

BioEstolide™

Delivering innovations for a sustainable future.

BioEstolide™ oils are natural, sustainable and come with a variety of superior benefits. Not only do they enhance the feel and performance of other cosmetic ingredients, they come with some powerful benefits of their own.



BIOSYNTHETIC®
TECHNOLOGIES

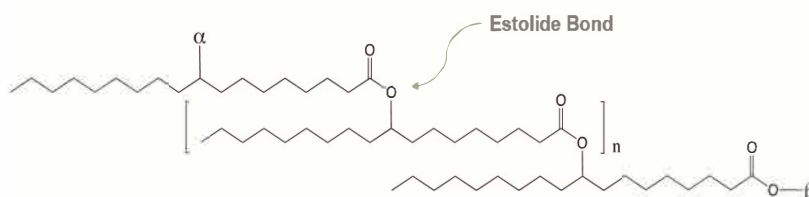
BioEstolide™ is an exciting new plant-based emollient with enhanced stability properties, exceptional moisturization characteristics and a light, satiny feel. This unique patented ester is made from natural seed oils and delivers enhanced performance properties for personal care formulations.

About BioEstolide™

- Multi-functional
- Eco-friendly, natural, sustainable
- Non-oily, non-tacky, elegant skin feel
- Moisturizing, softening and conditioning effects
- Low odor and color
- Superior oxidative stability
- Improved structural integrity in stick formulations
- Allows for higher pigment loading, enhancing color intensity
- Outstanding moisturization benefits
- Unique lubricious feel
- Improves skin barrier function
- Delivers superior hydrating properties
- Dry feel and fast absorption
- Non-GMO & animal cruelty free
- Reduces coefficient of friction on hair
- Imparts satiny, smooth sensory feel
- Provides sheen and moisture retention

FORMULATION BENEFITS

- **Extremely Stable** – BioEstolides™ have excellent oxidative stability enhancing the shelf life of the product over other naturally derived oils.
- **Excellent Sensory Profile/Gentle Feel** - BioEstolides™ have a luxurious soft feel. Can be used as a silicone replacement in hair and skin care.
- **Enhanced Moisturization** – BioEstolides™ hydrate, soften and smooth the skin surface without leaving an oily residue on the skin.
- **Environmentally Friendly** – BioEstolides™ are non-toxic, biodegradable with a high bio-content.
- **Silicon Replacement** - Hair and skin care.
- **UV Protection** - BioEstolide™ has some inherent UV blocking properties.
- **Water Resistance** – BioEstolide 1300 has water resistance benefits.
- **Thermal Protection** – protects hair from being damaged by heat.
- **Healthy Shine** - BioEstolides™ have a high refractive index enhancing the look of a formulation.
- **Lubricating Benefits** – Low coefficient of friction, reduces friction.
- **Suspension Benefits** – Help hold pigments or UV filters.



SEE REVERSE FOR PRODUCT SPECIFICATIONS

BioEstolide™

TYPICAL PROPERTIES



	BioEstolide™ 30 <i>Ethylhexyl Acetoxystearate</i>	BioEstolide™ 250 <i>Acetyl Ethylhexyl Polyhydroxystearate</i>	BioEstolide™ 1300 <i>Acetyl Ethylhexyl Polyhydroxystearate</i>
<i>Kinematic Viscosity, 100°C, cSt</i>	4.7	22.0	75.9
<i>Kinematic Viscosity, 40°C, cSt</i>	20.7	153.0	668.4
<i>Viscosity Index</i>	153	170	195
<i>Dynamic Viscosity, 25°C, cP</i>	34	259	1300
<i>Specific Gravity, 15°C</i>	0.9065	0.9174	0.9190
<i>Flash Point (Open), °C</i>	242	268	288
<i>Flash Point (Closed), °C</i>	216	221	251
<i>Pour Point, °C</i>	-21	-23	-21
<i>Cloud Point, °C</i>	-16	-21	n/a
<i>ASTM Color</i>	1	1	1
<i>Iodine Value, g I2/100g</i>	1.0	2.0	2.0
<i>Acid Value, mg KOH/g</i>	0.1	0.3	0.3
<i>Refractive Index, 20°C</i>	1.45	1.46	1.47
<i>Water Content, wt%</i>	0.1 max	0.1 max	0.1 max
<i>Molecular Weight, g/mol</i>	455	1426	2680
<i>Odor</i>	Low	Low	Low
<i>Appearance</i>	Light Yellow	Light Yellow	Light Yellow
<i>Sensory After Feel</i>	Light, Satiny	Light, Satiny	Light, Satiny
<i>Renewable Carbon, %</i>	69%	86%	95%

*Typical results are provided. To the best of our knowledge, the information is accurate, but given without guarantee.



PRODUCT APPLICATIONS

Baby Care	Hair Treatment & Styling
Bath & Shower	Household Cleaning
Body Care	Lubrication
Color Cosmetics	Make-up Remover
Depilatories	OTC
Ethnic Hair Care	Pharmaceutical
Food & Pharma	Skin Care
Hair Cleansing	Skin Cleansing
Hair Conditioning	Tanners

