



Frank Baier

„Eco-Fashion“ for the Book

Plastic as a material for print products and stationery is viewed with more skepticism than before in times of stronger commitment to sustainability and environmental protection. In the meantime, however, some manufacturers and suppliers from the printing industry and the paper, office supplies and stationery sectors are offering some alternatives worth considering.

At the moment, book covers and book protectors made from renewable or recycled raw materials are attracting increasing attention. Therefore, waterproof and wipeable plastic products made largely from sustainable ingredients are alternatives to paper, cardboard and paperboard.

Sugar cane as the basis

An innovative example of this is bio-based polyethylene – obtained from the renewable raw material sugar cane. After harvesting, biological ethanol is extracted from the sugar cane, which binds carbon dioxide from the atmosphere in every growth cycle, and this is used to produce the „green“ polyethylene. This helps reduce greenhouse gas emissions and improve the eco-balance compared to conventional polyethylene produced from fossil resources. It is also said to have the same application and performance properties as petrochemical polyethylene.

Hygienically high standard

Films for graphic applications, for example in archives, libraries and museums, are available from [Filmolux Deutschland](#), which is part of the [Neschen Group](#) based in Bückeburg, Germa-

ny. The company's latest innovation is „Filmolux Soft Organic,“ which consists of more than 90 percent renewable raw materials such as sugar cane polyethylene. According to the company, the article, which has been tested in accordance with the ISO 22196 standard by the independent testing institute QualityLabs, achieves an antibacterial effect and thus supports hygiene concepts in libraries.

Furthermore, the film conforms to the REACH chemicals regulation and is consequently free of alkylphenol ethoxylates (APEO) and bisphenol-A. Neither the adhesive nor the book protection film itself contain plasticizers. In addition, according to Filmolux, the film is easy to bond to smooth surfaces. And thanks to reduced initial adhesion, small errors during processing should be easy and quick to correct.

Toy-like safety

Many dust jackets for workbooks, reference books or textbooks are often still made of conventional plastic film. Suppliers such as [CoLibri System](#) from Düsseldorf offer so-called book covers made from renewable raw materials instead. Under the term „ECO Cover“, the specialist offers protective covers for books, which until now have been made of 55 percent sugar cane polyethylene.

CoLibri System is also focusing on protection against viruses and bacteria with its „ECO Shield Cover“ – in keeping with the current pandemic. According to new, independent studies, the surface of this product is likely to offer significantly less surface area for pathogens to attack compared to its „predecessor“ due to its microelectrostatic surface tension. All of CoLibri System's book protectors are said to be CE certified, comply with the applicable toy standard (because children are known to be textbook readers), and are recyclable.

Recycled marine plastic waste

In the future, however, products made from recycled raw materials are also likely to become important. Currently, Basel, Switzerland-based [Winter & Company](#) is on the market with recycled marine plastic – thanks to a new collaboration with Tide Ocean, a startup also based in Basel. According to the partners, the „Toile Ocean“ item is suitable for the production of book covers, premium packaging and stationery.

For this, the new founders created a solution with scientists from the University of Applied Sciences in Rapperswil, Switzerland: plastic waste from the coasts of Thailand, the Philippines and Indonesia is collected and sorted, mechanically compressed into a granulate and spun into a yarn. This results in a warp yarn made from recycled polyester (rPET). Finally, the back of „Toile Ocean“ is coated (instead of paper) with water-based acrylic.

Your
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