cloths with a seam for cleaning your surfaces: these have a surface like ultrafine sandpaper and will ultimately destroy the finish.
- Always use clean, seamless cotton or nonwoven cloths, or chamois leather.
- For difficult patches of soiling, which cannot be removed by cleaning with Naturtrend Furniture Cleanser, the oil/wax layer must be removed completely and the original finish must then be re-created. For deep cleaning, use **Zweihorn® Intensive Cleanser** (not based on natural products).

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## Naturtrend Furniture Care

- Natural care product with high wax content
- Nourishes the surface and polishes to a high shine
- For all oiled and waxed surfaces
- No artificial fragrances added
- Perfectly complements Naturtrend Furniture Cleanser

Naturtrend Furniture Care is a natural care product based on natural raw materials and contains no non-natural fragrances. Naturtrend Furniture Care gives all oiled and waxed surfaces a vibrant finish. The waxes it contains give the surface a high shine after polishing. The wood is visibly nourished and made more resistant by the extra-rich ingredients.

Naturtrend Furniture Care contains water, carnauba wax, candelilla wax, beeswax, shellac wax, shellac and natural emulsifiers (see "Health and safety").

### Application instructions:

Naturtrend Furniture Care is ready-to-use. On very dark surfaces, the product needs to be diluted with water 1:1, so as to avoid any potential "fogging" effects as a result of the natural wax ingredients it contains.

### Shelf life:

24 months in sealed original container. Keep between +10 °C and +30 °C for storage and transportation. **Sensitive to frost!**



Available in a 500 ml container.

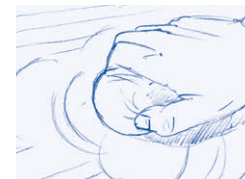
Cleaning

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- Note:** Before application, we recommend cleaning with our Naturtrend Furniture Cleanser product.  
Use undiluted Naturtrend Furniture Care to slightly dampen a nonwoven cloth and apply an even coat.



- Leave to dry for 30 minutes and then polish the treated surface with a coarse cotton cloth. If left unpolished, Naturtrend Furniture Care will dry to a satin finish.

**Caution:** Do not use plain water on the surface finish afterwards!



### Note:

For the cleaning and maintenance of all oiled wood or cork floors, Zweihorn® recommends Naturtrend Parquet Cleanser and Naturtrend Parquet Care.

For information about techniques for finishing flooring with Naturtrend oils, please see the Zweihorn® parquet finishing guide (available from your Zweihorn® stockist or as a download from "Leaflets and guides" at [www.zweihorn.com/en/downloads](http://www.zweihorn.com/en/downloads)).

### i

#### Tips:

- To freshen up the finish on surfaces, Naturtrend Furniture Care needs to be applied roughly every 2–3 months after cleaning.
- Do not perform wet cleaning, maintenance or freshening-up work on furniture in the first 10 days after oil or wax treatments. During this time, the oil is binding to the wood and the wax is achieving its final hardness.
- For difficult patches of soiling, which cannot be removed by cleaning with Naturtrend Furniture Cleanser, the oil/wax layer must be removed completely and the original finish must then be re-created. For deep cleaning, use Zweihorn® Intensive Cleanser (not based on natural products).

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## Naturtrend Oil Refresher

- For the restoration and care of oiled wood and cork surfaces
- Can be used on any oil product
- For re-oiling surfaces pre-oiled at the factory
- Restores freshness and shine
- Forms a protective film

Naturtrend Oil Refresher is an oil care product designed for use in restoring, refreshing and maintaining any interior oiled wood or cork surface. The light oil texture means it can be used on any surface treated with Naturtrend oils or with any other commercially available oil products. Naturtrend Oil Refresher nourishes the wood, returning the floor to its original saturation, shine and freshness after just one application. Where the original oil film has faded slightly or shows signs of wear in places, Naturtrend Oil Refresher can avoid a situation where the entire surface has to be treated again.

