
Introducing NEW
LIPEX® IllipeSoft™
Illipe butter expertly processed for easy formulating & upscaling.
AAK
The Co-Development Company

Consumers look for natural, sustainably sourced solutions

- What we see in the market
  - Consumers look for **natural, sustainably sourced ingredients** and want **transparency** about them
  - Natural ingredients offer environmental benefits but also align with the growing consciousness among consumers regarding **health and wellness.**
  - **Younger generations (millennials and Gen Zs)** are especially drawn to clean beauty and products free from synthetic ingredients.

- How it impacts the status quo
  - There is a tendency to progressively move away from traditionally used ingredients from fossil origin as well as ingredients that pose concerns linked to their sourcing.

- Associated challenges
  - Those ingredients are often robust and with known and needed functionalities that need to be replaced in the formulations.

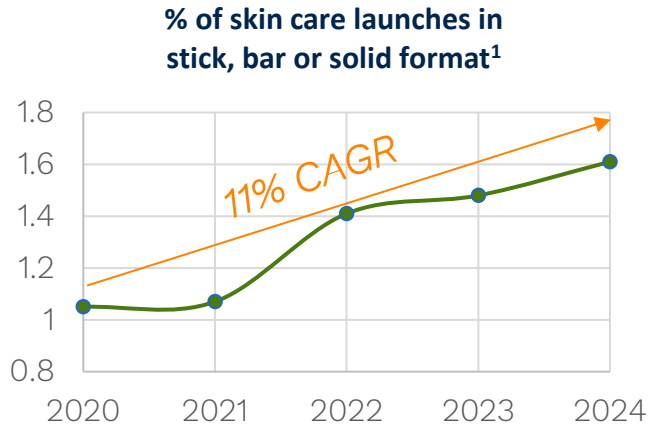
Top Trends Shaping the Beauty and Personal Care Industry – Euromonitor, June 2024
Skincare Analysis: Boomers vs. Millennials vs. Gen-Z
Global Natural Cosmetics Market Size, Trends, Share 2033

Waterless formulations are trendy

- What we see in the market
  - There is an increasing interest for solid, bar and stick products driven by sustainability (water, packaging, carbon footprint) and convenience

- How it impacts the status quo
  - More & more skin care products are launched in stick bar or solid format

- Associated challenges
  - New formulation challenges arise such as (1) Increased need for structure and temperature stability, (2) risk of bloom formation and (3) sweating



1. Mintel GNPD. Launches in bar/solid and stick formats in skin care in the 2021-2024 period
Solid cosmetics: Beauty in a bar | Christeyns
Solid Formulations: Their Appeal and what to look for in the Future

Increased focus on ingredients & innovation

- What we see in the market
  - Acceleration of innovation: more products are launched than ever
  - Increased focus on ingredients by consumers & personal care producers
  - Within emollients, we see an Interest for plant-based butters linked to
    - PC producers' efforts to improve their environmental impact & support their smallholder empowering initiatives.
    - Storytelling opportunity and the ability to communicate on ingredients with positive connotations.

- How it impacts the status quo
  - Plant-based butter penetration is significant and increasing

12.6% Penetration in skin care, hair care & colour cosmetic launches[1]

2.8% CAGR (%) Penetration in launches[1]

1.Mintel GNPD. Launches containing plant-based butter in the 2021-2024 period
Mintel Global Consumer Trends 2024, Euromonitor 2025 Consumer Trends

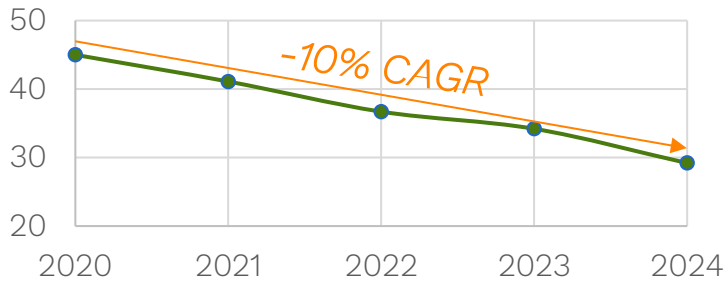
Vegan is a key claim in skin care

- What we see in the market
  - Valued at $17.39 billion worldwide in 2022, the vegan cosmetics industry is continuing to show exciting growth and is predicted to reach $24 billion by 2028.[1]
  - ~30% of skin care launches contain vegan / no animal ingredient claims[2]

