



AERSULATE® FIBERS

# REVOLUTION IN FILLING: AEROGEL-INFUSED VISCOSE FIBERS FOR SUPERIOR LIGHTWEIGHT INSULATION

Outlast has pioneered a groundbreaking technology that incorporates the ultra-light and highly insulating material Aerogel directly into viscose fibers. This innovative approach significantly improves insulation performance without adding extra weight. The result? Warm winter quilts that are as light as summer ones, offering the perfect blend of warmth and comfort or ultra-lightweight clothing that stands out with impressive performance.

## DISCOVER AEROGEL: THE ULTIMATE INSULATION MATERIAL

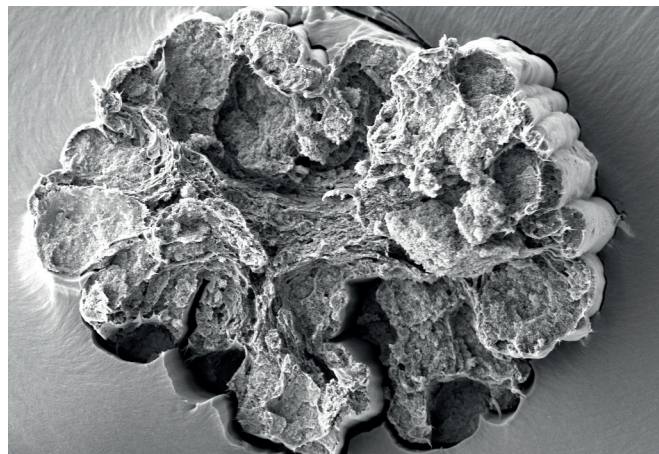
Aerogel, a silicate-based solid derived from quartz sand, is renowned for its exceptional insulating properties. Its outstanding performance is attributed to its highly porous structure, consisting of 98 % air, which makes it an ideal material for thermal insulation. Leveraging these remarkable properties, the Aersulate® fibers incorporate an impressive 50 % aerogel content by volume, establishing new benchmarks in insulation efficiency.

## FACTS ABOUT AERSULATE® FIBERS:

- **Contain Aerogel** – the lightest solid in the world.
- Aerogel is a **silicate-based material** derived from quartz sand, renowned for its superior insulating properties.
- Aerogel is also **used by NASA** in space.
- Fibers contain a **high proportion of air**, enhancing insulation.
- **Maintain performance** under pressure and humidity.
- An **animal-friendly alternative** to down, offering high insulation while supporting animal welfare.
- Based on viscose and therefore **sustainable**.

**WORLD-FIRST INNOVATION**  
Patent-Pending

The high air content in the Aersulate® viscose fibers becomes visible in microscopic cross-sectional images.

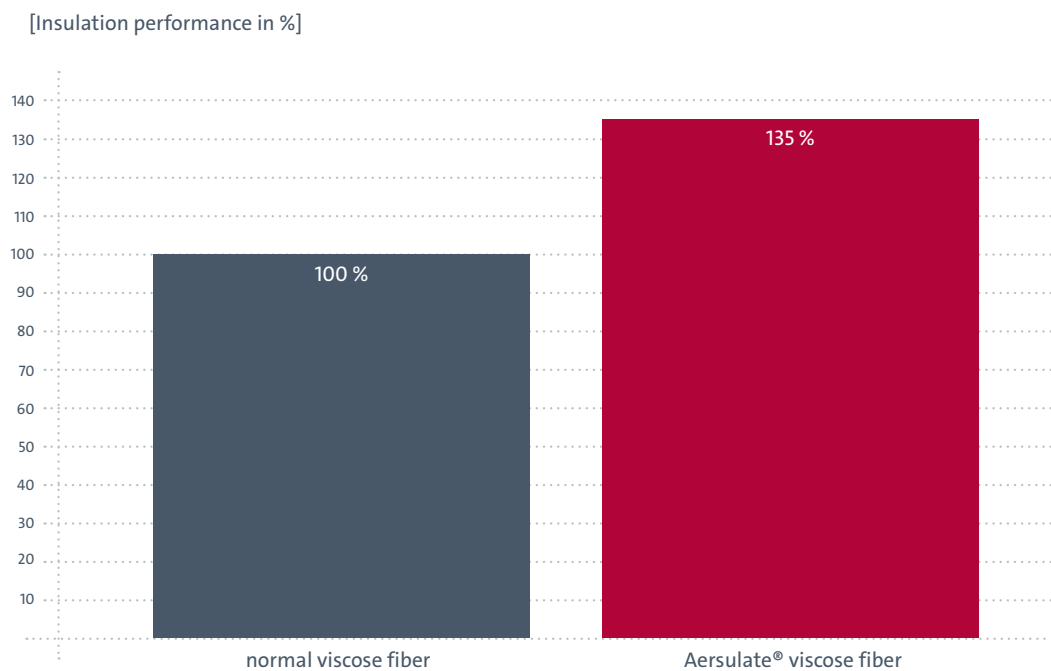


## INDEPENDENT TESTING OF AERSULATE® TECHNOLOGY

An independent, ISO-certified laboratory conducted tests to assess the insulation performance of Aersulate® technology. The evaluation compared 2 cm thick wadding made from viscose fibers, one with and one without the Aerogel component, in accordance with the DIN EN ISO 11092 standard. The results highlight the remarkable improvement in insulation when using Aersulate® fibers.

### COMPARISON OF THE INSULATING CAPACITY OF WADDING WITH AND WITHOUT AEROGEL

according to DIN EN ISO 11092 (measurement of RCT value)



„With this new technology, we can fully use the benefits of Aerogel for the textile industry for the first time, without compromising on softness or comfort. Manufacturers from the bedding and apparel industry now develop extremely lightweight yet highly insulating products that meet the growing demands for quality and functionality.“

**Volker Schuster,**  
Head of Research & Development