Naturtrend Oil Refresher contains natural oils, soy, sunflower and colza oil, isocalphates, wax dispersions, and lead- and barium-free siccatives (see "Health and safety").

### Application instructions:

500 ml Naturtrend Oil Refresher is enough for refreshing an oiled surface of around 20 m<sup>2</sup>.

### Shelf life:

24 months in sealed original container. Keep between +10 °C and +30 °C for storage and transportation. **Sensitive to frost!**

For information about techniques for finishing wood flooring with Naturtrend oils, please see the Zweihorn® parquet finishing guide (available from your Zweihorn® stockist or as a download from "Leaflets and guides" on [www.zweihorn.com/en/downloads](http://www.zweihorn.com/en/downloads)).

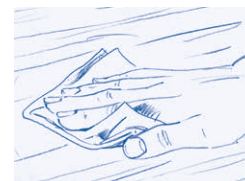


Available in a 500 ml container.

Cleaning

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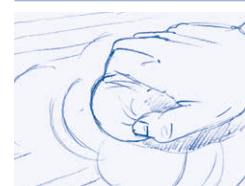
Freshening-up



1. Before applying Naturtrend Oil Refresher, first dust the surface off using a dry or slightly damp, lint-free cloth. Let the surface dry off before application.



2. Apply the oil refresher sparingly to a wad of cloth or a floor cloth and then wipe down the entire surface to create an even film.



3. Let the refresher soak in for 10 minutes and then rub the floor down with a white pad or a wad of cloth, so that the oil film is no longer visible and the surface appears dry. After treatment with Naturtrend Oil Refresher, leave the product to cure for at least 24 hours. Protect from water during this time! Finish by polishing with a white pad.

i

### Tips:

- The effect produced by Naturtrend Oil Refresher will depend on the surface it is used on. We therefore recommend testing a small sample on an inconspicuous area before treating the entire surface.
- To keep your surface looking beautiful, we recommend cleaning and care with Naturtrend Furniture Cleanser and Naturtrend Furniture Care.
- Decking, garden furniture, fences, etc. treated with Naturtrend Wood Design Oil followed by Naturtrend Project Oil can also be freshened up with Naturtrend Oil Refresher. If the colourless protective Naturtrend Project Oil film has worn down and perhaps even the Naturtrend Wood Design Oil pigment is starting to fade, the surface must be sanded down and these finishes re-created (see page 36).

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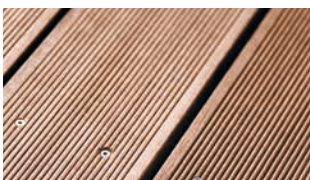

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**Product overview**  
**Care and cleaning**

			Cleaning		Maintenance		Freshening-up
			Parquet Cleanser	Furniture Cleanser	Parquet Care	Furniture Care	Oil Refresher
			<ul style="list-style-type: none"> <li>■ A natural, concentrated cleaning and care product</li> <li>■ For all oiled and waxed surfaces</li> <li>■ No artificial fragrances added</li> </ul>	<ul style="list-style-type: none"> <li>■ A natural cleaning agent and care product</li> <li>■ No artificial fragrances added</li> <li>■ For routine wet cleaning</li> <li>■ Specially designed for parquet flooring</li> </ul>	<ul style="list-style-type: none"> <li>■ Natural care product with high wax content</li> <li>■ For all oiled and waxed surfaces</li> <li>■ Can be polished to a high shine</li> </ul>	<ul style="list-style-type: none"> <li>■ Natural care product with high wax content</li> <li>■ Can be polished to a high shine</li> </ul>	<ul style="list-style-type: none"> <li>■ For the restoration and care of oiled wood and cork surfaces</li> <li>■ Can be used on any oil product</li> <li>■ For re-oiling surfaces pre-oiled at the factory</li> <li>■ Restores freshness and shine</li> <li>■ Forms a protective film</li> </ul>
Interior	Flooring		●		●		●
	Furniture, etc.			●		●	●
Exterior	Flooring		○		○		●
	Furniture, etc.			●		●	●

● Our recommendation ○ Only recommended in some circumstances

**i** **Note:**  
Naturtrend Beeswax Balsam can also be used for the maintenance and care of indoor furniture.

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## Repairing damage

Surfaces finished with natural products commonly show signs of wear and tear – scuff marks, scratches or stains – after a period of use. In contrast to painted or varnished finishes, however, damage on these surfaces can be repaired quickly and easily. This means that repairing a natural wood finish is not only quicker to complete but also more economical!

