Devan presents further findings on MOOV&COOL

Textile finishing innovator Devan Chemicals presents its further findings on their Moov&Cool® 'cool comfort' technology for the apparel/sportswear market. The patented polymer technology was first introduced on Performance Days in April earlier this year.

Moov&Cool technology provides a cool comfort feel through a combination of durable heat absorption capacity, thermo conductivity and a unique, balanced moisture transfer system. In addition to a fast absorption of sweat, the technology helps to manage sweat evaporation in a balanced way. The topical treatment for textiles has been brought to life in an effort to boost the performances of professional athletes, and to enhance comfort for recreational athletes.

Truly unique

Devan claims their technology is truly unique. "Where other technologies count on wind to help evaporate sweat to create cool skin sensation, Moov&Cool uses superfluous heat produced by the body during the sports performance to lower the body core temperature," says Dr. Vanessa Daelman, Business Unit Manager Performance at Devan. "The effect remains when the wind speed is reduced, which makes it also suitable for indoor sports".

Furthermore, the technology is not only useful in hot climates, but also insulates when it gets cold. "When Moov&Cool is exposed to colder conditions, the pore-like openings in the polymeric layer are more closed, trapping heat between the body and the fabric," Dr. Daelman explains.

Devan established a unique system to guide sportswear manufacturers towards the most suitable solution. The aim is to specifically adapt the application level of Moov&Cool to the intended use.

Test results

As Devan attaches great importance to scientific proof and independent testing, they teamed up with the Bakala Academy and the University of Leuven to severely test the patented technology. "As we did more testing with professional athletes, trends we saw earlier can now be confirmed," says Dr. Daelman.

"Moov&Cool lowers the body core temperature significantly and has a positive effect on heart rate and heat perception," Dr. Daelman adds. "But the full details of the testing will be presented at Performance Days on November 28th & 29th".

Inspired by nature

Devan says they were inspired by a mechanism of plants when they started developing Moov&Cool. "Plants also use small pore-like openings (stomata) on the bottom of their leaves which open and close depending on the environment they are exposed to", Dr. Daelman explains. "It allows them to manage the water reservoir in the leaves and hence their thermo-regulation".◆