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# Bonding performance with responsibility: KLEIBERIT's sustainable approach to adhesives

With formaldehyde-free innovations, bio-based coatings, and a customer-centric approach, KLEIBERIT is leading the charge in adhesives that meet today's environmental and performance demands — without compromise.

Sustainable, high-performance products and processes are the gold standard within a manufacturing industry for which productivity and quality are increasingly pressure points. Within this landscape, early adopters of environmentally responsible innovation are thriving, tuned in as they are to the evolving needs of their customers. Specialist adhesives manufacturer, KLEIBERIT, is one such company.

Founded in 1948 in Ebenhausen, Germany, by shareholders Dipl.-Chem. Max Becker, Dr. Werner Klingele and Dr. Heinz Otto, KLEIBERIT now boasts a 700-strong global workforce, pioneering research and production centres worldwide, and a fleet of adhesive systems for a broad field of applications.

Environmental responsibility, alongside the health and wellbeing of its workforce, has been fundamental to the company from the very start of its 77-year history. This philosophy has organically shaped the impressive portfolio and ethos the company holds today.

As one of the world's leading suppliers of polyurethane (PUR) hotmelt adhesives for surface lamination, profile wrapping, and edge or assembly bonding, KLEIBERIT boasts a diverse offering of products containing non-petroleum-based raw materials. This dedication to the development of renewable alternatives to fossil-based resources is a crucial element of KLEIBERIT's mission statement.





Rather than respond to the demands of the market, KLEIBERIT pre-empts them, utilising its impressive technical expertise and world-class facilities to create pioneering solutions.

As the KLEIBERIT team at LIGNA put to Editor, Gemma, so eloquently, "We don't talk about intentions; we talk about solutions".

### Advanced surface finishing with HotCoating Technology

In 2024, KLEIBERIT raised the bar with its new PUR HotCoating products containing over 50% bio-based, renewable raw materials. These formulations replace fossil resources while maintaining "While many of its competitors have streamlined their UK operations, KLEIBERIT maintains a dedicated warehouse in Coalville, Leicestershire"

outstanding performance. Crucially, all product variants are available exclusively in micro-emission (ME) quality, eliminating the need for hazardous substance labelling.

KLEIBERIT is artfully tapping into the new market opportunities unlocked by an evolution from surface finishing on flat panels to diverse roll materials. Indeed, the company unveiled a groundbreaking innovation in this field at LIGNA with a world-first, roll-to-roll system capable of coating sheet materials with thicknesses up to 12 mm.

This impressive industrial machine, with a working width of up to 1600 mm, can achieve processing speeds of up to 60 metres per minute.

Visitors to the exhibition were able to experience the coating of flooring materials produced by Swiss HotCoating user, LICO, firsthand. Utilising recycled leather scraps from industrial waste streams, the resulting product consists of approximately 55% leather fibres, 25% natural rubber as a binder, 10% water, and 10% plant-based oils. The same 1600 mm HotCoating system can also be employed for paper or thermoplastic films, which ushers in new possibilities for the cladding of large-format, three-dimensional elements such as door panels.



#### The "Triple F" Breakthrough – KLEIBERIT's 343.3 polymer system

One of the most significant developments for KLEIBERIT's portfolio, and another key focus for the company at this year's LIGNA exhibition, is the introduction of the KLEIBERIT 343.3 polymer system.

Developed in response to increasingly stringent formaldehyde emissions regulations, the product offers an effective, compliant, and sustainable alternative to traditional ureaformaldehyde adhesives.

Designed to integrate seamlessly into current production setups, this singlecomponent, ready-to-use formulation achieves instant curing through hot pressing, with discolouration-free bonding. Formaldehyde-free according to ISO 15373 Method A, users can rest assured in the knowledge that they're achieving higher production efficiency, without harmful VOC emissions.

This is not just a concept, but a proven solution already delivering efficiency gains and safer indoor environments for clients across the UK.

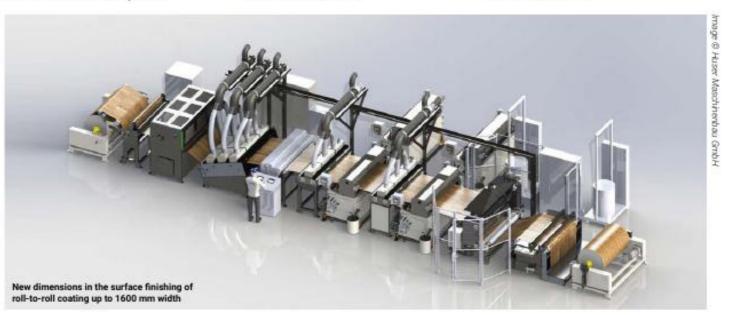
#### A strategic commitment to the UK market

While many of its competitors have streamlined their UK operations by outsourcing logistics and centralising distribution, KLEIBERIT maintains a dedicated warehouse in Coalville, Leicestershire. This facility ensures local stock availability with lead times of just three to four days, significantly improving supply chain responsiveness.

