



Heidenheim, May 2015

## Outlast launches new PCM acrylic fiber

Second generation with four times higher performance

Outlast Technologies, Inc., market leader in phase change materials (PCM), and the renowned fiber manufacturer Thai Acrylic Fibre Co. Ltd., Bangkok/Thailand, announce they have succeeded in developing a new generation of a PCM acrylic fiber with Outlast® technology. This new fiber provides four times the performance and offers perfect climate comfort for apparel and home textiles.

A new production process has allowed the Outlast® acrylic fiber to perform four times better than the existing version. "We are using now a non-encapsulated pPCM system and we no longer work with encapsulated mPCMs here," says Martin Bentz, President of Outlast Technologies LLC, Golden/USA. "This change allowed us to improve the performance of the new Outlast® acrylic fibers enormously. With that, the spinning and dyeing properties are enhanced." This especially plays a positive role for dark colors - darker tones are easier to achieve now through a better color absorbance.

The new Outlast® acrylic fiber blends very well with wool. It is well suited for use in socks, knitwear (e.g. pullovers) and home textiles (blankets) offering the significant added value of a dynamic heat and moisture management. The new Outlast® acrylic fibers absorb excess body heat, store and release it.

The performance fibers regulate the climate proactively - in contrast with other technologies that only wick away humidity. Outlast® technology proactively manages heat while controlling the production of moisture before it begins, so less humidity is produced inside the apparel. This Outlast® difference also results in more comfort as well as improved hygiene, which is important especially when it comes to socks.

## Outlast® technology

Outlast® technology was originally developed for NASA to protect astronauts from temperature fluctuations in space. Outlast® technology utilizes phase change materials (PCM) that absorb, store and release heat for optimal thermal comfort. Outlast® technology is comparable to ice in a drink; as it changes from solid to liquid, it absorbs heat and cools the drink, keeping that drink at the desired temperature for a longer period of time. Outlast® phase change materials work in the same way. The PCMs have the capacity to absorb, store and release excess heat. This gives any product containing Outlast® technology the ability to continually regulate the skin's microclimate. As the skin gets hot, the heat is absorbed, and as it cools, that heat is released.

Outlast® technology is not wicking technology, which manages moisture by reacting to your sweat and pulling it away from the skin. Outlast® technology will proactively manage heat while controlling the production of moisture before it begins. That's the Outlast® difference. The benefits of Outlast® products at a glance:

- Absorbs excess body heat
- Manages moisture
- Reduces overheating
- Reduces chilling
- Reduces perspiration
- Continuously adapts to thermal changes

Outlast presents the newest innovations at Techtexil from 4 to 7 May, 2015, in Frankfurt; Hall 6.1, Stand C 11.

### Outlast

Outlast Technologies LLC, a privately held U.S. corporation, is the worldwide leader in phase change materials (PCM) and applications. Outlast® technology is the heat management technology originally developed for NASA that enables any textile to absorb, store and release heat. Outlast® technology proactively responds to changes in skin temperature to manage heat and reduce moisture for everyday comfort.

For over 20 years, Outlast has been committed to the development of new fibers, fabrics and coatings incorporating phase change materials, expanding the use of Outlast® technology across more than 300 brands and a multitude of products in apparel, footwear, bedding, packaging and labels, and accessories. For more information, please visit [www.outlast.com](http://www.outlast.com).

### Thai Acrylic Fibre

Thai Acrylic Fibre belongs to the Aditya Birla Group, a US \$40 billion corporation. Incorporated in 1987, Thai Acrylic Fibre (TAF) ranks among the top three quality acrylic fiber producers globally. It is anchored by an extraordinary force of over 120,000 employees, belonging to 42 different nationalities. It is one of the top two service providers of acrylic application development. Advanced technology, automation, computerized process control systems and captive power, make the operations of Thai Acrylic extremely efficient and reliable.

Outlast®, Thermocules™ and ...not too hot ...not too cold ...just right™ are trademarks of Outlast Technologies LLC.

271 words

Pictures: Outlast® acrylic fiber, How Outlast® technology works, Martin Bentz

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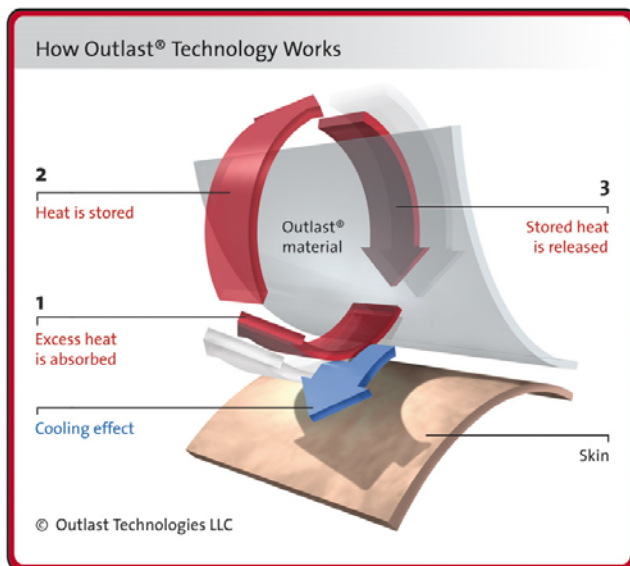
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**Picture 1**

The new generation of PCM acrylic fibers: Outlast and TAF succeeded in producing a heat managing Outlast® acrylic fiber with a four times higher performance.

Picture: Outlast Technologies LLC



**Picture 2**

Outlast® technology works dynamically and proactively manages heat while controlling the production of moisture before it begins.

Picture: Outlast Technologies LLC



**Picture 3**

„We are proud of our new PCM acrylic fiber with a four times higher performance,“ says Martin Bentz, President of Outlast Technologies, Golden/USA.

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information ...

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