On-trend, sustainable color cosmetic formulations with consistent color and high pay-off

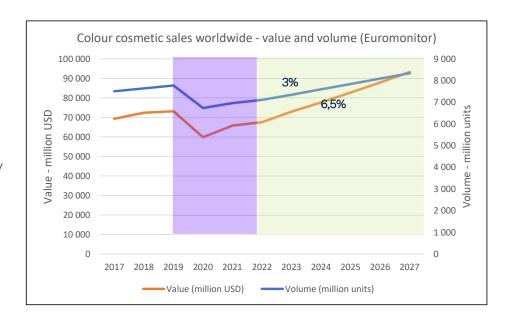
With LIPEX® SheaSolve™

AAK Personal Care



The color cosmetics category is recovering from the pandemic crisis, but consumer habits have changed

- The color cosmetics category suffered during the pandemic, due to the shift to working from home & reduced in-person socializing.
- It is currently experiencing a gradual recovery after the COVID-19 crisis. However, consumers' makeup usage habits have changed, which presents new challenges and opportunities.
 - With the ongoing cost-of-living crisis, value messaging has become crucial, while the concept of skinification has significantly influenced new product development.
 - Consumers are looking into simplifying their routines
 - There is a growing focus on environmental concerns and sustainability.
- Euromonitor forecasts 3% y-o-y growth in volume and 6,5% y-o-y growth in value for the next 4 years.



Is the horizon bright for colour cosmetics? In-cosmetics connect. Future of beauty: How natural makeup is shaping the industry – Sensient The intersection of value, sustainability and skinification trends - Mintel



Skinification and multifunctional products will drive innovation as consumers seek value

- Consumers are expecting additional benefits from their makeup as the skinification trend continues to drive innovation in the color cosmetics category.
 - Added benefits such as SPF, moisturizing, anti-aging and anti-acne claims will appeal.
- Multifunctional products will appeal during the current cost-of-living crisis and will support consumers wanting to simplify their routines. Brands can rethink their formulation strategies to create versatile formulas.

57%

of Thai consumers who have used base makeup are interested in makeup products that provide skin protection benefits (eg. antiacne) 59%

of US women who use makeup look for ingredients that benefit the skin when choosing color cosmetic products

A year of innovation in colour cosmetics, 2023. Mintel







Eco-ethical claims are on the rise and are expected to increase brand perception

- Ethical & environmental makeup launches now account for nearly 35% of color cosmetic launches which represents almost a 2x growth since 2019.
 - Skincare is, however, still ahead where almost 50% of launches contain ethical and environmental claims(1)
- Tapping into the clean beauty movement & providing transparency will be a way to rebound the color cosmetics category.



Want to know where the ingredients originate from



Brands that transition to natural, sustainable ingredients can see an improved consumer perception, as younger consumers are particularly eco-conscious.

⁽¹⁾ Percentage on launches containing ethical and environmental claims in 2019 vs 2022, Mintel. Is the horizon bright for color cosmetics? In-cosmetics connect. Future of beauty: How natural makeup is shaping the industry – Sensient

Getting the pigment dispersions right is a critical, and challenging step in the development of color cosmetics formulations

- Colored pigments are broadly used in makeup. In order to formulate these products, manufacturers must disperse these color pigments.
 - The ideal result is an even, consistent, and long-lasting color.
 - On the other hand, poorly dispersed color pigments can lead to issues with streaking, poor color consistency, difficulty with color matching, and can negatively influence formulation sensory and viscosity.
- To achieve a successful color dispersion, several aspects need to be researched.

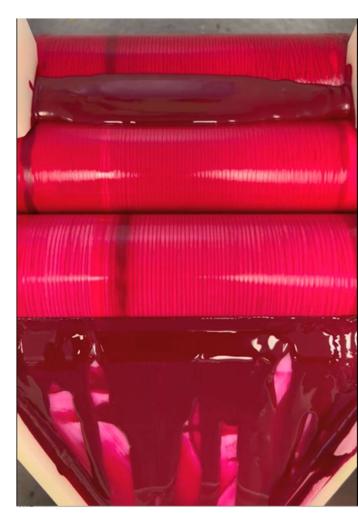


• Using a versatile solution can help ease up your product development process and increase your chances of success.

