



■ Emollients – Emollient Esters

INCI NAME: SHEA BUTTER ETHYL ESTERS

LIPEX[®] SheaSolve[™]

This eco-friendly shea-derived emollient ester offers excellent wetting, dispersing and solubilizing properties for all types of UV filters and pigments, making it ideal for sun care, UV protection skin care, and color cosmetics.

Lipex SheaSolve effectively solves complex challenges, such as combining appealing textures and other sensory benefits with high loads of UV filters and color pigments. It also shows SPF-boosting properties when used with mineral UV filters.

Its low viscosity, high polarity and good solubilizing properties mean you can combine it with other ingredients for functional use across various cosmetic applications and formats, including stick and sprayable formulations.

Derived from sustainable shea and containing 100% carbon from renewable sources, Lipex SheaSolve is produced using energy-saving catalysts and processes and is also suitable for cold processing.



Recommended applications: sun care and UV protection, color cosmetics, cleansing and skin care, hair care applications

Appearance: clear, slightly yellow liquid

Slip melting point: 10 °C

Unsaponifiable content: 7%

Viscosity: 15 mPa-s @20 °C, 11 mPa-s @40 °C

Polarity: surface tension 25 mN/m, interfacial tension 13 mN/m

Certifications: COSMOS Approved, NATRUE Compliant, China Compliant, Kosher, Halal, Vegan-friendly

Solubilizing
Dispersing
Highly polar
Fast-spreading
Eco-friendly
Ethically sourced

LIPEX[®] SheaSolve[™] for sun care and UV applications

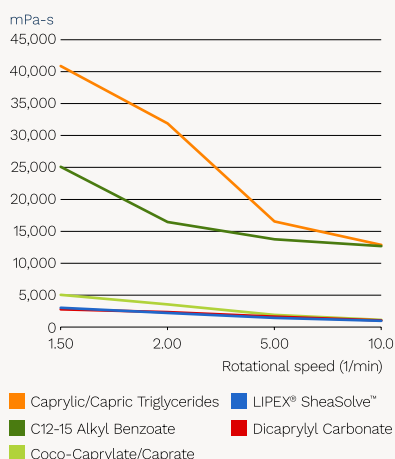
Key features and benefits:

- Good solubilizing and dispersion capacity for both organic and inorganic UV filters make Lipex SheaSolve suitable for use in all types of sun care where a high SPF in combination with good aesthetics is essential.
- Comparative studies on Lipex SheaSolve show effects on providing lower viscosity to dispersions containing high levels of mineral filters. The lower viscosity translates into a better wetting of the particles, which means the dispersant secures a lower agglomeration, making it more efficient than other natural or synthetic emollients such as C12-C15 Alkyl Benzoate. The resulting benefits include lower ghosting, better absorption, and improved finish in formulations.
- The in-vitro study shows that when used with mineral UV filters Lipex SheaSolve provides an SPF boosting effect vs the other alternatives. By delivering above the expected SPF value (in this case, 28), formulators can be confident that they can reach the SPF value needed without adding more mineral filters.

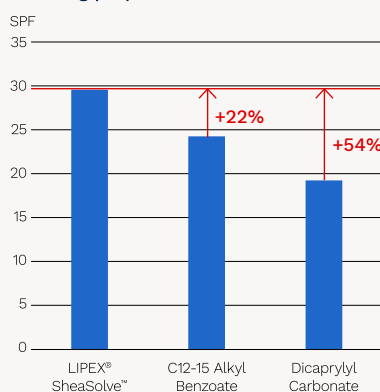
Visit the product page on aakpersonalcare.com for video explanations.

LIPEX[®] SheaSolve[™] shows superior wetting of mineral filters

Viscosity of 40% zinc oxide dispersions



LIPEX[®] SheaSolve[™] shows SPF boosting properties



Formulation suggestions:

SUN PROTECTION:

SunSafe Mineral Stick SPF 50
AAK-22-002

CreamUp Sun Care Spray SPF 30
AAK-22-001

Sun Care Lotion SPF 30
AAK-14-03

DAILY UV PROTECTION:

Urban Defence Daily Face Cream SPF30
AAK-17-312

AFTER SUN CARE:

After Sun Soothing Spray Oil
AAK-14-278

Organic UV filter solubilizer
Mineral UV filter dispersant
SPF booster
Low ghosting

Typical use concentrations:

5-20% in emulsions
20-80% in anhydrous products

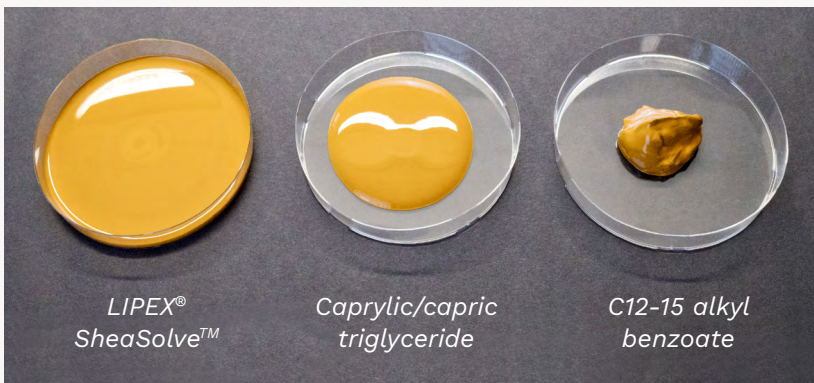
Recommended AAK partner products:

- LIPEX[®] PreAct[™]
- LIPEX[®] SheaTris[™]
- LIPEX[®] Bassol C[™]
- LIPEX[®] SheaClear[™]
- LIPEX[®] SheaLiquid TR[™]
- LIPEX[®] SheaSoft TR[™]

LIPEX[®] SheaSolve[™] for color cosmetic applications

Key features and benefits:

- Our eco-friendly shea-derived emollient ester provides optimal pigment dispersion and wetting, creating low viscosity and homogeneous dispersions.
- Comparative studies on Lipex SheaSolve show effects on consistently providing more flowable and lower viscosity dispersions containing high loads of color pigments than commonly used alternatives.



