

Buzz Worthy Ingredients for 2015

By Michael Q. Pugliese

The demand for natural and ecofriendly ingredients in personal care products across the board has exploded over the last decade. The increased consumer awareness concerning health hazards of preservatives, categorically, was initiated by a study suggesting parabens in cosmetics could be linked to breast cancer. Although a definitive link was never established, from that moment on parabens were heavily scrutinized and placed atop the list of ingredients that both skincare professionals and consumers should avoid. The consumer outcry created an increased responsibility on the part of manufacturers to respond with skin care products proven to be safe. At the same time, “green” cosmetics were transitioning from buzz words to industry staples, which loosely indicated that a “chemical” ingredient was replaced with a botanical alternative. Reaction to televised protests from the organized activists, from Greenpeace to PETA, meant all industries were challenged to reduce the negative impact of non-biodegradable raw materials and packaging components, plastics essentially, on our water, food supply and air quality. Consumers voted with their wallets, supporting those companies whose message was “green.” Trends matter.

Specialty ingredient suppliers responded to the outcry over potentially hazardous cosmetic ingredients, as well as to the concerns of environmentalists, by investing heavily in intensive new research and development. As a result, 2015 will bring exciting innovations in products scientifically designed to both restore the skin and protect our increasingly fragile world. We will examine three significant ingredient technologies for professionals and consumers to keep on their radar as this trend continues to grow.

This year Kemin®, a biotech company that supplies active ingredients to the personal care industry, will feature a new addition to its already popular offerings. In the continuing effort to offer effective preservatives that eliminate environmental and toxicity concerns, MicroCurb™ is a natural broad spectrum preservative derived from oregano leaf extract. The company works



with family farmers throughout the United States to harvest the leaves, which are distilled to form the concentrated extract. MicroCurb™ is considered nontoxic and non-irritating. Tests show that it is highly effective against bacteria, yeast and mold. To add to the consumer appeal, it is also ECOCERT® and COSMOS® approved. Both are internationally recognized certifications for natural and organically sourced ingredients. This will certainly be an ingredient formulators will embrace, for both effective product preservation and appeal to “green” consumers.

Another growing segment of eco-conscious formulations are polyethylene bead replacements. Illinois has become the first state to ban polyethylene beads, tiny pieces of plastic often used in facial cleansing scrubs. The move has been taken in response to growing concern among ocean activists over marine damage, caused by plastic waste, particularly in the Great Lakes. Petroleum-based micro-beads are not sifted out from wastewater during the sewage-treatment process, but instead end up being released into large bodies of water where they have been found to accumulate. One California-based institute found almost 470,000 pieces of plastic per square kilometer of the Great Lakes, and most of them (81%) were cosmetic micro-beads. New York, Ohio, Pennsylvania, New Jersey, and California are expected to follow Illinois’s lead in the coming months.

Evonik, another personal care supplier, recently launched SIPERNAT®. This polyethylene alternative is comprised of SiO₂ (silicone dioxide), and is the chemical equivalent of sand. It makes not only a fantastic alternative to polyethylene from a sustainability prospective, as they return to larger bodies of water, but in this formulator’s opinion, SIPERNAT® offers ease of use when dispersing the material for product development. Win-win!

Epigenetics and the significance it plays in skin health has been an emerging topic among skin care professionals and product formulators for many years, but its true importance remains in large unrealized. 2015 will be a year when epigenetics will begin to gain momentum and more mainstream attention. What is it? Epigenetics is a vastly complicated sub-study of biology that deals with inheritable traits which are not caused by changes in the DNA sequences. For the skin care professional, in simple terms, this area of study deals with traits that can be passed on due to environmental influences. While this is an overly simplified explanation, it is a good place to integrate epigenetics into our discussion of trends.

New understanding of epigenetics has been the driving force for some very exciting new ingredient



a good place to integrate epigenetics into our discussion of trends.

New understanding of epigenetics has been the driving force for some very exciting new ingredient development. Something familiar that has been used for many years is Calendula extract, well-known for its anti-inflammatory properties. It is simple in application, but powerful in performance. Epigenomyl® is rich in calendula flower oligosaccharides that help boost the cellular mechanisms involved in epigenetic regulation. These include modification of histones and miRNA, which acts to help normalize collagen synthesis and preserve the organization of elastin and fibrillin fibers. A topical product effectively incorporating these functions into its overall benefits could have an impact on dermal tissue integrity, structure and function.

Again, trends matter. But whose message will we listen to? You have to ask, “Says who?” The answer is important. Through the internet, now anyone can create the trends that direct consumer spending, globally, in an instant. That is an awesome responsibility. Our profession is the first to insist that consumers have the right to qualified care, and the most functional, safe solutions to achieve their appearance goals. We provide our professional services and treatments in an environment of wellness, with respect for the individual, and for this precious planet we inhabit together. That is a trend well worth following.



Michael, BS, LE became the third-generation CEO of Circadia by Dr. Pugliese, Inc. in 2006. Under Michael's leadership, the Circadia brand has grown to achieve international recognition and distribution. He is a licensed esthetician, a member of the Society of Cosmetic Chemists and stays on the cutting edge of new product development. Michael's compelling original lectures honor the tenets of modern skin science discovered by his grandfather, and add today's application of that information in an ever-changing business and scientific environment.