Source: How to Get Better Pigment Dispersions for Cosmetics | Blog | Applechem | The Differences between Wetting Agents and Dispersants (ulprospector.com)



The Co-Development Company



Introducing LIPEX® SheaSolveTM

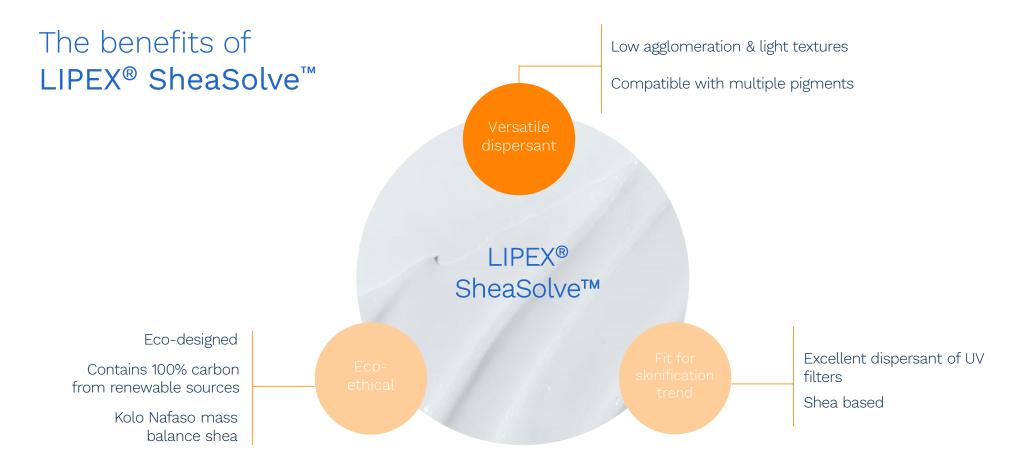
- Ethically sourced shea-derived emollient ester. Eco-designed, derived from 100% natural and renewable sources
- Offers excellent wetting and dispersing across different pigment types,
 which enables the formulation of color cosmetic products with consistent color, high payoff, and lightweight skin feel
- Based on shea and an optimal choice when developing suncare and inorganic UV formulations, Lipex SheaSolve can contribute to incorporating skincare and suncare attributes into color cosmetics.

INCI name: Shea Butter Ethyl Esters
Appearance: clear, slightly yellow liquid
Viscosity: 10 mPas @20°C, 6mPas @40 °C

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

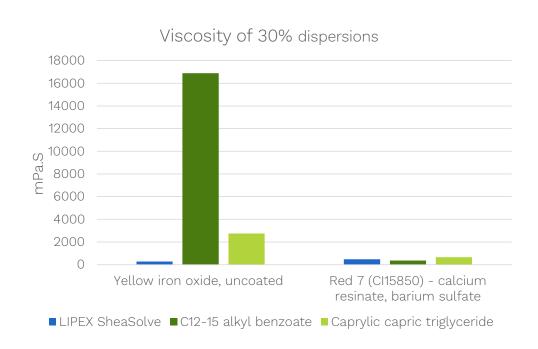








LIPEX® SheaSolve shows the best dispersing capabilities across two pigments and processing conditions

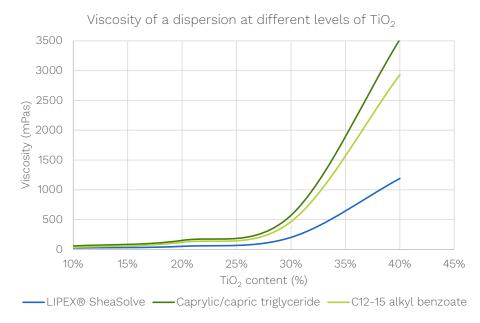


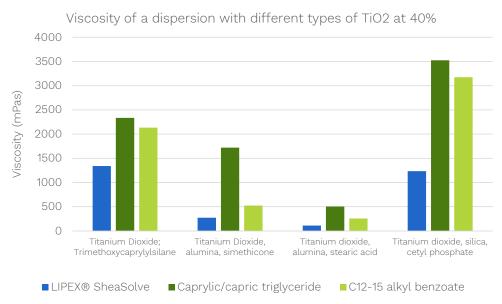
- LIPEX® SheaSolve generates low viscosity dispersions with the two tested pigments:
- A lower viscosity of the final dispersion indicates:
 - Better wettability of the pigments, which leads to lower agglomeration, which leads to a more homogeneous color
 - Reduces the need for additional wetting/dispersing agents
 - · Easiness to work in the lab and scale up
 - Ability to disperse a higher amount of pigment at a workable viscosity, ensuring a higher color payoff.

