

CopperGel™

Production Description

CopperGel™ is an exciting, new additive for open-cell CoolFlow™ and Energex™ foams, allowing microscopic, copper-infused gel particles to get incorporated into the cellular structure of the foam. Copper is a completely natural and environmentally friendly mineral that serves as a required nutrient in many ecosystems and plays a vital role in many cellular functions in the human body. Copper naturally provides protection against viruses and microbial growth to prevent odors and stains in the product. The high conductivity of copper complements and enhances gel's thermal properties to help dissipate excess body heat, providing a cooler and more comfortable sleep. Copper is a hyper-conductive, natural anti-bacterial and anti-viral element essential for your body's health. The patented infusion of Copper into Gel allows us to harness these benefits. The combination of ThermaGel™ technology with the science of copper provides superior comfort and pressure relief.

IT'S TIME FOR A COOLER, HEALTHIER SLEEP!

CopperGel™

Benefits & Advantages

HEAT REDUCING

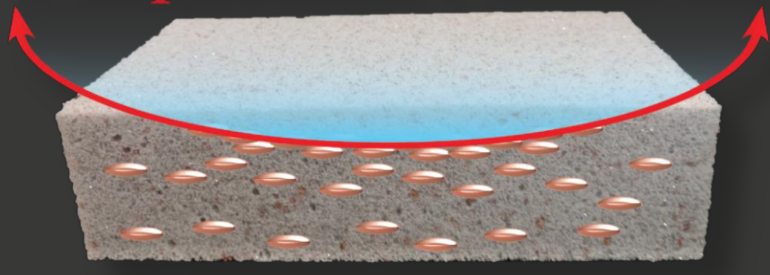
Copper is one of the most conductive materials on Earth, with a conductivity of up to 20,000 times higher than that of polyurethane foam. When any foam, open- or closed-cell, is compressed by body weight, the cells become crushed, which restricts airflow and limits the liberation of heat through convection. With CopperGel™, compression has the positive effect of bringing copper and gel particles in contact with one another, allowing for rapid conductive heat transfer through the solid particles for lasting thermal comfort. Heat conducted through gel is ultimately liberated by convective heat flow as it reaches uncompressed areas of the mattress.

ANTIMICROBIAL

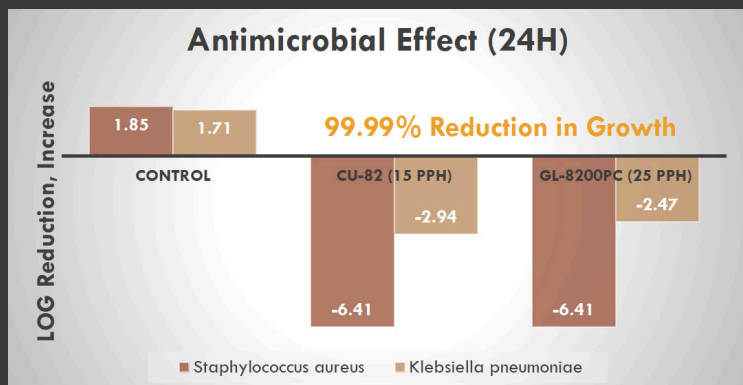
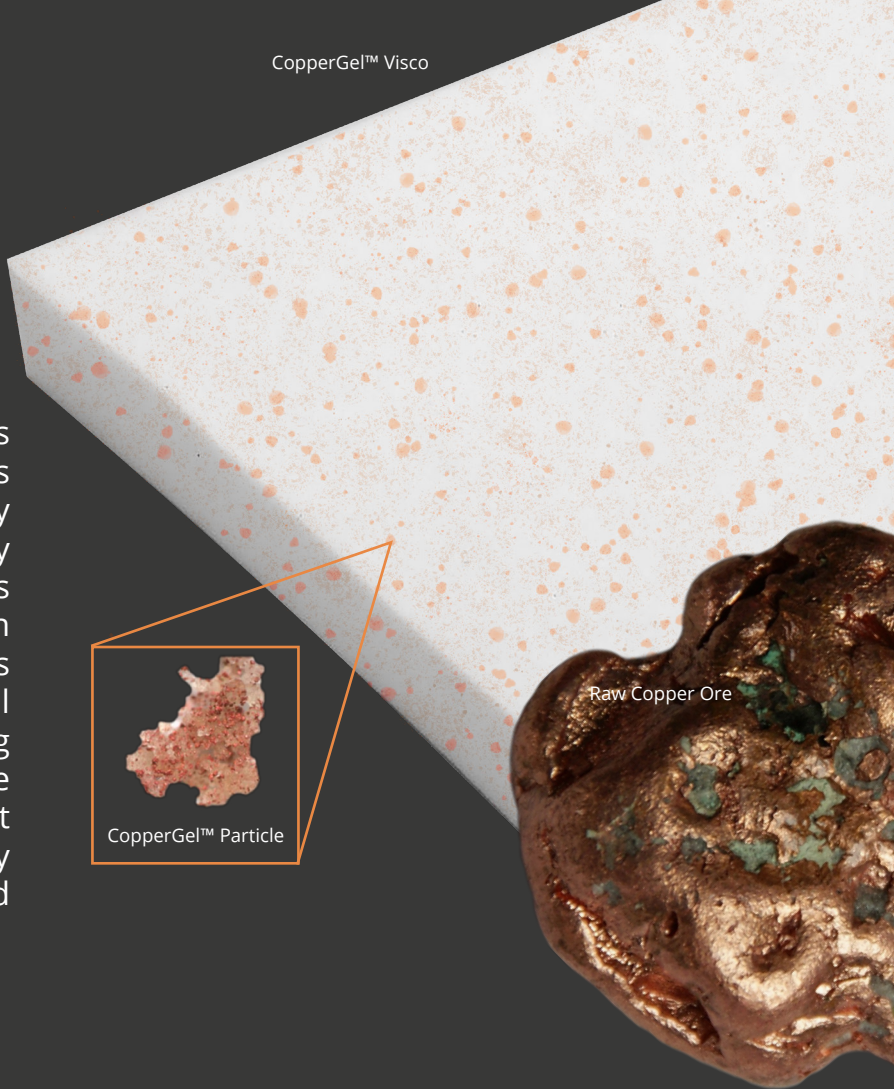
Copper continuously kills harmful microbes making it a safe, naturally occurring element which is why copper is used today in hospitals for brass doorknobs, table surfaces, etc. Third Party Testing was performed on CoolFlow Visco infused with either CopperCool or Copper Gel. Antibacterial testing was performed by introducing staph and pneumonia bacteria cultures at a concentration of ~300,000 units. Both samples containing copper additives showed 99.99% reduction in microbe growth compared to control sample, which showed an increase.

**Control Sample Growth values are based on the original microbe concentration at 0 hours

Compression Conduction



CopperGel™ Visco



SUPPORT

ThermaGel acts as a carrier for Copper. When foam is compressed and copper-infused gel particles come into contact, conductive pathways are created in the foam.

This Compression Conduction is important for moving heat and cooling the sleeper in compressed regions under the body where airflow and convective heat flow are restricted.