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Avoiding mistakes

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### Wine stain on an oiled finish

**Cause:** If liquid remains pooled on an oiled surface, stains are the result since oil does not form a film on the wood surface but instead keeps it permeable. This means marks can be left by wine, juice, tea or coffee. Stains should therefore be removed immediately.

**How to remedy:** The best approach is to sand the stain with the same grit size as originally used for the entire surface. If you don't know the grit size that was used, use a P 400 grit: sand the stain out until it is no longer visible, working in the direction of the grain. Now liberally apply the original type of oil to the sanded area. Let the oil soak in for at least 10 minutes before wiping off any excess oil with a wad of cloth. Repeat this procedure until the colour of the brighter patch blends in with the rest of the surface. To finish the repair and freshen up the treated area, you should apply an appropriate care product after 10 days.

### Dull patches on waxed surfaces

**Cause:** Regular wear and tear can cause the shine to diminish over time and the surface appears dull.

**How to remedy:** Apply the original wax to the affected areas and then polish to a shine with a brush, a cloth, a fine white non-woven fabric or a lambswool disc.





### Scuff marks on oiled surfaces

**Cause:** Areas subject to wear and tear can tend to wear down in places where hard objects frequently rub against the surface.

**How to remedy:** The best approach is to sand the scuffed area with the same grit size as originally used for the entire surface. If you don't know the grit size that was used, use a P 400 grit: sand the damaged area down, working in the direction of the grain, to remove any patches of soiling. Now apply the original type of oil to the sanded area. Let the oil soak in for at least 10 minutes before wiping off any excess oil with a cloth. If the area is still brighter than its surroundings, repeat the procedure.



### Minor scratches on oiled surfaces

**Cause:** The effects of pointed or sharp-edged objects on the surface can quickly lead to scratching, especially on softwoods.

**How to remedy:** Fill the scratches with the type of oil originally used, using a suitable paintbrush or a sponge. Let the oil soak in for 10 minutes and repeat the procedure until the scratch has been completely filled. No intermediate sanding of the fill is necessary. Larger scratches or holes must be filled in first with Correct Soft Wax in a matching wood colour shade.

You can correct any unevenness by using a white non-woven abrasive. Use only moderate pressure while working, so as to avoid creating sanding marks.

**Caution:** The above does not apply to surfaces treated with Naturtrend Hard Oil. Repair scratches on these surfaces with Correct Soft Wax in a matching wood colour shade.

## Avoiding mistakes

### Shiny/sticky areas

**Cause:** The oil has not been absorbed fully and has therefore dried onto the surface.

**How to remedy:** Deep clean the surface with Zweihorn® Intensive Cleanser (not based on natural products) and then re-oil to finish. Further information can be found at [www.zweihorn.com](http://www.zweihorn.com)



### Poor water resistance

**Cause:** Not enough oil has been applied to the wood.

**How to remedy:** Sand the wood to key up the surface and oil again until saturated.



**i Note:** For instructions about repairing damage to parquet, please see the Parquet Finishing Guide from Zweihorn® (available from your Zweihorn® stockist or as a download from "Leaflets and guides" at [www.zweihorn.com/en/downloads](http://www.zweihorn.com/en/downloads)).

