



Press Release

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Reduced ecological footprint with certified wood adhesives from Henkel

Henkel enables sustainable transformation: First bio-based PUR-Adhesives for load-bearing timber construction

Düsseldorf – The construction industry is facing a challenging pivot towards sustainable practices and lower CO₂ emissions. Mass timber or also called wood construction, with its ecological advantages, is an important driver in achieving these goals. As a leading supplier of certified adhesives for load bearing mass timber, Henkel Engineered Wood is already enabling a vital transformation with its innovative solutions – and has now initiated a further transformation in the industry by shifting from fossil-based to bio-based formulations.

Developed with bio-based materials, the new Loctite engineered wood adhesives, HB S ECO and CR 821 ECO, reduce CO₂eq emissions by more than 60 percent compared to fossil-based alternatives.¹ Both ECO variants are already available for load-bearing timber construction. Henkel is thus creating added value for the industry and helping to make the use of mass timber even more sustainable.

"With Loctite HB S ECO and Loctite CR 821 ECO, we are launching two of our best-selling certified polyurethane (PUR) adhesives as bio-based variants. The solutions offer an excellent standard of performance. Our first bio-based PUR adhesives deliver the high levels of safety, durability, productivity and reliability our customers expect from Henkel adhesives," says Dr. Christian Fild, Global Director Engineered Wood at Henkel. "For both our direct customers and architects, the sustainability of the adhesives used plays a very important role. After all, they are a fundamental part of modern wood construction. Thanks to Henkel's commitment to pioneer innovative solutions, engineered wood adhesives are becoming a vital building block on the path to even greater sustainability."

¹ The figures are based on a cradle-to-gate life cycle assessment by Henkel.

Loctite HB S ECO continues the LOCTITE brand's 30-year track record of success in wood construction

Used globally, the Loctite HB S product series has introduced an even more sustainable option with the addition of the ECO variant to the product range. Loctite HB S ECO is a one-component polyurethane adhesive that is free of volatile organic compounds and solvents. The adhesive is manufactured with 63 percent bio-based materials² and is certified according to the ISCC PLUS³ mass balance method. Compared to conventional HB S solutions, the ECO variant generates 66 percent⁴ lower CO₂eq emissions.

Loctite CR 821 ECO combines stability and aesthetics in sustainable timber construction

As a bio-based two-component polyurethane resin, Loctite CR 821 ECO is an innovation that enables invisible bonding of hybrid wood construction elements. With easy product handling due to its excellent flow properties, the product is versatile and offers highest performance, including in certified load-bearing applications such as glued-in-rods. The ECO variant additionally improves the environmental footprint: CO₂ emissions are 62 percent⁴ lower than a fossil-based version. The product was developed with 71 percent bio-based materials⁵ and is partly ISCC PLUS³ certified.

Comprehensive sustainable benefits for users

Beyond product manufacturing and properties, these innovative products also support sustainable and easy application. As before, Henkel has also ensured that all the necessary certifications for load-bearing timber construction are taken care of with its Loctite ECO products: ECO adhesives come with the appropriate documentation, including life cycle assessments and ISCC PLUS certificates. For ISCC PLUS certification, in a closed system according to the mass balance model, at the end of the production process it must be possible to remove exactly the specified amount of bio-based material from the process as was present at the start of the process. The mass balance model enables the production of solutions that are a mixture of bio-based and fossil materials. In this context, every participant in a product's supply chain must be certified from the point of origin to the warehouse. The relevant Henkel sites already meet these requirements today.

² by weight of organic materials certified according to the mass balance method.

³ ISCC PLUS is a globally applicable sustainability certification system for sustainable raw materials. Examples of raw materials classified as biocircular or biobased include vegetable oils, animal fats, and organic wastes, excluding all inorganic fillers.

⁴ The figures are based on a cradle-to-gate life cycle assessment by Henkel.

⁵ by weight of organic materials containing both direct bio-based and bio-circular raw materials certified according to the mass balance method.

Experience Loctite ECO adhesives live

Henkel will be participating at the 27th International Timber Construction Forum in Innsbruck from November 29 to December 1, 2023. Meet with Henkel application and sales experts to learn more about the ECO solutions. Detailed information on the product innovations is available in advance [here](#).

About Henkel

With its brands, innovations and technologies, Henkel holds leading market positions worldwide in the industrial and consumer businesses. The Adhesive Technologies business unit is the global leader in the market for adhesives, sealants and functional coatings. With Consumer Brands, the company holds leading positions especially in hair care and laundry & home care in many markets and categories around the world. The company's three strongest brands are Loctite, Persil and Schwarzkopf. In fiscal 2022, Henkel reported sales of more than 22 billion euros and adjusted operating profit of around 2.3 billion euros. Henkel's preferred shares are listed in the German stock index DAX. Sustainability has a long tradition at Henkel, and the company has a clear sustainability strategy with specific targets. Henkel was founded in 1876 and today employs a diverse team of about 50,000 people worldwide – united by a strong corporate culture, shared values and a common purpose: "Pioneers at heart for the good of generations." More information at www.henkel.com

Photo material is available at www.henkel.com/press

Contact Kristina Bauer
Email kristina.bauer@henkel.com

Henkel AG & Co. KGaA

The following photo material is available:



Close up of a joint and seam of wood panels.



Gare Maritime, Belgium



Bjergsted Financial Park, Norway