- How it impacts the status quo
  - Some ingredients, like Beeswax are being progressively phased out from segments where vegan is key

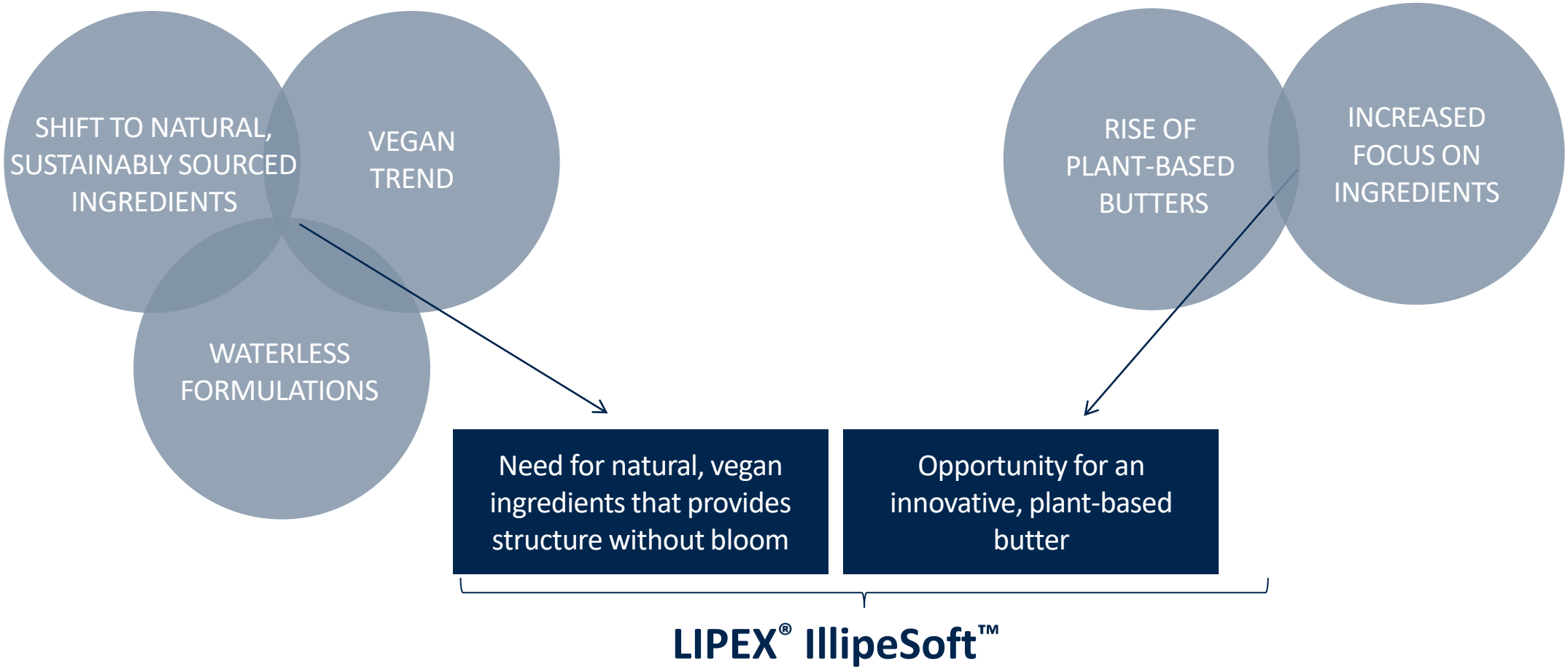
- Associated challenges
  - As with fossil-based ingredients, ingredients that are often robust and with known and needed functionalities need to be replaced in the formulations.

