





The natural thermoregulation brand...





A new technology answering consumers' expectations



FEELING TOO HOT OR TOO COLD?

We have all experienced these two extreme and contrasting sensations, hot and cold, during the same day or a particular activity and their negative aspects on comfort and performance.

It is because our activity level, as well as external weather conditions during the same day or during several hours of the same physical exercise change, that the R&D engineers of ADVANSA have created a unique yarn for fabric and clothes offering both technical performances. Warmth when you feel cold and cooling when you feel hot.



ADVANSA Thermo°Cool™ is designed to optimize the body's natural thermoregulation capabilities through smart fibre cross-sections: providing evaporative cooling or thermo-buffering according to the wearer's needs.

THERMO°COOL™... MULTI-FUNCTIONAL AND ECOLOGICAL

Consumer trend research confirms a high interest by the final consumer for multi-functional products which offer combined benefits such as food (light and nutritional), cars (compact and comfortable), mobile phones... adding the environmental friendly option where ethical criteria will make a difference and may reconcile our individual and consumer behaviours.

Thermocool is a multi-functional and ecological evolution born from ADVANSA's technological experience of modified cross-section fibres

The ADVANSA Thermo°Cool™ combination is a unique blend of fibres with a hollow core along with fibres with a channeled surface providing benefits beyond what can be expected by just one type of fibre in a single yarn.

A wide portfolio of products is being developed including a variety of innovative performance cross-sections.



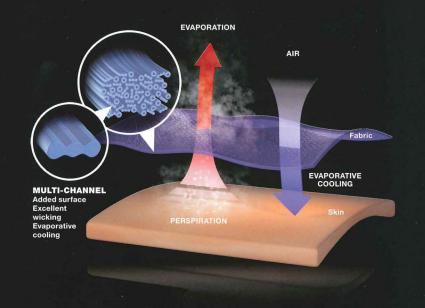


Made from smart fibre cross-sections Thermo-Cool provides year-round thermoregulation and comfort

HIGH ACTIVITY: EVAPORATIVE COOLING

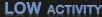
ADVANSA Thermo°Cool™ evaporates moisture faster than other materials thanks to its unique fibre mix.

The fibres are designed to provide added evaporative surface. The fibres with multi-channel surface give outstanding moisture transport. Hollow fibres allow enhanced air circulation and focus energy on the evaporation process.



HIGH ACTIVITY





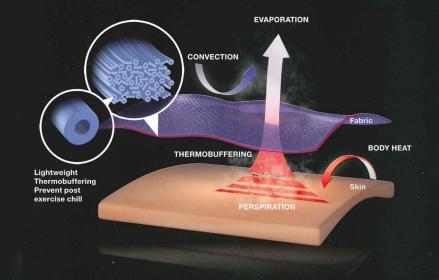






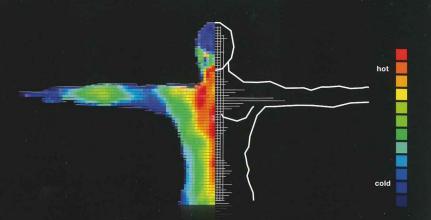
LOW ACTIVITY: THERMOBUFFERING

Hollow voids in the fabric provide a lightweight material with thermobuffering properties: it protects the user from temperature changes. This also prevents post exercise chill and still allows excess heat to dissipate into the air.



Surface + Energy = Evaporation

The skin provides the surface. The energy comes from the body's core heat.
But both surface and energy are limited.
ADVANSA Thermo°Cool™ makes an optimal use of body energy to improve the evaporation process.



Benefits

Wearing ADVANSA Thermo°Cool™ garments helps to keep the body at a comfortable temperature whatever the outside temperature or the physical intensity of your exercise. Without any kind of chemical treatments, ADVANSA Thermo°Cool™ fabric provides enhanced comfort coupled with moisture management during physical exertion.

HIGH ACTIVITY









LOW ACTIVITY

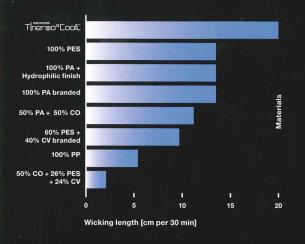


When external conditions are hot or during high activity, perspiration is the body's natural cooling mechanism. Evaporative cooling helps the wearer to stay in the Comfort Zone. Conversely when external conditions are cold and at low activity levels, moisture is the enemy and needs to be moved rapidly away to avoid muscle chill or bodily discomfort. A dry fabric insulates from the cold acting as a thermo-buffer. ADVANSA Thermo∘Cool™ technology incorporates both cooling and thermo-buffering functions designed to keep wearers in their Comfort Zone across different external temperatures and activity levels.

