

## Press Release

April 2021

For immediate release

### **The biopolymers market could grow sharply in the coming years as the absorbent hygiene products (AHPs) industry seeks to avoid legislation**

The market for biopolymers could easily double between 2020 and 2024 as the absorbent hygiene products (AHPs) industry seeks to avoid legislation, according to a 23-page report in Issue 119 of *Technical Textile Markets* from the global business information company Textiles Intelligence.

AHPs are big business. They include baby diapers, feminine care (femcare) products such as sanitary pads and panty liners, and products for coping with adult incontinence (AI). The market for AHPs at retail was valued at US\$90 billion in 2019, and sales were boosted significantly in 2020 by the COVID-19 pandemic.

However, AHPs are manufactured largely from spunmelt nonwovens produced from polymers derived from petroleum, and their manufacturing and use have an unfavourable environmental footprint. On average, 1.5 billion diapers are disposed of every day and most of the waste is either incinerated or sent to landfill.

A number of recycling initiatives have been established. In particular, several companies have set up plants for recycling polypropylene--which is widely used in the manufacture of spunmelt nonwovens for AHPs--while FaterSMART in Italy has helped to set up AHP waste recycling chains and has established the world's first plant for recycling AHPs.

But recycling AHPs is extremely difficult because of the complexities of AHPs in terms of material construction, the applications they are used for, and the state they are in when they are disposed of.

As the problem of AHP post-consumer waste becomes bigger, the AHP industry is facing restrictions and legislation such as the Single-Use Plastics Directive in the EU, and similar legislation is pending approval in the USA and being drafted in Canada.

Manufacturers of AHPs are seeking to escape the impact of legislation by looking at the use of biopolymers--including drop-in solutions developed for bio-based polyester and bio-based polyamide, bio-based polypropylene produced from agricultural waste, polylactic acid (PLA) made from second generation and third generation feedstocks, and polyhydroxyalkanoates (PHAs) made by the bacterial fermentation of renewable biomass.

However, the availability of biopolymers is limited. In 2020 production was only 2.1 million tons, which is minimal relative to the availability of polymers as a whole. Consequently, companies which manufacture nonwovens for use in AHPs will have to compete with producers of plastic packaging for whatever capacity becomes available. At present, supplying fibres for nonwovens is seen as a secondary consideration by polymer recycling companies and biopolymers manufacturers.

Nevertheless, as the virgin plastic used in packaging is progressively replaced with bio-based or recycled alternatives, the opportunities for replacing existing polymers in nonwovens will increase.

Ends.

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This report, “Potential of biopolymers and recycled synthetic fibres to create sustainable nonwovens for absorbent hygiene products (AHPs)”, contains 23 pages. The report is available for purchase and costs £235 in the UK, Euro435 in Europe, the Middle East or Africa or US\$570 in the Americas or Asia Pacific.

The report was published by the global business information company Textiles Intelligence in Issue No 119 of *Technical Textile Markets*.

Other reports published in the same issue include: “Editorial: Small-scale and niche applications for nonwoven specialities can reach huge markets”; “Technical textile markets: product developments and innovations, March 2021”; “The world nonwovens industry: part 2--20 medium sized producers, March 2021”; “Global technical textiles business update, March 2021”; and “Statistics: trends in glass fibre reinforced plastic production in Europe, March 2021”.

*Technical Textile Markets* is published four times a year by Textiles Intelligence. Each issue provides an independent and worldwide perspective on the global technical textiles industry.

A year’s printed subscription to *Technical Textile Markets* costs £1,355 (UK), Euro2,390 (Europe, Middle East or Africa) or US\$3,145 (Americas or Asia Pacific). An electronic supplement is also available; please contact Textiles Intelligence for details. Single issues and multi report packages are available on request.

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