

#### **WHAT IS 37.5**

37.5 Technology is a dynamic thermoregulation technology that triggers off of humidity.

## WHY IS IT CALLED 37.5® TECHNOLOGY?

Funny you ask. It's not a made-up name like Google. It's called 37.5 Technology because it helps keep your body at the ideal core temperature of 37.5° Celsius and helps keep the microclimate next to your skin at the ideal relative humidity of 37.5%

#### **HOW DOES IT DO THAT?**

37.5 Technology triggers off of humidity. Humidity is the gauge for whether you are hot or cold. When you're hot, active particles embedded into the material use your body's energy to remove moisture and cool you down. When you're cold, the active particles retain the body's energy to warm you up.

## **BUT HOW DOES IT REALLY WORK? LET'S GET NERDY...**

Patented 37.5 technology uses active particles made from volcanic sand that have billions of micropores, massively increasing the surface area of the material. These particles also absorb infrared (IR) light in the spectrum that the human body emits it, and this light becomes the energy that powers the particle. If no moisture (sweat vapor) is present, meaning you are cool, the particles retain this energy to warm you. If moisture (sweat vapor) is present, meaning you are hot, the particles use this energy to move moisture out of the clothing system. Without these active particles, water has no reason to leave the microclimate until relative humidity is much higher than is comfortable. Want more? 37.5 active particles also trap odor molecules and then release them when they're washed and dried. And speaking of washing, because the active particles are permanently embedded in the fiber they will last the lifetime of the garment.

# IS THIS A REAL TECHNOLOGY OR JUST A "MARKETING STORY"?

37.5 technology was invented by a Ph.D. photo-physical chemist, who loves testing materials. In fact, he loves it so much he invented two important test methods that were adopted by the AATCC and are now widely used around the world to measure how fast fabrics dry (AATCC 200 and 201).

As much as we love lab testing, we believe human testing is the best way to investigate how fabrics interact with the body. In human trials, 37.5 technology has been proven to increase athlete performance by reducing the increase of core temperature during activity, like wearing a cooling vest circulating cold water. This data can be found in the peer-reviewed article titled "Beneficial Effects of Cooling during Constant Power Non-Steady State Cycling" published by The International Journal of Sports Medicine,

It's also been proven to increase comfort by removing moisture in the vapor stage, before liquid sweat forms, to delay the onset of sweat. Human testing collected at Inside Climate Lab in Munich supports this claim.

# 37.5® TECHNOLOGY



37.5<sup>®</sup> active particles increase comfort and performance™



37.5® technology helps warm you up when you're cold and cool you down when you're hot



37.5° technology helps you maintain a comfortable personal microclimate relative humidity of 37.5%



37.5® technology removes sweat in the vapor stage before liquid sweat forms



37.5° active particles are derived from nature



37.5® technology traps odors and then releases them when washed and dried

37.5® technology works for the life of the garment/clothing

## BETTER PERFORMANCE

Scientifically proven to increase stamina by reducing the amount of energy used to manage core temperature.

Extend an athlete's peak performance by 10 minutes, or

Increase efficiency so you use less energy to do the same amount of

## **BETTER SLEEP**

Proven to reduce the effect of temperature-induced sleep disruptions, leading to longer, more restful sleep cycles.

Stay in the ideal comfort zone more often/longer (89% vs 38%).

## **LESS MOISTURE**

Remove moisture in the sweat vapor stage, before liquid sweat

Delay the onset of sweat.

Wicking only moves moisture, 37.5 removes moisture.

Proven to keep you dry more effectively than wicking; thus, increasing your comfort.

## **STABILIZED TEMPERATURE**

When you are hot, 37.5 speeds evaporation and cooling; when you're cold, 37.5 returns the energy to warm the body.

A shirt with 37.5 technology has a similar effect as an ice vest on cooling the core.

Decrease the rate of core temperature buildup.