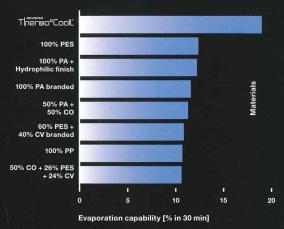
Performance results

Compared with other products ADVANSA Thermo°Cool™ shows wicking properties 48% better than other performance fabrics tested.

MOISTURE TRANSPORT



EVAPORATIVE COOLING



Evaporative cooling is key for the comfort.

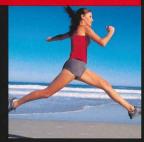
The unique mix of hollow and multi-channel fibres, evaporates moisture 53% better than other performance fabrics tested.

HIGH ACTIVITY





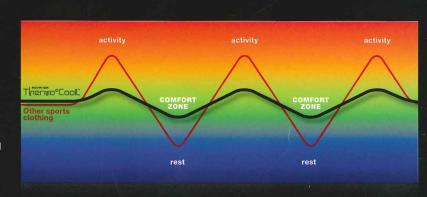






LOW ACTIVITY

The presence of hollow fibres is designed to give a thermobuffering capability in order, to reduces extreme temperature changes on the fabric helping to keep users in the Comfort Zone.



Marketing support



When the garment you choose carries the Thermo°Cool brand label, you and your custom can be confident you have made the right choice.

To your customers, the ADVANSA Thermo°Cool™ brand name means quality, consistency and per ance. For the textile industry, it means added value for all your products. And, of course, we provid own package of unparalleled consumer communications support. Global advertising, retail promot top sports sponsorships and public relations activities which helps build brand recognition and dri sales.





The ADVANSA Thermo°Cool™ label is your reassurance of premium performance.

The garments are made from approved fabrics that meet the high standard of the certification ADVANSA requires from all manufacturers.

Every certified ADVANSA Thermo°Cool™ fabric is regularly tested to ensure continuing ADVANSA high standards.

Nature loves contrast...

That is why we have chosen the Fire Salamander to illustrate the concept of ADVANSA Thermo°Cool™. It is not just the contrasting colour difference, but also the associated legends and myths: the salamander survives both the coldest of the winters and also the flames of the fire. We have chosen the duality of these contrasting extremes to explain how ADVANSA Thermo°Cool™ makes the user feel warm when he is cold or feel fresh when he is warm.



ADVANSA Europa's polyaster leader

FOR FURTHER INFORMATION, PLEASE CONTACT:
ADVANSA MARKETING GMBH
CALDENHOFER WEG 192 - 59063 HAMM
NURHAN NALBANT
NURHAN.NALBANT@ADVANSA.COM
WWW.THERMOCOOL.NET
TEL +49 23 81 8785 306 - FAX +49 23 81 8785 350

This information corresponds to our current knowledge on this subject. It is offered solely to provide possible suggestions for your own consideration. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variation in end use conditions, ADVANSA makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a licence to operate under or a recommendation to infringe any patent right.



ADVANSA's lower CO₂ footprint technical fibres give consumers the choice of being eco-responsible.

Using less crude oil reduces environmental impact. With its significantly lower CO₂ footprint, ADVANSA Thermo°Cool™ eco brings us one step closer to building a sustainable economy, without compromising technical performance. A wide portfolio of products is being developed including a variety of innovative performance cross sections.

ECO FRIENDLY SUSTAINABLE

NATURAL RESOURCES **EASY CARE**

ADVANSA Thermo°Cool™ ĆCO₂ innovative garments are :









HIGH ACTIVITY









LOW ACTIVITY



Our brand logo now comes with a new ${^c\!CO_2}$ logo and hangtag that identifies our product's ecological benefits .





Since ancient times, silver has been known for its qualities of purification. In ancient Egyptian and early Roman civilizations silver was a recognized natural source of cleanliness. Modern medicine has adopted much of this knowledge and uses silver in a wide variety of applications.

By incorporating an additive based on noble metals to ADVANSA Thermo°Cool™ Fresh we can offer the user the possibility of adding freshness to the other





Proven effectiveness

The active antimicrobial ingredient is durable and non-migratory. This ingredient has been shown to be highly effective in the laboratory against a wide range of micro organisms.

When incorporated into polyester fibre, it has been shown to impart bacteriostatic properties.

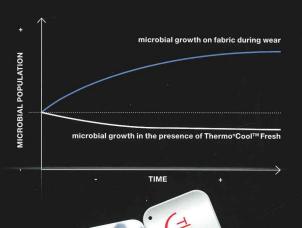








LOW ACTIVITY



The action mechanism interacts with microbes to disrupt their cellular functions, thereby inhibiting growth of the microbial colonies. Microbes are known to feed off of components in human sweat and body oil, resulting in odorous by products. The additive will control bacteria growth on the fabric and thereby help prevent bad odours.

Special labels are available to be added to the ADVANSA Thermo°Cool™ one.