

## HEIQ SMART TEMP

# **Keeps cool, dry and comfortable – dynamically**

Intelligent temperature and moisture management triggered by body heat

- Keeps you cool, dry and comfortable
- Revolutionary dynamic cooling and moisture management technology
- Cooling effect triggered by sweat and rising body temperature
- Up to 2°C/1.9°F cooler skin temperature (depending on fabric weight)
- Exceptional efficiency and durability (100% cooling performance up to 40 washings)
- Independently tested as safe for the skin (cosmetics testing standards)
- Complies with EU REACH, US TSCA, JP MITI,
  ZDHC and most RSL regulations
- Perfect breathability
- Applicable to any fiber type: natural, synthetic and blends

#### What does it do?

HeiQ Smart Temp is a revolutionary textile technology providing garments with the ability to dynamically respond to temperature conditions and achieve optimal comfort and performance. When hot, HeiQ Smart Temp cools down the wearer by vaporizing moisture and removing body heat. When chilly, this innovative technology helps to retain body heat on light fabrics.

## What is it for?

Specifically designed for next-to-skin textiles, HeiQ Smart Temp brings a new level of thermal comfort to sportswear, workwear, underwear and hosiery. It also brings a special comfort to home textiles such as bed linen and mattress ticking.



OEKO-TEX®



## HeiQ Smart Temp Intelligent thermoregulation

#### Like a second skin

Clothes provide shelter and protection for our bodies – the downside is that clothing can compromise our ability to regulate our body temperature and that overheating will affect our physical performance.

HeiQ's dynamic cooling technology HeiQ Smart Temp complements the natural perspiration process – just like a second skin – to achieve an enhanced evaporative cooling mechanism.

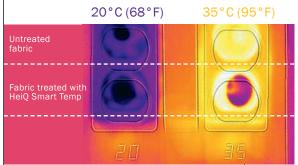
The bluish violet circle on the lower right side fabric shows the dramatically enhanced HeiQ Smart Temp cooling effect.

## **HeiQ Smart Temp cooling potential**

By utilizing the HeiQ demo tool and visualizing with a handheld infrared (IR) camera the infrared emission of untreated polyester and polyester treated with HeiQ Smart Temp, the dramatically enhanced cooling effect of HeiQ Smart Temp at increased skin temperature becomes apparent.

## HeiQ offers the following test methods for your textiles:

- Adaptive Dynamic Evaporation test
- Vertical wicking test (M&S P136B)
- Water drop test (AATCC 79)



HeiQ Smart Temp demo tool



### **Cooling and comfort with dynamic materials**

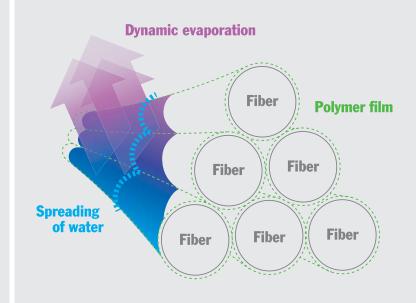
HeiQ Smart Temp is based on an innovative hydro-functional polymer developed by HeiQ. This unique responsive material dynamically changes its properties in response to temperature, interacting with moisture to complement the skin's natural ability to sweat. During cool conditions the polymer has a high affinity to moisture, and in warm conditions the affinity of the hydro-functional polymer to water is reduced as it solidifies. This responsive dynamic moderates the moisture transport and resulting evaporative cooling properties of the treated fabric. Compared to untreated fabric, the greater dynamic evaporation rate of fabrics treated with HeiQ Smart Temp provide outstanding thermal comfort for the wearer.







HeiQ Smart Temp polymer becomes solid with increasing





Watch the video!