

## Bio-based Packaging for Contact Lens, replacing Plastic

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Bio-based medical packaging solution developed by Dutch Company, PaperFoam.

The Dutch company PaperFoam has developed a new type of medical packaging designed to reduce plastic use in the healthcare sector. The solution, created in collaboration with Medicon and Individual, is aimed at packaging systems for contact lenses. The new solution is based on a moulded tray made from bio-based materials. Its structure is designed to keep each lens securely in place while also providing cushioning during transport.

According to the company, the main challenge was to replace conventional plastic trays without compromising medical requirements. The packaging must withstand transport, storage and use in clinical environments where speed and reliability are essential. The packaging features a hinged design, making it easy to open while ensuring a clear organisation of the contents. This is particularly important in healthcare environments where efficient handling is a priority. The inner structure is optimised for protection and stability, while an outer printed sleeve is used for branding purposes.

By separating design and function, the packaging can be more easily adapted and scaled. Compared with plastic alternatives, the solution is described as lighter and easier to stack, which may influence logistics and storage efficiency. However, several uncertainties remain. Costs, long-term durability and the actual environmental impact at scale have yet to be fully assessed. Experience from similar material transitions suggests that new packaging solutions often encounter practical challenges when introduced across healthcare systems. (Source: PaperFoam)