

# Don't put off until tomorrow what you can do today

Innovative Solutions  
Interview with Lena Edinger,  
Project Manager Wood & Construction

## Special Producers of adhesives low in isocyanate



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# DON'T PUT OFF UNTIL TOMORROW WHAT YOU CAN DO TODAY

HAVE YOU THOUGHT ABOUT THE MANDATORY TRAINING FOR  
THE SAFE USE OF DI-ISOCYANATES AFTER 24 AUGUST?



Lena Edinger (Kleiberit)

**"Sustainability will only grow in importance, we are playing right into it"**

*From 24 August onwards, new, tightened European rules apply to industrial and professional end-users working with di-isocyanates. From now on, products containing di-isocyanates may only be used as before if the content of the free, monomeric isocyanate is below 0,1%. If this is not the case, products containing di-isocyanates may only be used if users have received training on the safe use of di-isocyanates.*

*Consequently, it makes sense for manufacturers to look for the easiest possible transition, and not just to avoid training, but above all to ensure the greatest possible environmental, health and safety at work. A pioneer in this field, which has a fully-fledged alternative product on the market with its micro-emission [ME] PUR-Hotmelt adhesives, is Kleiberit, based in the southern German town of Weingarten Baden. Kleiberit, has more than 75 years as a specialist*

*in adhesives under its belt and, as a wholly domestically developed and manufacturing company, is an international partner for a wide variety of industries, with the flooring industry as one of its key markets. With its 725 employees worldwide, annual production of around 60,000 tonnes of adhesives, exports of around 85% of its products, around 500 active products and a network of 75 sales engineers worldwide, it is undeniably a world leader.*

#### **Innovative solutions**

*In recent years, Kleiberit has already been tinkering intensively with its adhesive systems, which has led it to come up with innovative solutions very regularly. Among these, we note adhesive systems with bio-content and Micro-Emission [ME] PUR-Hotmelt adhesives. In this article, we are specifically interested in how they approach the bonding of LVT flooring and how diisocyanate issues are addressed. In a conversation with Lena Edinger, wood and construction project manager and technical sales assistant, we not only get clarification on a specific product for LVT [Kleiberit PUR 716.8.00], but also take a look at the future and how Kleiberit is going full steam ahead for a sustainable and green future, with products that are at least as good as what is currently available on the market.*

*"The requirements within the production chains for the manufacture of furniture, furniture elements and supply products are becoming increasingly stringent," opens Ms Edinger. "It makes sense for us to respond to this and to do so in our own research and production centres, which can be called one of the most modern and innovative worldwide. In cooperation with a wide field of international customers, we develop a product range specifically tailored to customer requirements. We guarantee its global availability through an intelligent logistics concept."*

#### **PUR-Hotmelt Kleiberit 716.8.00**

*"The PUR-Hotmelt Kleiberit 716.8.00 is a great example of how we do things. First, this does include a little explanation of what PUR-Hotmelts are. These are chemical reactive systems, with a chemical cross-linking after application, when producing floorboards in the factory. Due to the chemical cross-linking, PUR-Hotmelts create final products with a high end-performance in terms of temperature stability, etcetera. Kleiberit 716.8.00 was especially designed for LVT flooring. The product was designed to manage plasticizer migration, which is always a big topic when using materials like PVC or LVT."*

*Following the new European requirements, Kleiberit developed the ME types for LVT, in full compliance with the EU REACH-regulations. Micro-emission: Kleiberit 716.8.50*

*"Following the new rules, we developed Kleiberit 716.8.50, where the 50 indicates a Micro-Emission product. Thanks to this product, we can continue to guarantee that the plasticizers migration from the floor covering can be handled by the adhesive and do not soften*

the glue joint, which can cause delamination. At the same time, the product allows to keep the soft-touch feeling of LVT floors", Lena Edinger clarifies. " Kleiberit 716.8.50 goes one step further, because with it we no longer have to respond to the new regulations for di-isocyanates. This product stays nicely below the required 0.1% of free, monomeric diisocyanate, which means that people don't have to be trained when using ME either. Indeed, the diiso-cyanate content is so low that there is no longer any hazardous labeling on the product, while the quality of the adhesives is just as good as before. And important for the customer: they don't have to change anything at all on their own machine lines to use these ME products. You just put new drums on your machine and continue working as before."

"We are very proud of this innovation, which we launched a year and a half ago. It is a great achievement, after we already launched our Kleiberit 716.8.00 for LVT four years ago. Even before the EU brought out the new rules, we were already designing products that were Micro-Emission because we have long been aware that isocyanate can cause a sensitizing of the skin and respiratory system. Consequently, we now already have around 30 ME products in our range, illustrating that being proactive does pay off."

