

Noble Biomaterials' Ionic+® Botanical Technology Receives EPA Registration

New plant-based fabric technology using citric acid-based formula passes EPA hurdle. Registration supports antimicrobial claims for treated article applications.

SCRANTON, PA. [March 22, 2023] Noble Biomaterials, a global leader in antimicrobial solutions for soft surface applications, announced its latest antimicrobial technology has received official EPA registration.

Ionic+® Botanical uses a bio-based registered citric acid formula to inhibit the growth of microbes and reduce odor on fabric and other soft surfaces. Noble Biomaterials began development of the proprietary Ionic+® Botanical formula in 2021 and filed for EPA registration as part of the development process. Registering the citric acid-based active formula allows Noble's licensed partners to claim antimicrobial benefits such as "odor control" and surface protection for various performance fabric applications.

Citric Acid is one of the most commonly used ingredients in food and beverage products, pharmaceutical and dietary products, and cleaning agents. The registration of Noble's citric formula introduces this commonly used product into a whole new arena - the protection of textiles and other everyday manufactured materials. Noble has seen the growing interest in plant-based solutions and recognizes that the Ionic+® Botanical technology can be an important step in meeting the demand for high performance, sustainable material preservation solutions.

"Sometimes innovative solutions are staring you right in the face," said Joel Furey, founder and chief commercial officer at Noble Biomaterials. "Citric Acid is used for so many things in our everyday lives and during the pandemic we noticed how much citric was used as an antimicrobial and disinfectant agent in various consumer products. This led us to explore its use in fabric applications. After significant research and development, we were able to engineer a novel approach that was both an effective and durable solution for the antimicrobial protection of textiles and other materials. Our product team deserves tremendous credit for bringing Ionic+ Botanical to market so quickly."

Receiving an EPA registration is a big step in the process of advancing Noble's Ionic+ Botanical products. Before manufacturers can sell products with antimicrobial actives in the United States, EPA must evaluate these products thoroughly to ensure that they meet federal safety standards to protect human health and the environment. EPA regulates antimicrobial actives by reviewing the toxicity of the ingredients and the potential for exposure. Approval of a product for registration is based on scientific assessment related to the identity, composition, potential adverse effects, and environmental fate of each EPA-registered product. After a lengthy review and the EPA determines that no adverse effects are expected to occur when the product is used according to the label directions, they grant product registration.

Over the past 5 years, Noble has seen increasing demand for Ionic+ and antimicrobial fabrics in active wear and health care. At the same time, the market has shifted to more sustainable fabric options requiring more wear with less care, or washings per use. Today, Ionic+ products are found in several categories, including athleisure, travel, home bedding and towels, and sports accessories. Noble is developing Ionic+ Botanical with select development partners, including Salomon— global leader in outdoor, and Trident— global leader in Home textiles. Ionic+ Botanical products will be widely available in 2024.

"We hold ourselves to a very high bar," said Furey. "We know it's important to our Brand partners and ultimately the end users to bring products to the market that are built on integrity, efficacy, and sustainability. As our portfolio of antimicrobial solutions with Ionic+® continues to grow, we are excited to add now a plant-based option."

The new Ionic+ Botanical product line compliments Noble's established Ionic+ Mineral® products built around the benefits of permanent silver technology to control bacteria on fabric.

Noble has a history of groundbreaking innovation, covering the first EPA-registered silver-based textiles, advances in the use of silver metallized yarns and fibers in wound care, to the first silver antimicrobial textile on the International Space Station. Noble's antimicrobial products are found on elite athletes, in healthcare and medical supplies, as well as in military applications.

About Noble Biomaterials, Inc.

Noble Biomaterials, Inc. is a global leader in antimicrobial and conductivity solutions for soft surface applications. The company produces advanced material technologies designed for mission-critical applications in the performance apparel, healthcare, industrial, and emerging wearable technology markets. Its flagship brands, IONIC+®, X-STATIC®, and CIRCUITEX®, are used by hundreds of world-class licensees to provide odor elimination, infection prevention/management, biometric monitoring, and conductive protection benefits. Noble Biomaterials is a registered FDA medical device facility, an essential sole-source technology supplier to the US military, and a US EPA-registered antimicrobial manufacturer. Noble products are EPA, FIFRA, BPR, and CE conforming. Its headquarters and manufacturing facilities are located in Scranton, PA, and the company has offices in Europe, Asia, and South America.

For more information on Noble Biomaterials and to view their full range of fabric applications, please visit www.noblebiomaterials.com