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## Health and safety

Interiors featuring a lot of natural wood offer an especially pleasant living environment. As a natural raw material, wood has the ability to “breathe” – i.e. to absorb excess moisture from the air and to release it again as needed. When treated with an oil or wax finish, wood surfaces are able to retain these natural abilities. This is how the Naturtrend brand can make a positive contribution to healthy living. Strong principles during manufacturing, full disclosure of our ingredients and compliance with relevant standards guarantee your health and safety when handling our products – this has been confirmed by independent testing institutions.

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Healthy living

There's no place like home! Our own four walls are where we can relax and recharge our batteries. And we're happy to spend most of our time here. Yet this is exactly the reason why harmful substances in wall and floor coverings, adhesives and (to an extent) in paints and varnishes can lead to serious health problems: asthma, migraines, allergies, cardiovascular disease or heart attacks. The interactions between room air and the living environment can release harmful substances from coatings and coverings into the air we breathe. This is why there has been an increasing focus on "building biology" since the 1970s. Building biology investigates the relationships between humans and the built environment. Another aspect considered is the use of suitable products and techniques to ensure that structures are environmentally friendly and contain no harmful substances.

The ultimate goal is to create a safe and healthy living environment. All of these topics are studied by the Institute of Building Biology + Sustainability (IBN) in Ro-

senheim, Germany. The IBN tests products to determine their effects on human health, issuing a quality mark to products that pass such testing. Both health and ecological aspects are considered before making product recommendations. Typical testing involves looking for lindane, PCP, formaldehyde, radioactivity, heavy metals, etc. Naturtrend products bear the IBR quality mark and can therefore contribute to a healthy indoor climate (see page 70). Our manufacturing operations are also carbon-neutral. Accordingly, we are doing our part to compensate for emissions and to combat climate change.

The principles we follow when manufacturing our Naturtrend products include:

**Conserving resources**

Naturtrend products are made from high-quality, renewable natural materials such as beeswax, plant waxes and oils from managed plantations, and are produced using carbon-neutral, resource-friendly processes.

**All-natural materials**

Our oils are made from pure natural raw oils, with no added terpenes, preservatives, artificial fragrances or hazardous materials.

**Safety first**

When selecting and formulating our Naturtrend products, we always look for the solution that is the safest for human and animal health.

**Social responsibility**

Naturtrend products contain no carcinogenic, toxic or aromatic solvents. Our products are also ecologically "optimised", i.e. they have a lower solvent content or are solvent-free where possible.

**Certified quality**

The entire production process meets stringent certification standards to ensure consistently superior product quality.

**Transparency**

We always provide full declarations of all of the ingredients used to make our Naturtrend products, so consumers can cross-check these lists for allergies ([www.zweihorn.com](http://www.zweihorn.com)).



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## Product safety

The Zweihorn® division of AkzoNobel Wood Coatings GmbH hereby declares that Zweihorn®-brand Naturtrend products contain no heavy metals – such as lead, chromium, mercury or cadmium – in any physiologically relevant quantities and further comply in full with the requirements of EN 71-3 (migration of certain elements) in terms of their heavy metal content.

Selected Naturtrend products also meet the requirements of the Institute of Building Biology + Sustainability (IBN) in terms of building biology. The corresponding test certificate can be viewed on our website at [www.zweihorn.com](http://www.zweihorn.com). Our products also contain no toxins of organic origin, such as PCP (pentachlorophenol), PCBs, PCTs (polychlorinated bi- and terphenyls), gamma-HCH (lindane), pesticides (permethrin), phenols, cresols or formaldehyde.

Many Zweihorn® products are solvent-free. Where products do contain solvents, these solvents are used only at certified and/or audited levels of purity. No chlorofluorocarbons or chlorinated hydrocarbons are used, nor are benzene, methyl cellosolve, ethyl cellosolve, methyl glycol acetate or ethyl glycol acetate – all of which are classified as toxic. Our products also contain no allergenic terpenes, such as citrus terpene or turpentine, for example.

