Celliant - Fiber Technology Cheat Sheet

by [deleted] via cheatography.com/2754/cs/16723/

Introduction

Celliant technology keeps your body heat working for you. Translate hard work and persistence into increased blood flow that enables enhanced cellular performance, increased blood oxygen levels, and ultimately higher levels of cognitive focus and physical energy. Perform at your peak with Celliant, and feel the difference throughout your day with technology designed to help you achieve your next great milestone.

Apparel that emits Infrared Radiation (IR) can decrease an athlete's oxygen consumption during competitive exercise. Celliant fibers enhance performance during competition, through vasodilation and thermoregulation processes which enhance blood flow and cellular performance for more power and personal capability

Benefits: The filament and spun yarns are sent to fabric makers across the world to create Celliant-powered consumer products such as clothing, bedding (sheets, pillows, etc), accessories (athletic braces, back supporters), and furniture (both home and office seating).

Source: https://celliant.com/

Step 1: How it Works

Celliant's proprietary mix of 13 thermo-reactive minerals is embedded into the core of polyester fibers during the extrusion process.

Step 2 Embedded Minerals Absorb & Reflect Heat

These embedded minerals give any product developed with Celliant the ability to absorb and re-emit the visible and infrared electromagnetic light energy emitted by the body.

Step 3 Reflect heat Back

These minerals then alter the wavelengths of this energy and reflect them back to the body, even through multiple layers of fabrics, making it possible for the tissue to absorb it.

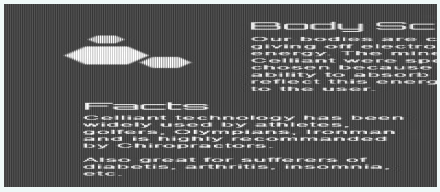
Step 4 Recycles Back

The energy that Celliant recycles back to the body triggers vasodilation in the capillary bed and makes more oxygen available to your cells. This results in more fuel for your body.

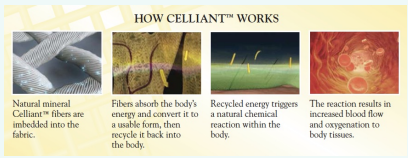
Step 5: Natural Biological Increase Circulation

This natural, biological process improves circulation resulting in an average increase in tissue oxygenation of 7%. The result: your body uses oxygen more efficiently.

Celliant



How Celliant Works



Step 1 How it's Made

Celliant master batch is added to a liquid polyester resin and extruded into staple fiber.

"Our scientists have selected 13 safe, naturally occurring, thermo-reactive minerals for their unique properties and combined them into a patented and clinically proven formula to create Celliant:"

- Titanium Dioxide selected for its photocatalyst (light absorbing) properties
- Silicone Dioxide selected for its energy reflection and absorption properties
- Aluminum Oxide selected for its ability to increase reflectivity

Step 2 Minerals are Ground

The minerals are ground up into a powder finer than 1 micron - approximately 100 times smaller than the width of a human hair!

Step 3 Added to Polyethylene Terephthalate

The powder is added to Polyethylene Terephthalate (PET) and made into Celliant master batch.

Step 4 Addto Liquid Polyester Resin & Extruded

Celliant master batch is added to a liquid polyester resin and extruded into staple fiber.

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Published 27th August, 2018.
Last updated 19th August, 2018.