Roller mill dispersion conditions: Regular setting with "2" on rear and "1" on the front; pass batch through roller mill 3 times. Viscosity measurements were done with an Anton Paar Rheometer MCR301 under 10 S-1 shear rate and 20°C temperature



LIPEX® SheaSolve is able to produce the lowest viscosity dispersions at different levels and with different types of ${\rm TiO_2}$





INCI: Titanium Dioxide, Silica, Cetyl Phosphate

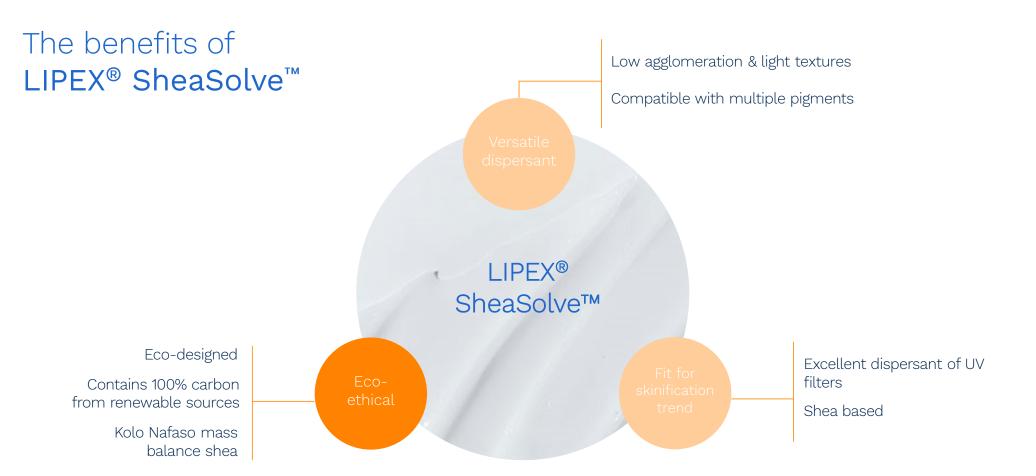
- LIPEX® SheaSolve consistently delivers low viscosity dispersions, regardless of the concentration or the type of titanium dioxide used.
- By being a versatile emollient across pigments and pigment types, processing conditions and concentrations, LIPEX® SheaSolve releases pressure and time on the product development process.



See it for yourself!









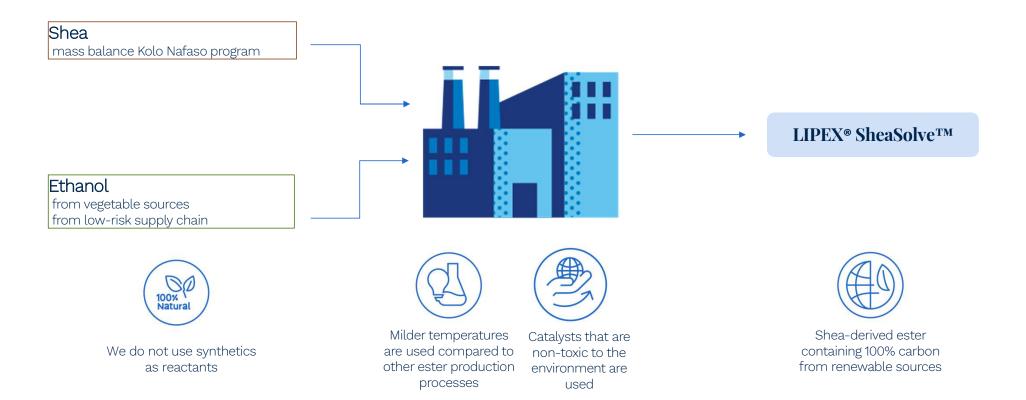
By extending the use of LIPEX® SheaSolve to color cosmetics you can have a positive impact across the value chain



- Lipex SheaSolve is an eco-designed ester which is derived from 100% natural and renewable sources
- It is from ethically sourced shea: AAK operates a Kolo Nafaso mass balance model, so all our customers contribute to the growth of the program
 - Kolo Nafaso is the largest verified shea sustainability program in West Africa focusing on poverty alleviation and women empowerment
- By using LIPEX® SheaSolve in color cosmetics:
 - You can expand the application areas for sheaderivatives and, in turn, help support the Kolo Nafaso program.
 - You can tap into the eco-ethical trend and appeal to the eco-conscious consumers.



