

Outlast Technologies Redefines Insulation

Based on extensive research and development, we succeeded in permanently bonding aerogel to textile substrates in astonishingly high concentrations, without affecting the original properties of the textile or modifying subsequent processing procedures, leading to excellent insulating performances. The AERSULATE® technology is patent pending.

Properties of Outlast Aersulate® Products

Space miracle

Characteristic for our AERSULATE® textiles is their low thickness at highest performance. While conventional insulation materials usually achieve their functionality through increased thickness, AERSULATE® products are true space miracles. Materials as thin as 1-2 mm can provide excellent insulation. This offers completely new potentials.

Top Performance

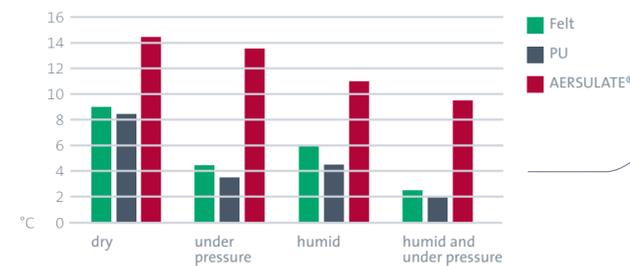
AERSULATE® products have an impressive thermal resistance. The German Institutes for Textile and Fiber Research Denkendorf (DITF) determined the following Alambeta key figures:

Material	Alambeta-Value
Non-Woven without Aersulate	20,4
Non-Woven with Aersulate	45,0

Result: When comparing identical non-woven substrates with and without AERSULATE®, Outlast Technologies achieves an increase in thermal resistance of more than 100%.

No problem with compression and humid conditions

Studies show that when AERSULATE products are exposed to the thermal influence of a block of ice, they can keep away the cold significantly more than identical materials without AERSULATE® technology. Under pressure and/or humidity, this effect even increases.* Of course, similar effects will be seen when exposed to heat.



Additional properties

Our new high-performance materials also reliably resist boiling water. With a glove made of 1mm thick AERSULATE® you can easily reach into boiling water without scalding yourself. AERSULATE® not only insulates perfectly, it is also 100% water-repellent and very breathable. It also can be equipped with additional FR properties when requested.

Carrier Materials

We offer a wide variety of carrier materials, ranging from nonwovens and felts over multiple composite systems. The potential for AERSULATE® is immense.

Further processing

AERSULATE® materials are extremely robust and resistant, but can be further processed very easily in existing manufacturing processes.

Sustainability

Aerogel is made from quartz, the base material of sand, and is therefore harmless to health and environment. Aerogel and the AERSULATE® product range are Made in Germany, guaranteeing the highest environmental and safety production standards.

Developed for Space – Proven on Earth

With its proactive heat and moisture management, Outlast Technologies already successfully established a NASA technology here on earth. Now the company is also making the unique properties of aerogel available to us earthlings. While aerogel was also used by NASA for operations in space, Outlast's intensive research and development work benefits us in a wide variety of potential applications such as in classic consumer goods, technical applications, security or construction.



AERSULATE is the optimal solution for all applications where a very good insulation with little space or a functionality under pressure or moisture is required.

* We will be happy to send you detailed information on further measurement results and the specific test setup if you are interested.