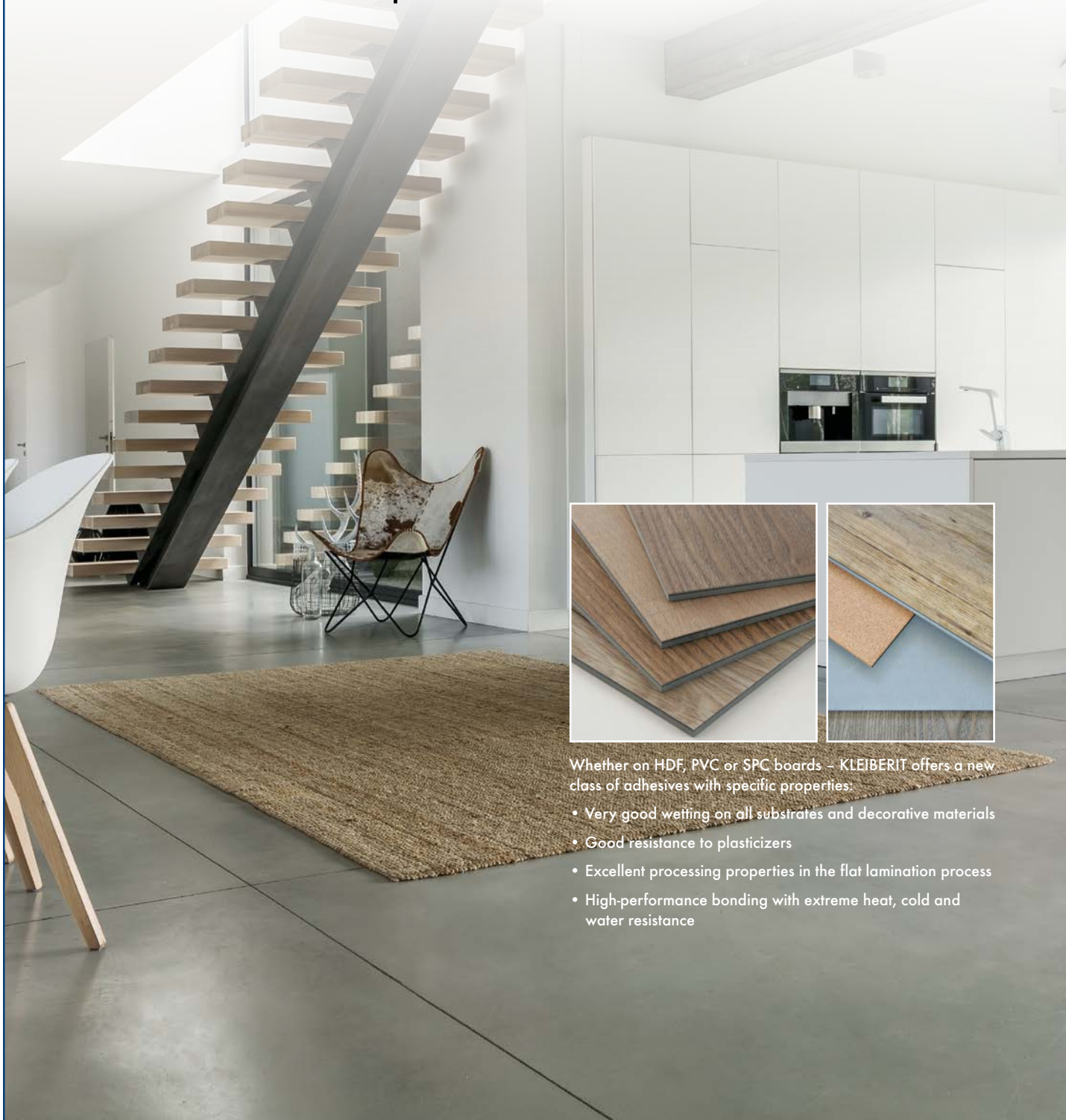
#### **Bio-based and recycling**

We next learn that evolution is anything but over at Kleiberit. Quite the contrary: because sustainability will clearly only gain in importance in the future, the company is taking full advantage of this to be and remain a market leader in the field of sustainability as well. It is therefore developing bio-based materials and is also experimenting with adhesives using recycled materials [PET].

"We start to move away from fossil-fuel-based products and are exploring new avenues of thought day by day," concludes Lena Edinger. "We even launched a hybrid product already, combined with ME technology, based on 35% bio-based materials and it doesn't stop there. We are also looking at how we can source as much raw material from as close as possible, so giving absolute priority to raw materials from our own EU. And, of course, we are tinkering further with the Kleiberit programme, where we can reduce CO<sub>2</sub> emissions even further."



# Design Flooring/LVT – New Trends require New Adhesive Solutions!



Whether on HDF, PVC or SPC boards – KLEIBERIT offers a new class of adhesives with specific properties:

- Very good wetting on all substrates and decorative materials
- Good resistance to plasticizers
- Excellent processing properties in the flat lamination process
- High-performance bonding with extreme heat, cold and water resistance