All Naturtrend products are based on natural raw materials, most of which are also renewable. Naturtrend Products can also be used to treat children's toys or children's furniture. The Zweihorn® division hereby declares that Zweihorn® products contain no materials that have been included or are pending inclusion on the official list published pursuant to Annex IV of the REACH Regulation and therefore classified as Substances of Very High Concern (SVHC).

Regular audits of product quality and production processes in the Zweihorn® division are performed by independent institutions.

Hilden, Germany, 2014

Test certificates, appraisals and other certificates are available from [www.zweihorn.com](http://www.zweihorn.com)



A. Krause, HAZMAT officer

## Ingredients

An important aspect of our corporate philosophy is making information available about our products. Accordingly, each Naturtrend product is accompanied by a full list of the ingredients.

Lists of ingredients are also included in this Guide and in the technical data sheets about our products on the [www.zweihorn.com](http://www.zweihorn.com) website. This ensures that all of our customers are well-informed about product ingredients – which is especially important as regards allergies.

Some manufacturers are reluctant to admit to using certain kinds of ingredients. **Hydrocarbons (solvents)** are one such substance. Often, solvents are needed to make the product easier to work with – especially in terms of its application with a brush or roller, or the product's ability to penetrate into wood. Apart from the safest of all solvents, water, aromatic-free hydrocarbons are the substances that are the safest for the environment and human or animal health. Unlike other chemicals, these solvents are low-odour substances that contain no harmful aromatics and do not cause any impairments to the central nervous system – as is otherwise the case for essential plant oils, balsam turpentine oils and citrus peel oils. Since solvent-based Zweihorn® products contain only aromatic-free hydrocarbons, they require no safety labelling and meet the requirements of the EN 71-3 standard (safe for use on children's toys). For customers who would prefer to use an entirely solvent-free oil product, Zweihorn® offers Naturtrend Hard Oil, based on 100% natural oils.

Some manufacturers also remain silent about whether or not they use **lead-free siccatives** (drying agents). Lead was often used as a siccative (drying agent) in the past when manufacturing oils. Legislation has now been passed that prohibits the use of such drying agents in surface coatings, as they can damage the nervous system and blood formation. To ensure quick drying times for surface coatings despite this ban, many manufacturers now use catalytic quantities (<0.1%) of cobalt-family siccatives in their oil products instead of lead-based drying agents. The metals in these substances accelerate the oil's oxidative drying process. As an example, linseed oil without drying agents takes 7–14 days to dry out, while linseed oil with siccatives dries in a single day. As a rule, other manufacturers use cobalt and manganese salts to achieve the fast-drying properties of their oil-based surface finishes. As a result of using a new and innovative drying agent, our Naturtrend oils and waxes are cobalt-free, however, and are therefore entirely safe to use while being just as quick-drying and easy to apply.

To add colour to oils, dyes can be used that are certainly easier to blend into the final product but which are produced using synthetic processes. We have made a conscious decision to avoid such dyes and therefore use only natural **pigments** in our Naturtrend Wood Design Oil. Most of the colourants we use are based on iron oxide pigments. There are several naturally-occurring iron oxides.

As one example, iron (III) oxide (Fe<sub>2</sub>O<sub>3</sub>) is the mineral haematite. Each of these iron oxides has its own specific colour shade. The oxidation process can also be controlled technically to create certain specific types of pigments.

## Tests, appraisals and certificates



### Chemical stresses on furniture surfaces pursuant to DIN 68861/1C

**Classification of resistance groups:**

1A = Most resistant group to 1F = Least resistant group

**Example:** Chemically cured two-component paint/varnish coatings are classified as resistance group 1B. Paints/varnishes that only dry physically (by evaporation) are typically classified into group 1C.

The tests are carried out with 10 different test substances, such as wine, water, disinfectants and typical household cleaning agents, all of which are applied to the treated surface. Each of these substances is left on the oiled or waxed surface for 10 minutes and is then removed. If the surface shows no visible alteration, the test is passed and the coating is classified as 1C. All Naturtrend surface finishing oils are certified to this test standard.



