

Toyobo Expanding Sales in Europe for Its Cushion Material BREATHAIR® as a Replacement for Urethane Foam

Toyobo is establishing a development, manufacturing, and marketing base in Europe to expand sales of BREATHAIR®, which is a three-dimensional spring-structured fiber that replaces urethane foam in cushions and other applications.



1. Background

Toyobo has thus far manufactured BREATHAIR® at its Tsuruga Plant (in Tsuruga, Fukui Prefecture) and marketed it mainly in Japan for a wide range of uses, including automotive seats, mattresses for medical applications, cushions, and artworks. On the other hand, to develop markets overseas, Toyobo has researched the markets where BREATHAIR®'s features of durability, air permeability, and light weight will be put to best use.

Accordingly, Toyobo has decided that TOYOBO Europe GmbH (a subsidiary of Toyobo; headquartered in Dusseldorf) will invest in facilities located in Obernburg, Germany, and they will be responsible for further development, manufacturing, and sales of BREATHAIR® in Europe.

2. Future Plans

The Obernburg plant will have an annual production capacity of 1,100 tons and will begin operations in August 2013. Toyobo has set a target date of five

years from now for bringing the plant up to full capacity and has budgeted a total of approximately ¥700 million for future business expansion.

Looking ahead, plans call for expanding sales of BREATHAIR® in Europe for such applications as furniture, mattresses for medical use, and seats for boats, automobiles, and trains.

Supplementary Information

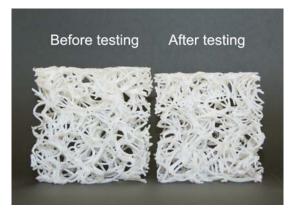
■ Outline of BREATHAIR®

BREATHAIR® has a three-dimensional spring-structured fiber created through the complex combination of PELPRENE®, which is a polyester elastomer.

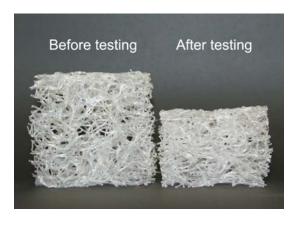
Toyobo began the volume production of BREATHAIR® in 1996, and it was adopted as a superior for urethane foam in seats for railway cars, such as the Shinkansen N700 Series, and motorcycle seats, where high durability is required. In addition, cushions and mats made using BREATHAIR® are comfortable, do not become hot and stuffy, and make it easy for sleepers to change position. They can also be laundered whole and find wide application in hospitals and care facilities.

Reasons for BREATHAIR®'s Durability

The secret of BREATHAIR®'s durability is that it has the properties of both rubber and engineering plastics, and it is made of PELPRENE®, which is both durable and easy to process. BREATHAIR® is manufactured in a special, patented process, and features superior durability in comparison with materials that use polyethylene as a base.



BREATHAIR®



Polyethylene-based structures

As a result of pressure tests, BREATHAIR®, which is made from PELPRENE® (photograph on the left above), undergoes almost no smashing or collapsing. However, polyethylene-based structures (photograph on the right above) do not maintain their thickness and are crushed by about 40% from their original size.

*Testing conditions: JIS K 6400-4 Compression set and fatigue by constant strain/load pounding (It is a test for determining the ratio of decline from the original thickness after being compressed to 50% of the original or actual thickness and heated for 22 hours in a testing oven at a temperature of 70° centigrade.)

■ Outline of TOYOBO Europe GmbH

Representative: Yoshihisa Yokota

Lines of business: Promoting the Toyobo Group's business operations in Europe. Manufacture and sale of films and functional polymers, industrial materials, life science products, and textiles

Address: Klosterstrasse 18, 40211 Dusseldorf, Germany

Ownership: 100% owned by Toyobo

For more information, contact: The Toyobo Public Relations Group pr_g@toyobo.jp