The image shows 20% yellow iron oxide dispersions in different emollients. The Lipex SheaSolve dispersion is flowable, the caprylic/capric triglyceride dispersion is thicker but also flowable, and the C12-15 alkyl benzoate dispersion doesn't flow.

- The lower viscosity makes laboratory handling and upscaling easier and indicates better wetting of the particles, which leads to less agglomeration.
- In the final formulation, Lipex SheaSolve delivers a more consistent color, a higher color payoff, and an overall lighter skin feel.
- Based on shea and an optimal choice when developing skincare and inorganic UV formulations, Lipex SheaSolve can contribute to incorporating skincare and sun care attributes into color cosmetics.

Formulation suggestions:

COLOR COSMETICS:

**La Vie En Rose
Creamy Matte Lipstick**
AAK-23-007

Candy Floss Blush Stick
AAK-24-001

Pigment dispersion
Homogeneous color
Versatile
No agglomeration
Pigment wetting
Light feel

Typical use concentrations:

5-25%

Recommended AAK partner products:

- LIPEX[®] SheaLiquid TR[™]
- LIPEX[®] SheaLuxe TR[™]
- LIPEX[®] SheaSoft TR[™]
- LIPEX[®] PreAct[™]
- Akofine R[™]

LIPEX[®] SheaSolve[™] for cleansing and skin care applications

Key features and benefits:

- Low viscosity, high polarity and good solubilizing properties make Lipex SheaSolve a good choice for anhydrous and emulsion-based cleansing formulations, as it effectively dissolves skin impurities and all types of makeup, including waterproof products.
- Reduces viscosity, improves spreadability and lowers tackiness, making it a good sensory and performance enhancer for a wide range of skin care formulations, including massage oils.



Formulation suggestions:

CLEANSING:

**Natural Glow
Eco-Conscious Face Polish**
AAK-16-251

**Black Magic Triple Action
Exfoliating Balm**
AAK-19-023

**Pure Start Dual-Phase
Cleanser**
AAK-15-310

SKIN CARE:

**Moisture Rescue
Eco-Conscious Body Cream**
AAK-16-250

Cashmere Soft Hand Cream
AAK-18-2435

Solubilizer
Sensory enhancer
High polarity
Low viscosity
Fast-absorbing

Typical use concentrations:

1-20% in emulsions
5-70% in anhydrous products

Recommended AAK partner products:

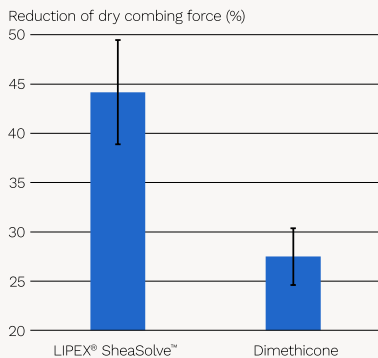
- LIPEX[®] PreAct[™]
- LIPEX[®] SheaTris[™]
- LIPEX[®] Bassol C[™]
- LIPEX[®] SheaClear[™]
- LIPEX[®] SheaLiquid TR[™]
- LIPEX[®] SheaSoft TR[™]

LIPEX[®] SheaSolve[™] for hair care applications

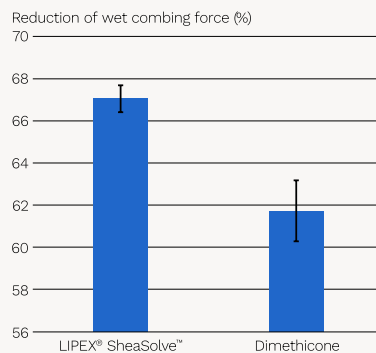
Key features and benefits:

- Lipex SheaSolve outperforms dimethicone to improve combability on both wet and dry hair, reducing the probability of hair breakage.
- An in-vivo preference test carried out by professional hairdressers showed that Lipex SheaSolve delivers similar sensory, spreadability and rinsability benefits as dimethicone throughout the whole washing process. And there was no significant difference in performance between the two.
- Low viscosity, high polarity, and good spreadability ensure uniform coating of hair fibers with a thin, weightless, moisturizing film to improve silkiness, shine and combability, making Lipex SheaSolve a good alternative to linear, low molecular weight silicones in hair care application.
- Readily biodegradable and 100% natural derived, Lipex SheaSolve can be combined with eco-friendly surfactants to produce environmentally-safe shampoos and conditioners.

LIPEX[®] SheaSolve[™] outperforms dimethicone in reducing the dry combing force



LIPEX[®] SheaSolve[™] is superior to dimethicone in reducing the wet combing force



Formulation suggestions:

HAIR CARE AND STYLING:

Deep Nourishing Conditioning Treatment

AAK-16-270

Bioactive Hair Wax Stick

AAK-13-211

Silicone alternative
Biodegradable
Ethically sourced
Low viscosity
High polarity
Fast-spreading

Typical use concentrations:

- 0.5% in shampoos
- 3-5% in conditioners
- 10-70% in hair oils
- 3-5% in scalp treatments

Recommended AAK partner products:

- LIPEX[®] Collect[™]
- LIPEX[®] PreAct[™]
- LIPEX[®] SheaTris[™]
- LIPEX[®] L'sens[™]
- LIPEX[®] SheaLiquid TR[™]