### Chemical stresses on furniture surfaces pursuant to DIN 68861/1C

EN 71-3 – European standard – Migration of heavy metals (testing of children’s toys, for example)

EN 71 part 3 specifies requirements for the migration of harmful substances in coatings (heavy metals such as lead, chromium, cadmium, barium, etc.). An extraction is used to simulate a digestion process, to provide information about the solutes. A quantitative analysis is made of elements demonstrably extracted. Exposure limit values of hazardous substances must not be exceeded.



### CE marking

For Zweihorn® products provided with the compliance mark (Ü), CE marking can be requested for structural components such as parquet, stairs, etc. This compliance mark (Ü) is awarded to building products (parquet and other coatings, care products and adhesives, wood flooring) that meet the health protection requirements defined in the technical specifications from the German Institute of Construction Engineering (DIBT).



### Non-slip properties according to BGR 181 and DIN 51130

During this test, test persons with test shoes and a specified rubber sole walk on the flooring to be tested, which has been coated with engine oil. The slope of the floor is increased until the test person slips (= angle of acceptance). The average angle of acceptance is classified into evaluation groups R9 to R13.



### Building biology appraisal for solvent-free and solvent-based Naturtrend products

As described on page 66, the work of the Institute of Building Biology + Sustainability (IBN) focuses on testing products and production methods for classification as safe in terms of healthy living and environmental protection.

The aim is to protect consumers from the unhealthy effects of unsafe living environments. IBN appraisals for our Naturtrend products can be found on our website at [www.zweihorn.com](http://www.zweihorn.com)

## Sustainability

The concept of sustainability seems to be ever-present at the moment. Many companies state that their business is sustainable, and publish corporate sustainability reports or even go so far as to appoint one of their staff as a “Sustainability Officer”. But what does “sustainability” really mean? At first glance, it seems to relate to environmental protection – but sustainability goes much further than this.

Terminology  
NaturT.R.E.N.D.

74–75  
76–77



Basic know-how  
Natural products

Preparation

Finishing

Preservation

Repairing damage

Health and safety

**Sustainability**



## The concept of sustainability

### In a nutshell, sustainability means only ever consuming as much as you can replace in the future

So “renewability” is the underlying principle here. This means that sustainability is a model that is based on renewable systems. Systems are used that can be maintained and which can regenerate themselves in natural ways, so as to safeguard the future for subsequent generations. From this view, sustainability also always has something to do with our responsibility to future generations.

### Sustainability can be divided into three major areas:

- Ecology:** Nature and the environment should be preserved for future generations. This is achieved by preserving species diversity, by climate and environmental protection, and by conserving our natural surroundings, cultural heritage and landscapes.
- Economics:** The circumstances in which we do business should be organised to guarantee prosperity and long-term security of supply. One important aspect here is shielding our economic resources (such as employers and employees) from exploitation.
- Sociology:** Society should develop in a way that ensures everyone is involved and can play an active role in this development. The ultimate goal is to achieve a forward-looking society worth living in that safeguards basic necessities (food, water, safety, social contacts, etc.) while also combating poverty and ensuring equal treatment and opportunities for men and women.

To achieve the greatest impact, sustainable strategies and decision-making depend on how each of us interacts with his or her personal environment.

We can start “thinking sustainably” at home and in our families – and a sustainable approach often involves making cost savings, too.

