Trends Concerning Surfaces

Try it for yourself and see how good this natural product really is. Use exclusive boards made of precious wood to show off your food.

Hesse FOODCARE-OIL GE 11077

Natural, reliable and completely safe protection for surfaces in contact with food.

Are you looking for natural, reliable protection for your precious wood surfaces, such as counter tops, work surfaces, fruit bowls, chopping boards and serving boards? Were you frustrated that you couldn’t find a suitable natural oil, because all the oils on the market spoiled the taste of food?

Hesse FOODCARE-OIL GE 11077 is the answer! The odour-free, tasteless natural oil is solvent-free, and contains neither siccatives, nor oximes. It is 99.7% pure and the oiled surface has no effect on any foodstuffs stored on it in terms of either taste or smell. This oil has also passed the sensory tests for use with foodstuffs as mandated in the LFBG (Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch - German Food, Consumer Goods and Foodstuffs Code). Those results have even been confirmed by an independent institute.

And protecting your surfaces is so easy. Simply apply the oil to the clean, finely sanded wood, allow it to penetrate the wood briefly, work it in with a non-woven abrasive cloth, and remove the excess. The oil can then be reapplied as necessary depending on the type of wood used and the level of protection required. The oil accentuates the colour and structure of the wood, showcasing the exclusivity and high quality of the precious underlying material. Once the oil has been applied the surface remains breathable, despite being effectively protected. And, as we have already mentioned, the oiled surface affects neither the taste nor the smell of any food stored on it.
Are you proud of what your company does? What are the highlights that keep you motivated day in, day out? It’s worth taking some time to think about it.

Of course I am proud of what happens in our company every day. But what exactly is it that we can all be proud of at Hesse-Lignal? The personal commitment of our staff in every area of the business, the many new product and process ideas we regularly present to you - that’s the obvious bit.

But why do we actually do it in the first place? Of course, part of the reason is to build a profitable company, to ensure it is healthy, stable and equipped to face the future. As a family-owned company, it’s also about giving our many employees a secure future.

These are very important considerations. They drive us on and give us energy.

But that’s by no means all there is to it. There is another, very important, point to mention. As our customer, everything you do in your own company, and your massive commitment to it, is every bit as remarkable as what we do. As well as being proud of our own products, we are proud of all the beautiful, top quality products you produce using our lacquers and stains. Your brilliantly designed furniture, doors, floors and interiors for hotels and yachts remind our staff why they do what they do.

You could say we identify not just with our own products, but with yours too. So it’s always a real pleasure for us to work on a customer project and to be able to present it to you and to our own staff, whether it’s in lacktuell - as in this issue - or elsewhere. Your products show a passion you can be proud of.

And to see what our products can help produce always makes us proud too.

Yours sincerely, Jens Hesse

Reactive stains – full of surprises

Colours can appear on oak due to the effects of tannic acid. They’re a curse for some, but a blessing for others. Tannic acid is generally seen as something to be avoided. This substance is frequently responsible for unwanted discolouration of stained and lacquered wood. However, we can turn this characteristic of tannic acid into an advantage by treating the wood with Hesse reactive stains.

When Hesse reactive stains are applied, the stain reacts with the tannic acid, which causes colours to appear on the stained wood. The colours are produced in the cell walls of the oak, producing a very intense colour on the wood. The colour tone which is finally produced depends on the amount of tannic acid present in the wood. As every tree contains a different amount of tannic acid, staining the wood with reactive stain produces a unique colour tone, which can differ from one piece of wood to the next.

What is seen as a problem when using normal stains is precisely what lends reactive stain its charm.

Campe, one of Hesse Benelux’s dealers, was inspired by the attractive range of colours, and took up the challenge. This is how this magnificent flooring came to boast such natural and varied colour tones. The parquet manufacturer was particularly struck by how easy it was to work with Hesse reactive stain. Despite the fact that it was being used to cover relatively large surfaces, the stain could be applied and used immediately without the need for any preparation.

Hesse has put together a range of colours for you to choose from. These stains are not part of the Stain Mixing System (SMS), because the final colour tones can only be controlled to a limited extent. The colour range we have put together will give you an idea of what to expect, but the final colour tone depends on the amount of tannic acid in the wood. The stains have been given some apt names, including Ginger, Swamp and Black Olive.
Set sail with Hesse natural wood effect

The natural, untreated look is right on trend at the moment - and not just for furniture surfaces. More and more consumers are coming to appreciate this special kind of wood surface.

The non-accentuating, dull matt wood is designed to match accentuating, solvent-based polyurethane lacquers in every way. It must show the same levels of chemical and mechanical resistance and be tough enough to cope easily with the demands of daily life, at the same time as having a dull matt finish.

Hesse natural wood effect has been performing this balancing act with ease for years. An almost imperceptible change in the wood can be achieved with just two or three coats of lacquer, both on light woods and on darker ones which have been stained light.