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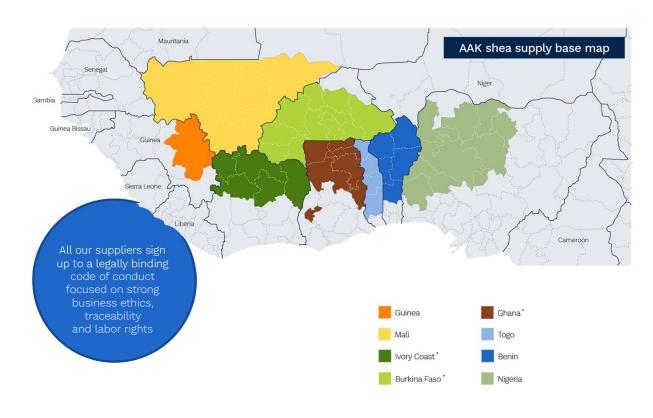




AAK provides ingredients derived from ethically sourced sheathrough two supply chains

Our AAK shea is sourced from eight West African countries using two parallel supply chains to serve our food, confectionery and personal care divisions.

We work directly with the women's groups engaged in our AAK Kolo Nafaso program and with conventional shea traders, who play an important logistical function in transporting kernels from remote areas to big towns.



*Countries with the Kolo Nafaso program



A short intro to our direct sourcing program: Kolo Nafaso

Kolo Nafaso

- Established in 2009 by AAK
- The largest verified shea sustainability program in West Africa focusing on: poverty alleviation and women empowerment
- Through direct trade, interest free microcredits and training.

Social and economic impact

- 3 countries: Burkina Faso, Ghana, Ivory Coast.
- Engaging and creating new opportunities for hundreds and thousands of women shea collectors in West Africa.



Link to video in Youtube AAK PC channel



The difference between a 100% traceable and a mass balance shea-derived ingredient

The continued growth of our AAK direct sourcing program and an established, responsible conventional supply chain has enabled AAK to offer Kolo Nafaso segregated (traceable) and mass balance shea-based products to its Personal Care customers.

Watch the following video to learn more!



<u>Link to video in Youtube AAK PC channel</u>



Other relevant parameters and certifications

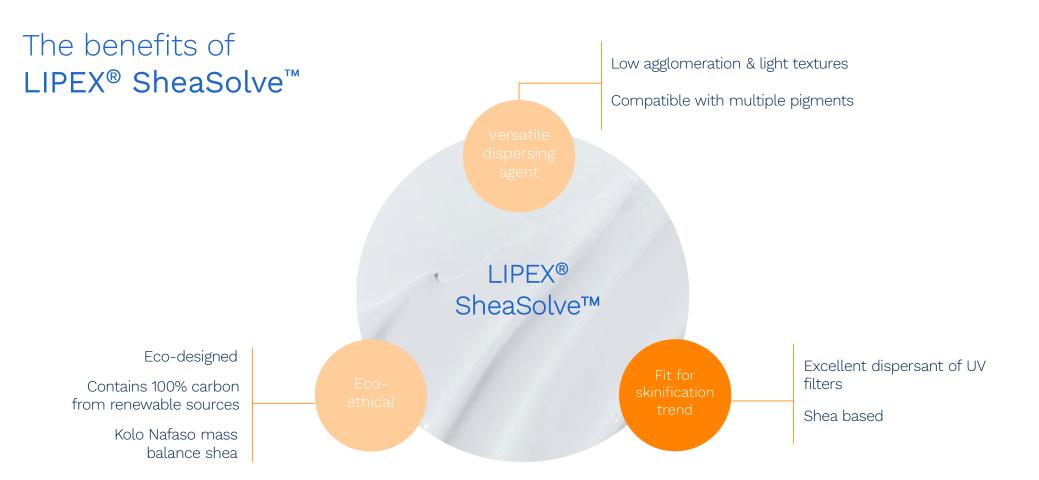
Parameter	Lipex SheaSolve	
Halal approved	Yes	HALL FEE AND FOR MAIN AND MAIN
Natrue approved	Yes	The state of the s
Cosmos approved	Yes	ECCERT LAW WITTERS. COSMOS APPROVED
Natural derived ester according to ISO 16128	Yes, 100%	ISO
Vegan friendly	Yes	
Biodegradability according to OECD 301 F	Readily biodegradable	
EWG rating	1	© ewa





