MEADOWESTOLIDE®

non-animal origin
skincare and haircare additive
for cosmetics and toiletries

GENERAL INFORMATION
MEADOWESTOLIDE is a unique, functionally significant derivative of Meadowfoam Seed Oil. The development of this estolide represents a new level of advanced ingredient technology. The estolide is a dimeric molecule, which is structurally sophisticated and functionally active. MEADOWESTOLIDE provides measureable and meaningful consumer benefits. In hair, the estolide improves intra-fiber moisture retention and thereby imparts protection from thermal damage, while restoring the elasticity and reducing the coefficient of friction of the hair cuticle surface to prevent mechanical damage. In skincare systems, MEADOWESTOLIDE helps to adjust the hydration levels of the interstitial spaces and provides significant moisturization benefits. These benefits are often perceived as softer, more pliant tissue. Initial investigations suggest that the estolide will prove to be a very important agent in protecting skin from the damaging effects of a variety of common causes. MEADOWESTOLIDE has been incorporated into decorative cosmetics where significant attributes were observed including improved elegance in product texture and, in the case of pigment delivery, considerably better color “pay-off”.

INGREDIENTS
INCI name: Meadowfoam Estolide

APPLICATIONS
- Hair Shampoo
- Hair Conditioner
- Hair Setting Aid
- Hair Relaxer
- Hair Dye
- Decorative Cosmetics
- Skin Creams and Lotions

KEY PROPERTIES
MEADOWESTOLIDE skin and haircare additive
Typical properties
- Provides measureable and meaningful consumer benefits
- Improves intra-fiber moisture retention
- Imparts protection from thermal damage
- Restores elasticity to hair
- Reduces coefficient of friction on skin and hair
- Helps adjust hydration levels of interstitial spaces and provides skin moisturization and protection benefits
- Contributes to an elegant after-feel
- Improves elegance and texture of products
- Enhances pigment delivery and color “pay-off”
**CHEMICAL AND PHYSICAL DATA**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance @ 35°C</td>
<td>Clear, Yellow to Amber Liquid</td>
</tr>
<tr>
<td>Color (Gardner)</td>
<td>12 max.</td>
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<tr>
<td>Acid Value</td>
<td>50-100</td>
</tr>
<tr>
<td>Refractive Index</td>
<td>1.455-1.475</td>
</tr>
<tr>
<td>Iodine Value</td>
<td>40-70</td>
</tr>
<tr>
<td>Specific Gravity @ 25°C</td>
<td>0.88-0.94 (g/mL)</td>
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</tbody>
</table>

**TOXICITY**

Care is taken to ensure that the ingredients used in the MEADOWESTOLIDE additive are not known to be injurious to health in any way and have been toxicologically tested to ensure their safety. However, the MEADOWESTOLIDE additive has not been subjected to testing involving the use of animals within the last 10 years.

**STORAGE TEMPERATURES**

Keep container sealed and store at room temperature. Meadowestolide may form a precipitate during winter months. It should be warmed to 35°C and mixed before use to ensure homogeneity.

**LEVELS OF USE**

The level of use of the MEADOWESTOLIDE will depend on the formulation. Typical addition levels are 0.1-10%.

**COMPATIBILITY**

MEADOWESTOLIDE is compatible with most materials used in cosmetics and pharmaceutical preparations.

**INCORPORATION**

MEADOWESTOLIDE can be added at any convenient suitable stage during the manufacturing cycle with mixing.

**SHELF LIFE**

MEADOWESTOLIDE has a shelf life of 2 (two) years from date of manufacture.

**SAFETY**

Before using this product, please consult our MSDS.

**ECOCERT**

MEADOWESTOLIDE is approved by Ecocert Greenlife in accordance with the Natural and Organic Cosmetics standards.