### Examples:

- Don't leave the engine running when waiting in your car (railway barrier, garage door, etc.): even 15 seconds with the engine off will save you petrol while also doing your bit for the environment.
- When you take a break from office work, always leave your PC on standby – you'll save power and reduce your electricity bill. Standby also keeps your desktop exactly as it was when you left it, since the PC doesn't shut down. When you start from standby you can therefore get back to work in a matter of seconds.
- If electrical appliances aren't being used for prolonged periods (including overnight), switch them off rather than leaving them in standby mode. Just by leaving appliances permanently on standby, the average German household will add around €80 to its annual electricity bill. Multiplying this by 40 million households, this is €3.2 billion of wasted energy.
- For the sake of your own health and those around you, keep an eye out for sources of danger (trip hazards from cables, defective lighting, etc.) and try to eliminate them before an actual accident occurs.
- Set a good example to encourage others (family members, children, friends and acquaintances) to take a sustainable approach to natural resources. Remember: just a few changes can make a big difference. If everyone takes the time to do their bit for sustainability, this helps the family and the household budget, and conscientious conduct gradually then becomes part of wider society – ultimately leading to a global benefit for the world at large.





## Sustainability at Zweihorn®: NaturT.R.E.N.D.

In recent years, a greater sense of environmental awareness and an increase in the numbers of allergy sufferers have driven demand for products that are biodegradable and safe for human health. Zweihorn® was one of the very first to recognise the trend towards natural products, launching a new, coordinated range under the Naturtrend brand in 1997. These products have seen many improvements and are now faster-drying, more durable as regards surface finishes and even safer in terms of their natural raw materials.

In 2007, provisions from the German implementation of EU Directive 2004/42/EC came into effect, limiting solvent emissions from certain paints and lacquers, and Zweihorn® quickly launched appropriate product systems. These provisions do not apply to all coatings: only to paints and lacquers used for surface finishing of permanent structural parts and installations

(such as doors, stairs, windows, flooring, etc.).

A second, more stringent set of provisions from the German legislation came into effect on 1 January 2010. Zweihorn® offers water- and solvent-based natural systems that are fully compliant with volatile organic compound (VOC) legislation. In fact, all Naturtrend products are VOC-compliant, even though they are not all subject to this VOC Ordinance. Since wood has a wide range of positive qualities and retains its original characteristics when used in natural products, many people are now switching to such products.

The entire AkzoNobel Group is also strongly committed to sustainable development. Within our organisation, we prioritise positive attitudes to personal health and safety and risk minimisation. Our product devel-

opment work maintains a constant focus on new approaches, methods and techniques for creating sustainable products and operating procedures. This is why AkzoNobel has drawn up an internal eco-efficiency strategy as well as a programme for sustainable innovation, whose success is measured against sustainability benchmarks. Thanks to this work, AkzoNobel was ranked first by the 2010 Dow Jones Sustainability World Index (DJSI World) in the Chemicals supersector. DJSI World is one of the world's most important sustainability indices and ranks the performance of leading sector companies. The Index rates companies according to their ecological, social and economic performance, and also considers their forward-looking financial indicators. Compared to our

co-competitors, AkzoNobel is ranked as the top company in terms of renewable energy sources, carbon emissions and energy efficiency.

With this in mind, we want to continue to build on this success in the future – because sustainability at Zweihorn® is **NaturT.R.E.N.D.**



**T**radition: Zweihorn® has been a trusted brand for professional woodworkers since 1912. Even today, we are still working to develop innovative products that are even easier to use. Our Naturtrend range has also been a permanent part of our product portfolio since 1997.



**R**esources: Zweihorn® Naturtrend products are made from natural raw materials that are sourced directly from the natural environment and are usually renewable. We also prioritise the use of raw materials manufactured from local plant species – this helps to reduce CO<sub>2</sub> emissions.



**E**ngagement: We are committed to working towards a green future. Which is why we use FSC-certified paper for much of our printed matter.



**N**oble-minded: Product development is one example: here, we think about the type of disposal required so that we can avoid creating any special waste that pollutes the environment.



**D**esign: Sustainable interior design is once again fashionable. We offer our customers high-quality, contemporary products based on natural materials. Time and again, we prove the point that choosing Naturtrend oils and waxes to create sustainable surface finishes is an ecologically sound decision that does not compromise on style.

Basic know-how  
Natural products

Preparation

Finishing

Preservation

Repairing damage

Health and safety

Sustainability







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