INCI: Shea butter ethyl esters or Ethyl oleate (and) Ethyl stearate (and) Ethyl linoleate (and) Ethyl palmitate (and) Butyrospermum Parkii (shea butter) unsaponfiables





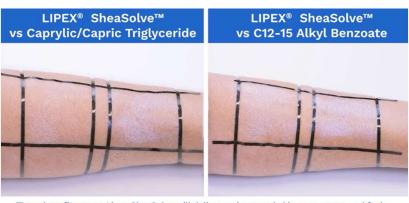


LIPEX® SheaSolve offers improved wetting and dispersion of mineral UV filters making it an ideal choice for adding SPF benefits to color cosmetics products

Improved wetting



Reduced ghosting



These benefits mean Lipex SheaSolve will deliver an improved skin appearance and feel in mineral sunscreen formulations.

- Low viscosity dispersions
- LIPEX® SheaSolve™
 with 20% coated Zno dispersion

 C12-C15 Alkyl Benzoate
 with 20% coated Zno dispersion

 Caprylic/Capric Triglyceride
 with 20% coated Zno dispersion

 Caprylic/Capric
 Triglyceride
 vith 20% zno Dispersion

 Caprylic/Capric
 Triglyceride
 vith 20% zno Dispersion

 Caprylic/Capric
 Triglyceride
 vith 20% zno Dispersion

 SheaSolve™
 C12-C15
 Alkyl Benzoate
 vith 20% zoated Zno dispersion

 Caprylic/Capric
 Triglyceride
 vith 20% zno Dispersion

 SheaSolve™
 She
- When working with zinc oxide, SheaSolve is shown to be consistently superior at dispersing and wetting the filter vs other emollients. You can find more details in the LIPEX® SheaSolve package for suncare.
- The versatility of LIPEX ® SheaSolve allows you to include colored pigments and mineral UV filters with a single emollient reducing complexity and appealing to the skinification trend.

LIPEX® SheaSolve can contribute to incorporating skincare attributes in makeup

- · Shea is widely known and appreciated by consumers in skin care
 - Ca 22% of the skin care launches the last 5 years contain shea butter.
 - Brands actively communicate on pack about its use.
 - Consumers recognize shea as a natural moisturizing ingredient.
- LIPEX® SheaSolve is a shea-derived ester. Like shea butter, it is rich in unsaponifiables the components associated with driving shea's ability to condition, moisturize and protect the skin.
 - By expanding the use of shea-based products like Lipex SheaSolve to color cosmetic formulations, brands can help consumers scale down makeup routines by incorporating skincare attributes and ingredients into their make up.

Source: Mintel, State of the Industry Report 2022, Global Shea Aliance



22/03/2024

La vie en Rose Creamy Matte Lipstick

This long-wear lipstick

- delivers a perfect matt finish
- offers supreme comfort, thanks to the nourishing benefits of a duo of highly moisturizing shea-based emollients.
- is the ideal solution to mastering a bold matt look while simultaneously keeping lips in beautiful mint condition!

Directions for use: apply the lipstick working outwards from the cupid's bow directly from the bullet or with a lip brush. For a super smooth finish, exfoliate the lips before application. And check out our complimentary lip scrub formulations for inspiration.