New Hesse PICEA pine stains are a perfect partner for Hesse natural wood effect, allowing you to create your own colours. They are guaranteed to impress on other types of wood too, thanks to their exceptional clarity and shine.

Once the lacquer process has been completed, Hesse Natural wood effect adapts elegantly to the structure of the original wood. This makes the surface look and feel natural, as well as making the surface incredibly durable.

As well as these hallmarks, Hesse natural wood effect has now also passed the EC-type Examination certificate (Module B) for paint to be used on ships, in accordance with the IMO Resolution.

So it’s full steam ahead for DE 42900-0003 / DA 400-1
For personal advice on natural wood effect and other possible combinations, please contact our technical hotline.

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How can I make sure the mix is just right?

Mixing ratios given by volume or by weight. Added thinner and other additives. Learning from daily practical experience or long, nerve-shredding calculations? Here is a brief description of the procedure for mixing Hesse 2-part lacquers.

Before the lacquer can be used, the two parts, the lacquer and the appropriate hardener, must be mixed together. This should be done in accordance with the mixing ratio given on the lacquer’s label or in the technical details.

But what does a mixing ratio (by volume) of 10 : 1 actually mean? For a mixing ratio of 10 : 1, you need one part hardener for 10 parts lacquer. As the mixing ratio here is given by volume, the component parts have to be measured according to volume too (i.e. in litres). Obviously, a suitable measuring container will come in useful. If you want to harden 5 litres of our HYDRO-PUR MATO water-based lacquer, you will need 0.5 litres of hardener.

But what if your Hesse product is very dense, and is sold in kilograms rather than litres? You can still use a suitable measuring container to measure out the correct volumes of lacquer and hardener. Alternatively, mixing ratios can also be stated gravimetrically, or in terms of weight. Accordingly, for 7kg of FANTASTIC-FILL lacquer with a mixing ratio (by weight) of 100: 7, you will need to weigh out and mix 0.49 kilograms of hardener. This equates to 7 parts hardener for every 100 parts lacquer.

Once the hardener has been added, the lacquer has to be stirred well. The hardener has to be stirred in especially thoroughly when using our 2K water-based lacquers, because the solvents in the hardener cause the 2K HYDRO lacquers to thicken. Only once you have done that can you adjust the viscosity of the final product. A range of thinners are available depending on the lacquer and how it is being used. For 2K HYDRO lacquers, which can be diluted with water, water or optimiser is used. For other products specialist thinners are used with various different characteristics. The maximum amount of thinner which can be added (state as a percentage) depends on the lacquer/hardener mixture used. This limit should be observed carefully, especially when using water-based lacquers. For example, adding 5% water to a HYDRO-PUR lacquer/hardener mixture of 5.5 litres would mean adding a maximum of 0.275 litres of water.

The quantity of Hesse aids and additives to be used, such as our ring-proofing additive, can be stated as a maximum percentage or in terms of a mixing ratio. What are these stated quantities of additives actually based on? As a rule, the amount of aids and additives which can be used is determined before the lacquer is hardened and is based on the pure, standard lacquer.
Using Hesse HYDRO-PUR MATO for real

In the last issue of lacktuell we introduced our new HYDRO-PUR MATO HDU 54200. The dull matt surface stands out thanks to its added soft-feel effect. HYDRO-PUR MATO also boasts high chemical and outstanding mechanical resistance.

But the key feature of this range of materials is its ‘self-healing’ properties. Should a minor scratch or soiling appear despite the highly-resistant surface, simply wipe it with a damp cloth, then gently wipe it dry - job done! Any marks or minor damage will have disappeared.

A single spray application on a real wood surface with a clear base coat or a surface with a coloured lacquer base coat is sufficient. Then allow it to dry at room temperature. The original colour tone of the substrate will be largely retained when HYDRO-PUR MATO is used as a top coat on coloured surfaces, despite the dull matt gloss and the outstanding surface properties.

One manufacturer already using our HYDRO-PUR MATO successfully is Meyer-Holzbearbeitung GmbH, a 6th-generation family firm and renowned supplier to the kitchen furnishings industry, based in Melle, eastern Westphalia. Meyer and Hesse are united by over 100 years of partnership.

How Meyer treats wood:
- Oak heavily sanded at grain of 120-150, then brushed out
- 1 x 100 g/m² HYDRO-PUR natural wood effect HDE 54500-0001
- 10 : 1 mixture with DR 5081 hardener
- Intermediate drying: 16 hours
- Smoothing: 400 - 220 grain with subsequent de-dusting
- 1 x 90 g/m² HYDRO-PUR MATO HDU 54200
- 10 : 1 mixture with DR 5081 hardener
- Final hardness achieved after 2 days drying

The finished surface is characterised by a non-accentuating natural wood effect showing the matt, velvet-smooth texture of HYDRO-PUR-MATO.

