

# BioEstolide™ 250-100



Delivering Innovations for a Sustainable Future.

BioEstolides™ are biobased emollients that are natural, sustainable and come with a wide range of superior performance benefits. These multi-fuctional, eco-friendly ingredients are derived from Castor and deliver an excellent sensory profile with a **NEGATIVE** carbon footprint.



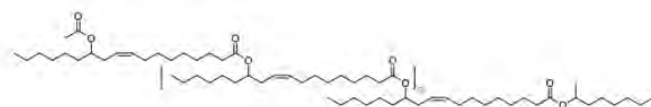
*BioEstolide 250-100 is a 100% bio-based emollient, derived from Castor Oil, a non-GMO source. This sustainable cosmetic ingredient delivers all the benefits of Castor Oil with the additional benefits of a superior sensory profile and a Natural Origin Index (NOI) of 1.0!*

## FORMULATION BENEFITS

- ✓ **Emollient** - hydrate, soften and smooth the skin surface without leaving an oily residue on the skin.
- ✓ **100% Biobased** - with a Natural Origin Index (ISO 16128) of 1.00.
- ✓ **Skin Elasticity** - show signs of enhanced skin elasticity.
- ✓ **Sensory Enhancer** - have the advantage of not leaving a greasy residue on the skin and provides a luxurious sensory experience.
- ✓ **Stable** - provide superior oxidative and hydrolytic stability when compared to other other natural or naturally derived oils.
- ✓ **Eco-Friendly** - BioEstoldes are 100% biobased, non-GMO, and manufactured with a negative carbon footprint.

## About BioEstolide™

- ✓ Multi-functional ingredient
- ✓ Eco-friendly, natural, sustainable emollient
- ✓ Carbon Negative Manufacturing Footprint
- ✓ Derived from Castor Oil
- ✓ Non-oily, non-tacky, elegant skin feel
- ✓ Moisturizing, softening and conditioning effects
- ✓ Low odor and color
- ✓ Improved structural integrity in formulations
- ✓ Inherent UV blocking properties
- ✓ Excellent pigment dispersion properties
- ✓ Unique lubricious feel
- ✓ Enhances skin elasticity
- ✓ Delivers superior hydrating properties
- ✓ Dry feel and fast absorption
- ✓ Imparts satiny, smooth sensory feel
- ✓ Provides sheen and moisture retention
- ✓ Non-GMO
- ✓ Animal cruelty free
- ✓ Kosher, Vegan and Halal Certified



# BioEstolide™

## TYPICAL PROPERTIES



	<b>BioEstolide™ 30</b> <i>Ethylhexyl Acetoxystearate</i>	<b>BioEstolide™ 250</b> <i>Acetyl Ethylhexyl Polyhydroxystearate</i>	<b>BioEstolide™ 250-100</b> <i>Acetyl Isooctyl Polyricinoleate</i>	<b>BioEstolide™ 1300</b> <i>Acetyl Ethylhexyl Polyhydroxystearate</i>
<i>Kinematic Viscosity, 100°C, cSt</i>	4.7	22.0	22.4	75.9
<i>Kinematic Viscosity, 40°C, cSt</i>	20.7	153.0	143.9	668.4
<i>Viscosity Index</i>	153	170	184	195
<i>Dynamic Viscosity, 25°C, cP</i>	34	259	259	1300
<i>Specific Gravity, 15°C</i>	0.9065	0.9174	0.9174	0.9190
<i>Flash Point (Open), °C</i>	242	268	n/a	288
<i>Flash Point (Closed), °C</i>	216	221	268	251
<i>Pour Point, °C</i>	-21	-23	-41	-21
<i>Renewable Carbon. %</i>	69%	86%	100%	95%
<i>ASTM Color</i>	1	1	1	1
<i>Iodine Value, g I2/100g</i>	1.0	2.0	2.0	2.0
<i>Acid Value, mg KOH/g</i>	0.1	0.3	0.3	0.3
<i>Refractive Index, 20°C</i>	1.45	1.46	1.46	1.47
<i>Water Content, wt%</i>	0.1 max	0.1 max	0.1 max	0.1 max
<i>Molecular Weight, g/mol</i>	455	1426	1426	2680
<i>Odor</i>	Low	Low	Low	Low
<i>Appearance</i>	Light Yellow	Light Yellow	Light Yellow	Light Yellow
<i>Sensory After Feel</i>	Light, Satiny	Light, Satiny	Light, Satiny	Light, Satiny

\*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