La vie en Rose Creamy Matte Lipstick

Product	Manufacturer	INCI Name	w/w
Phase A			
Akofine R™	AAK Sweden	Hydrogenated Vegetable Oil	2.00
LIPEX® SheaLiquid TR™	AAK Sweden	Butyrospermum Parkii Butter, Butyrospermum parkii (Shea) butter	5.00
LIPEX® SheaSoft TR™	AAK Sweden	Butyrospermum Parkii Butter, Butyrospermum parkii (Shea) butter	44.00
Polyglyceryl-3 Polyricinoleate		Polyglyceryl-3 Polyricinoleate	1.00
NF White Beeswax		Cera Alba (Beeswax)	8.50
Sunflower Wax	Koster Keunen	Helianthus Annuus (Sunflower) Seed Wax	5.50
Phase B			
Silica	The Innovation Company	Silica	8.50
Phase C(*)			
Red 7 Dispersion in LIPEX® SheaSolve™	AAK Sweden/Making Cosmetics	Shea Butter Ethyl Esters, CI 15850 (red no. 7 D&C lake), Hydrogenated Vegetable Oil	8.33
Red 28 Dispersion in LIPEX® SheaSolve™	AAK Sweden/Making Cosmetics	Shea Butter Ethyl Esters, CI 45410 (red no. 28 D&C lake), Hydrogenated Vegetable Oil	8.33
Yellow 5 Dispersion in LIPEX® SheaSolve TM	AAK Sweden/Making Cosmetics	Shea Butter Ethyl Esters, CI 19140 (yellow no. 5 FD&C lake), Hydrogenated Vegetable Oil	8.34
Dermofeel Toco 70 non GMO	Evonik	Tocopherol, Helianthus Annuus Oil	0.50

- LIPEX® SheaLiquid TR™ and LIPEX® SheaSoft TR™ Our two climate-neutral, fully traceable shea-based emollients help deliver the creamy texture, high stability and rich moisturizing benefits that help counteract the drying effect of the pigments and silica.
- LIPEX® SheaSolve™ Our eco-friendly shea-derived emollient ester provides optimal pigment dispersion and wetting, creating low viscosity and homogeneous dispersions. In the final formulation, Lipex SheaSolve helps deliver a more consistent color, a higher color payoff, and an overall lighter skin feel.

(*)All pigment dispersions are made using LIPEX® SheaSolve™ at 58%, Akofine R at 2% and the pigment at 40%



Candy Floss Blush Stick

A cream-to-matte tinted balm in a handy stick format, the formulation

- delivers a fresh flush of buildable color in a single swipe,
- blends seamlessly with the skin for beautiful, radiant results.

Directions for use: apply directly to the cheeks and blend out using fingers or a brush. Repeat for added color intensity

Candy Floss Blush Stick

Product	Manufacturer	INCI Name	w/w %
Phase A			
Akofine R	AAK Sweden	Hydrogenated Vegetable Oil	10.00
LIPEX® Bassol C™	AAK Sweden	Canola oil	20.00
LIPEX® SheaSoft TR™	AAK Sweden	Butyospermum Parkii Butter	35.00
LIPEX® SheaSolve™	AAK Sweden	Shea Butter Ethyl Esters	5.00
Polyglyceryl-3 Polyricinoleate		Polyglyceryl-3 Polyricinoleate	2.00
Sunflower Wax		Helianthus Annuus (Sunflower) Seed Wax	5.00
Phase B	_		
Creaspheres SIL W3	The Innovation Company	Silica	7.00
Phase C (*)			<u>'</u>
D&C Red 28 Dipersion in LIPEX® SheaSolve	AAK Sweden	Shea Butter Ethyl Esters, CI 45410 (red no.28 D&C lake), Hydrogenated Vegetable Oil	
D&C Red 7 Lake Dipersion in LIPEX® SheaSolve	AAK Sweden	Shea Butter Ethyl Esters, CI 15850 (red no.7 D&C lake), Hydrogenated Vegetable Oil	2.20
Titanium Dioxide Dispersion in LIPEX® SheaSolve	AAK Sweden	Shea Butter Ethyl Esters, Titanium Dioxide, Hydrogenated Vegetable Oil	7.40
Yellow 5 Dispersion in LIPEX® SheaSolve	AAK Sweden	Shea Butter Ethyl Esters, CI 19140 (yellow no. 5 FD&C lake), Hydrogenated Vegetable Oil	7.40

- LIPEX® SheaSoft TR™ Our climate-compensated, semi-solid shea butter has a creamy texture, slow melting profile, rapid crystallization, and proven skin moisturizing benefits. Expertly processed by interesterification, you can use it in much higher percentages than a standard refined shea butter (>35%) to ensure bloom-free, thermally stable formulations every time. Here, it helps protect and repair the lipid barrier, counteract the drying effect of the pigments and silica, and deliver a rich, smooth texture and long shelf-life.
- LIPEX® SheaSolveTM Our eco-friendly shea-derived emollient ester provides optimal pigment dispersion and wetting, creating low viscosity and homogeneous dispersions. In the final formulation, Lipex SheaSolve helps deliver a more consistent color, a higher color payoff, and an overall lighter skin feel.

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