

BioEstolides™

Sustainable Personal Care Ingredients

Biosynthetic Technologies

At Biosynthetic® Technologies, we are a specialty ingredient supplier to the Beauty and Personal Care industry, dedicated to meeting evolving consumer needs, and committed to sustainability and social responsibility. Our unique products; BioEstolides™, are stable bio-derived oils from a natural non-GMO source with unique performance features. These renewable and biodegradable oils deliver high performance benefits as an emollient with enhanced stability, exceptional moisturization characteristics and a light, satiny feel. BioEstolide™ are multifunctional and not only enhance the feel and performance of other cosmetic ingredients, but they come with some powerful benefits of their own.

Biosynthetic® Technologies is committed to sustainability and focused on the responsible use of natural resources. We incorporate sustainability into both our products and manufacturing practices. We are constantly looking for ways to minimize [the] negative impacts on the environment while conserving energy and natural resources. Our objective is to make sustainability a point of difference for our business, and we are confident that this strategy will generate even greater benefits for the environment in which we operate, the people that we work with and the communities we are part of. We understand that health and environmental awareness play just as large a role for consumers as quality and efficacy. As such, we use natural feedstocks in our products and our manufacturing facility is operating with a NEGATIVE carbon footprint!

We are committed to provide safe, quality products across food, pharmaceutical, personal care, and industrial applications. Our diverse set of quality certifications demonstrate our excellence across multiple regulatory environments catered to your specific needs. Our Quality Assurance team stays current on the ever-evolving regulations as new legislation is passed and implemented in the industry. Our continuous improvement culture drives us, building upon our solid foundation of quality principles ensuring



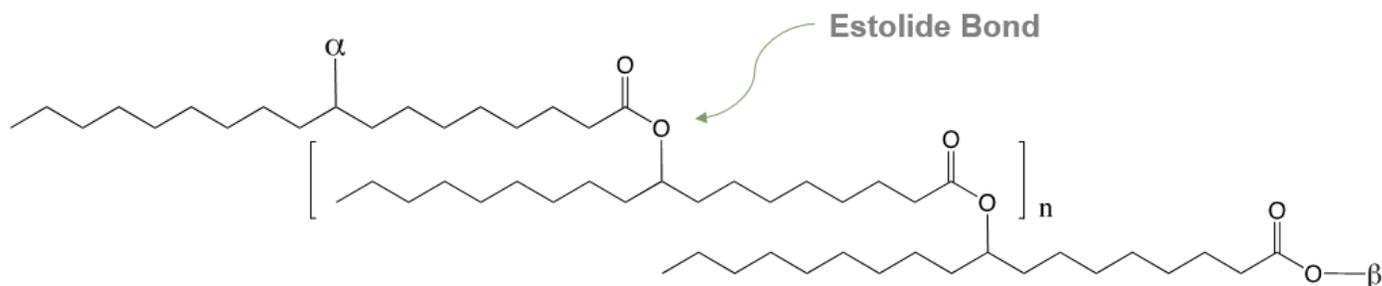
BioEstolide™ is a plant-based emollient. This unique and patented product is made from natural seed oils and delivers enhanced performance in personal care formulations. BioEstolides™ also deliver superior oxidative and hydrolytic stability making them longer lasting and easier to formulate with in a wide range of personal care applications. BioEstolide™ are multi-functional and not only enhance the feel and performance of other cosmetic ingredients, but they come with some powerful benefits of their own.

BioEstolides™ offer the following benefits and are not limited to the list below:

- **Moisturization** – BioEstolides™ hydrate, soften and smooth the skin surface without leaving an oily residue on the skin
- **Sensory Enhancer** – BioEstolides™ have the advantage of not leaving a greasy residue on the skin and provides a luxurious sensory experience.
- **Enhanced Oxidative Stability** - BioEstolides™ have excellent oxidative stability enhancing the shelf life of the product over other naturally derived oils.
- **Enhanced Hydrolytic Stability** – The chemical structure of BioEstolides™ improves the hydrolytic stability of the product over other naturally derived oils.
- **High Refractive Index** - BioEstolides™ have a high refractive index enhancing the look of a formulation
- **Pigment Dispersion** – The polar nature of the BioEstolide™ chemistry allows it easily hold pigment
- **Thickening Agent** – BioEstolides™ function as a thickening agent in personal care formulations to enhance the consistency, viscosity and volume of personal care products.
- **Non-Toxic** - BioEstolide™ are considered non-toxic and non-comedogenic.
- **UV Protection** - BioEstolide™ has some inherent UV blocking properties to boost UV protection naturally in a formulation.

BioEstolide Technology

Biosynthetic Technologies' flexible chemistry allows for the products to be specifically designed to meet a wide range of formulation requirements and can be customized if needed. The estolide is made by linking natural fatty acids together to form oligomers. The fatty acids can come from almost any natural oil source. In this instance the BioEstolides™ are formed using fatty acids from castor oil. This unique estolide structure provides the product unique protection from oxidation so it does not easily go rancid or break down over time.



BioEstolide Applications

Baby Care, Bath & Shower, Body Care, Color Cosmetics, Hair Shampoo, Hair Conditioner, Hair Setting Aid, Hair Relaxer, Hair Dye, Decorative Cosmetics, Skin Creams and Lotions, Depilatories, Ethnic Hair Care, Food & Pharma, Hair Cleansing, Hair Conditioning, Hair Styling, Hair Treatment, Household Cleaning, Lubrication, Make-up Remover, Pharmaceutical, Skin Care, Skin Cleansing, Tanners etc.