In addition, KLEIBERIT supports its clients with a highly trained, UK-based technical sales team. These experts work directly with customers to optimise production efficiency, often implementing adhesive changes that improve machine performance without requiring equipment modifications.

With this scrupulous approach to customer support, alongside its long-held and holistic approach to sustainability and responsible innovation, KLEIBERIT is truly a driving force in the industry's transition toward more responsible, high-performance production.

www.kleiberit.com

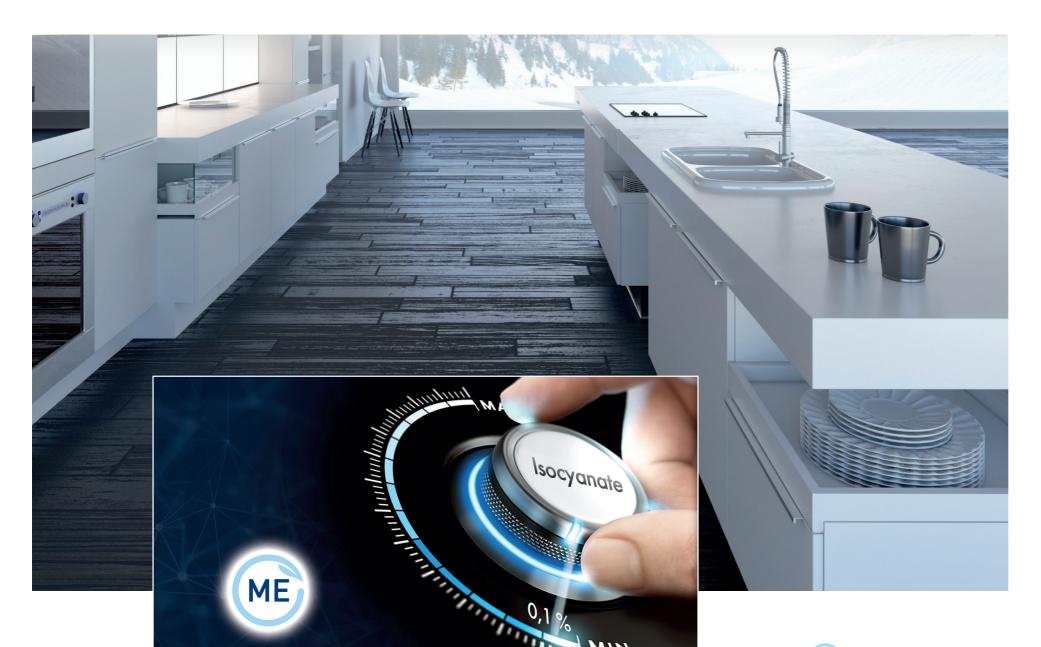


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# KLEIBERIT MICRO-EMISSION PUR HOTMELT ADHESIVES



### ADHESIVES FOR THE PERFECT EDGE

Elaborately designed pieces of furniture for long-term use, e.g. in commercial construction, have particularly high quality requirements in terms of material and processing. The invisible glue line in between stands for highest bonding quality and an elegant appearance. A seamless transition between edge and surface is often a fundamental criterion for the design of high-quality furniture. In the furniture industry, edge banding is performed using state-of-theart edgebanding machines. The requirements for an economical, efficient production process are constantly increasing. The adhesive must bond a wide variety of materials quickly and securely and allow immediate further processing of the furniture panels. PUR hotmelt adhesives with particularly high initial strengths are therefore ideal for edge banding.





Invisible glue line



Learn more about KLEIBERIT's edge banding PUR hotmelt portfolio. Our specialists look forward to speaking to you. Contact us by phone: +44 1530 836 699 or

Edgebanding

email: uksales@kleiberit.com.

### KLEIBERIT® micro-emission PUR hotmelts contain less than 0.1% of monomeric diisocyanate. This eliminates the need for training, as well as the labelling requirement of the PUR adhesive as a hazardous material.

By using KLEIBERIT® ME hotmelt adhesives, you not only release yourself and your employees from the training obligation, but as a company you also ensure improved health and occupational safety for your employees.



## MICRO-EMISSION PUR HOTMELTS FOR EDGE BANDING

Product	Color	Application examples/Characteristics
707.9.50 707.9.51 707.9.58 707.9.95	ivory white translucent black	THE label-free, can be used for all common edgeband materials, can remain in the melting tank overnight without cleaning (KLEIBERIT® Overnight Technology)
707.9.54	ivory	THE specialist, for bonding where exceptionally high initial strength is required
707.9.85	ivory	THE sustainable, Micro-emission technology with > 35% non-petroleum raw materials



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