HYDRO-PUR-MATO is Deco-paint-compliant and meets the EN 71-3 standard (toy safety; 2017-10) as well as DIN 53160 (Part one 1 point 2; Salvia and sweat-resistance).
For the fifth time, raumPROBE, based in Stuttgart’s Feuerbach district, has recognised outstanding innovation in the industry at its materialPREIS awards ceremony. The judge’s task was to identify the best of the best across seven different categories and from a total of 118 entries. Hesse was declared the winner of the Collection category.

For more than 13 years, raumPROBE has been acting as a service provider, agent and adviser for materials used in architecture, interiors and design. In their showroom, home to Europe’s largest materials database, designers can get their hands on 50,000 materials as they plan and research their latest ideas. The materialPREIS is awarded every year for outstanding materials. Winners include manufacturers, young designers, renowned architects and design offices.

The judging panel was made up of 6 specialists representing design, architecture, industry associations, specialist institutes. Winners were chosen in the following categories: Design, Collection, Ecology, Innovation, Procedure, Study and Classic.

Hesse entered the competition in the ‘Collection’ category with its new pattern samples and CREATIVE METALLIC colour range. We submitted our new Metallic range. It includes 112 classic metallic colour tones, but incorporates some more unusual ones too. These colour tones are lacquered onto membranes. This has the advantage that the front of the membrane shows the original gloss of the lacquer, whereas the rear features the sheen of a high gloss or reverse glass coating. Hesse CREATIVE-METALLIC is formulated as a 2-component, polyurethane-based lacquer material, which is suitable for wood, glass and plastics depending on the type of hardener used. Most polyurethane-based finishing and brilliant lacquers can be used for the top coat. Hesse CREATIVE-METALLIC is also available as part of a mixing system. The full range of colour tones can be mixed using five base lacquers and ten pigments.

The award ceremony took place at the beginning of June in Stuttgart’s Haus der Wirtschaft. Hesse’s Development Department, the rest of the Product Management team and the Marketing Department all joined in the celebrations alongside Ralf Untiedt, the inventor and spiritual father of the range. The Hamm-based surface specialists are determined to enter new creative solutions in the various materialPREIS categories in years to come.
Redwood Innovations had been supplying Oyster Yachts with glue for almost a decade when they approached Redwood for interior coatings for their yachts. As a supplier of Hesse Lignal fully tested and IMO certified lacquers both Redwood and Hesse Lignal were confident they had the right products to meet Oysters needs.

Richard Albon of Redwood Innovations said: “Redwood has always strived to improve the working environment and efficiencies of our customers so when Oyster approached us for coatings solutions for their yachts interiors we had no hesitation in supplying Hesse IMO certified coatings.”

Oyster Yachts was looking for coatings that met stringent marine regulations but in turn were aesthetically right for their clients. In particular they had an issue with the colour of their oak changing over time and wanted something that would keep this look.

Adrian Perrin said: “We were looking for a product that would primarily speed up the production process through our spray shop as well as meet the high standard of finish and level of protection we require inside our yachts. Redwood Innovations together with Hesse Lignal spent time with our team, in our spray booth and inside our yachts to really understand our requirements as well as the challenges of spraying the inside of a yacht.”

As well as recommending the right products for their range, Hesse was able to facilitate testing on varying substrates at their headquarters in Germany. Using their state of the art facilities, Hesse used climate chambers to assess the effect of UV on the varying substrates. This analysis provided them with their basis for recommending their DG 4717-0005 as a base coat ideal for closed-pore substrates with additional light fast properties.

The DE 4259x clear two component multicoat acrylic PU lacquer was successful in trials for the required top coat finish. As well as meeting the EC-type examination certificate for seagoing vessels according to IMO Resolution, the product proved a practical solution with its 3 day pot life. This high spec did not mean compromising on finish – the lacquer is resilient, achieves impressive results and is universally applicable. The safety aspect of the lacquer for Hesse Lignal does not stop with the fire testing. Their coatings are free of wood preservatives, toxic-heavy metals, phthalate plasticisers, formaldehyde, and volatile aromatic and halogenated organic compounds. Hesse Lignal “will not compromise on its customers’ health at any cost”.

From chemical content to optimum coat weights to onsite analysis of spray facilities including air flow and ambient temperature of the coatings; Hesse Lignal was on site with Redwood to support Oyster Yachts every step of the way. This premium level of technical back–up was reinforced by bespoke process sheets devised for Oyster by Ben Spinks of Hesse Lignal so that they could get the most out of their finishes. He said: “Oyster are a wonderful company to deal with and share our commitment to quality, forward thinking processing and environmental responsibility. We couldn’t be happier to partner with them and look forward to a long and fruitful relationship in the years to come.”
Encouraging innovation

This year we have set up a new team, one which is a key part of our overall business innovation plan. Its main task is to assess and develop existing processes and to implement innovations in process.

This team, known as the Process Innovation Team (PIT), is dedicated to projects, continuous improvement and change management right across the company. Our aim is to professionalise project management within the company and make our processes transparent.

The projects the team is working on come from every area of our business, but with a particular focus on interfaces and cross-departmental processes. The Process Innovation Team will support continuous improvement within the organisation, thus making a major contribution to the success of the company.