Botanical Stable Functional

High-Oleic Sunflower

Macadamia Moringa

Botanical Oils & Butters

The Natural Solution SM
Botanical Emollients

Benefits

- Oxidatively Stable
- Biodegradable
- Botanical
- Low Color
- Non-GMO
- Globally Approved
- Low Odor
- Sustainable

Longer Shelf Life

The shelf life of cosmetic and personal care products is enhanced by stable emollients. The graph displays common emollients and their relative Oxidative Stability Index (OSI) measured in hours.

Benefits

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Applications

Skin Care
Hair Care
Color Cosmetics
Body Wash
Sun Care
Hair Dyes

Floramac

1 AOCs method Cd 12b-92
Florasun 90

INCI: Helianthus Annuus (Sunflower) Seed Oil

Florasun 90 is a high-oleic oil produced from the seed of a unique (non-GMO) sunflower variety. Florasun 90 has an oleic acid content of >85% and low levels of polyunsaturates. These properties give Florasun 90 its superb oxidative stability. Florasun 90 is easily absorbed into the skin without the greasy skin feel typical of other oils.

BENEFITS:
- Superior oxidative stability
- Low color and odor
- Non-greasy
- Non-GMO

Florasun 90: The Superior Sunflower Oil

Adding Florasun 90 in place of less stable oils can improve the stability and shelf life of finished products while providing excellent natural emolliency.

Floratech tested the OSI of four massage oil formulas with different grades of sunflower oil. Formula 2, containing Florasun 90, is 11 times more oxidatively stable than Formula 4 containing traditional sunflower oil.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Formula 1</th>
<th>Formula 2</th>
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<tbody>
<tr>
<td>Florasun 90</td>
<td>95.00</td>
<td>80.00</td>
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<tr>
<td>Almond oil</td>
<td>4.62</td>
<td>18.50</td>
</tr>
<tr>
<td>Argan oil</td>
<td>0.25</td>
<td>1.00</td>
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<tr>
<td>Sesame oil</td>
<td>0.13</td>
<td>0.50</td>
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</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Formula 3</th>
<th>Formula 4</th>
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<tbody>
<tr>
<td>Sunflower oil</td>
<td>80.00</td>
<td>80.00</td>
</tr>
<tr>
<td>Almond oil</td>
<td>18.50</td>
<td>18.50</td>
</tr>
<tr>
<td>Argan oil</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Sesame oil</td>
<td>0.50</td>
<td>0.50</td>
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</tbody>
</table>
Floramac Macadamia Oil Refined

INCI: Macadamia Integrifolia Seed Oil

Rich in antioxidants, macadamia oil has been used for centuries to rejuvenate skin.

Floramac Macadamia Oil Refined contains high amounts of palmitoleic acid, a fatty acid with similar structure (isomer) to the most prominent fatty acid found on human skin.

As a result of its composition, Floramac Macadamia Oil Refined absorbs quickly leaving a non-greasy skin feel. It distinctly benefits dry and mature skin.

BENEFITS:

- Hydration for dry, mature skin
- 18% palmitoleic acid content
- Low color and odor
- Superior oxidative stability even in pro-oxidative environments

A Natural Alternative to

Floramac 10 is a botanical, non-volatile substitute for low-viscosity silicones. It can be gelled to mimic the properties of medium-viscosity silicones, and can be used in combination with silicones. Floramac 10 remains on the skin and imparts a degree of skin hydration greater than traditional silicones.
Floramac 10

INCI: Ethyl Macadamiate

Substantiated Claims:

Increased:
- Skin radiance
- Skin hydration
- Pigment dispersion
- Hair shine
- Consumer preference

Reduced:
- Hair breakage
- Heat damage to hair
- Comb force (wet & dry)
- Appearance of wrinkles*

Scan the QR code or visit floratech.com/ClinicalStudies to learn more
* See consumer preference study CS16-090

Silicones — Floramac 10

Floramac 10 is a moisturizing combination of macadamia esters. Floramac 10 leaves a silky, smooth after-feel similar to cyclopentasiloxane. Floramac 10 provides formulators with a natural alternative to silicones, and it provides brand managers with clinically substantiated benefits.
Floralipids Moringa Oil Refined

INCI: Moringa Oleifera Seed Oil

Floralipids Moringa Oil Refined is the most oxidatively stable botanical oil commercially available. Moringa oil has a unique fatty acid profile rich in oleic and behenic acids, and contains exceptionally low levels of polyunsaturates. Floralipids Moringa Oil Refined can extend the shelf life of finished products.

**BENEFITS:**

- Most oxidatively stable botanical oil available
- Rich in oleic and behenic acids
- Increased hair shine

Moringa Butter – The Better Butter

Floralipids Moringa Butter’s high oxidative stability can extend the shelf life of finished formulations.

```
<table>
<thead>
<tr>
<th>Product</th>
<th>OSI (hours)</th>
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<tbody>
<tr>
<td>Floralipids Moringa Butter</td>
<td>180</td>
</tr>
<tr>
<td>Floraesters® 30</td>
<td>150</td>
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<tr>
<td>Floraesters® 20</td>
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<tr>
<td>Cocoa Butter</td>
<td>90</td>
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<tr>
<td>Shea Butter</td>
<td>60</td>
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<tr>
<td>Olive Butter</td>
<td>30</td>
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</table>
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AOCS method Cd 12b-92

Ancient Wisdom, Modern Stability

The oil from *Moringa oleifera* was used by ancient Egyptians in cosmetics and medicine.

Today modern science has rediscovered the benefits of moringa.

The oil is sought for its stability, functionality and rich emolliency and the leaves for their abundance of vitamins and antioxidants.

Moringa is popular in India and Africa and is used in traditional ayurvedic practices.

In Senegal, the moringa tree is called the Nebeday, meaning “the tree that never dies.”
Floralipids Moringa Butter

INCI: Moringa Oil/Hydrogenated Moringa Oil Esters

Clinically Substantiated:

↑ Increase:
- Skin hydration
- Skin barrier recovery
- Consumer preference

Moringa vs. Shea

85% of consumers prefer Floralipids Moringa Butter over shea butter. Floralipids Moringa Butter has unique aesthetics with a matte appearance and a non-greasy skin feel, unlike shea butter which delivers a glossy, sticky skin feel. Additionally, Floralipids Moringa Butter not only offers a better payout than shea butter, but it provides more skin hydration and was preferred by 85% of consumers.

Botanical Butters and Skin Hydration

Botanical Butters at 10% in an anhydrous stick were measured by corneometer at 4 hours post-application.
NATURAL FROM THE GROUND UP

Floratech provides innovative ingredients for beauty, health and hygiene products worldwide. Floratech ingredients are derived from renewable botanicals such as jojoba, macadamia, sunflower and moringa. These natural ingredients strengthen the sustainable, renewable and botanical attributes of finished formulations.

Floratech has been an innovator of multifunctional ingredients for over 40 years. Floratech’s success is based on a lasting commitment to service and quality.

Ingredient information 24/7 with iLabel

While the information provided here is believed to be reliable, Floratech does not guarantee its accuracy. Customers are encouraged to conduct their own tests with materials described herein.