% of launches containing Beeswax in lip care[3]



1. Consumers demand vegan cosmetics as the global market continues to grow
2. Mintel GNPD. Launches in skin care containing vegan / no animal ingredient claims.
3. Mintel GNPD. Launches containing Beeswax in lip care in the 2021-2024 period range

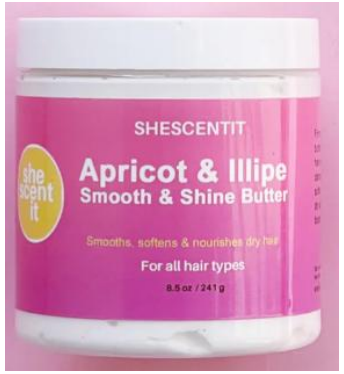
Introducing LIPEX® IllipeSoft™



A sustainably sourced Illipe Butter with optimized crystallization and melting behaviour, which provides versatile structuring properties. Ideal for sustainable, vegan-friendly formulations.

Illipe Butter

- **Botanical name:** Shorea stenoptera.
- **Origin:** native to Southeast Asia, particularly found in Borneo
- **Composition:**
  - **Fatty acid composition:** similar to cocoa butter, rich in stearic and oleic acid
  - **Minor active ingredients:** vitamins E, A, C and beta-carotene
- **Usage in cosmetics:** relatively low penetration in new launches[1]
  - Present in 0.1-0.5% of skin care launches
  - Present <0.1% launches in hair care, colour cosmetics & bath products



1. Mintel GNPD. % of products launched in 2023/24 containing Shorea Stenoptera Seed Butter in ingredient list

LIPEX® IllipeSoft™

One of our AAK Soft Technology Variants

In AAK's soft technologies, interesterification has been applied to optimize the melting and crystallization properties

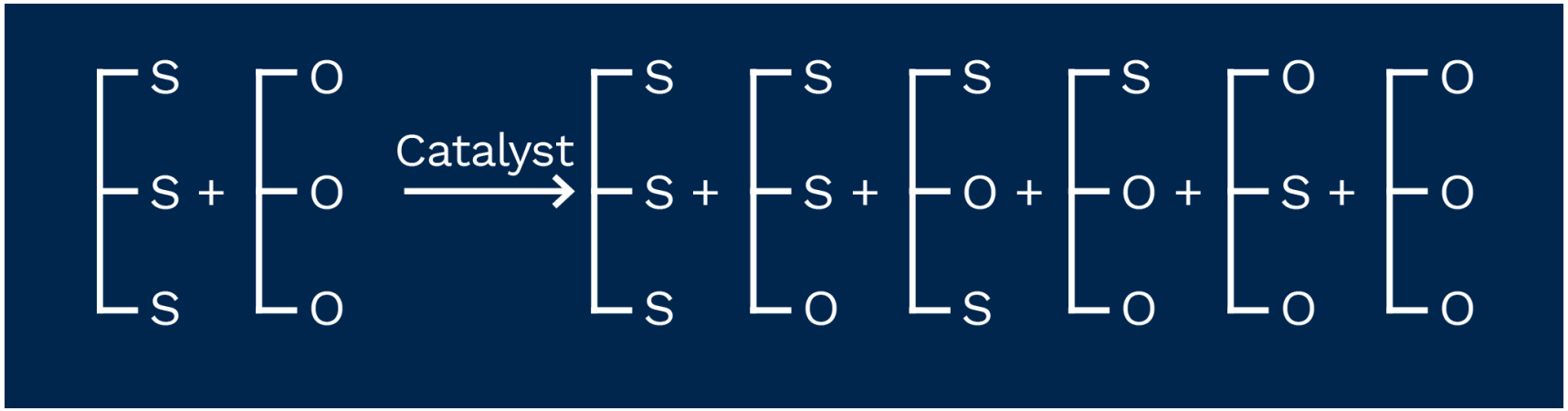
- In AAK's soft technologies, chemical interesterification has been applied to ***improve the crystallization properties*** **of the butter**, so that the transition to the stable crystal form happens faster without needing controlled cooling by specific equipment/processing.

This leads to the formation of a regular network of small crystals during crystallization, that brings thermal stability, oil-binding capacity, and structure to the formulations without the need of texturizing agent.

- Due to the processing of the soft technology products, ***their melting profiles are flatter***, which gives a uniqueness in how the ingredient will be perceived and how it will behave on the skin

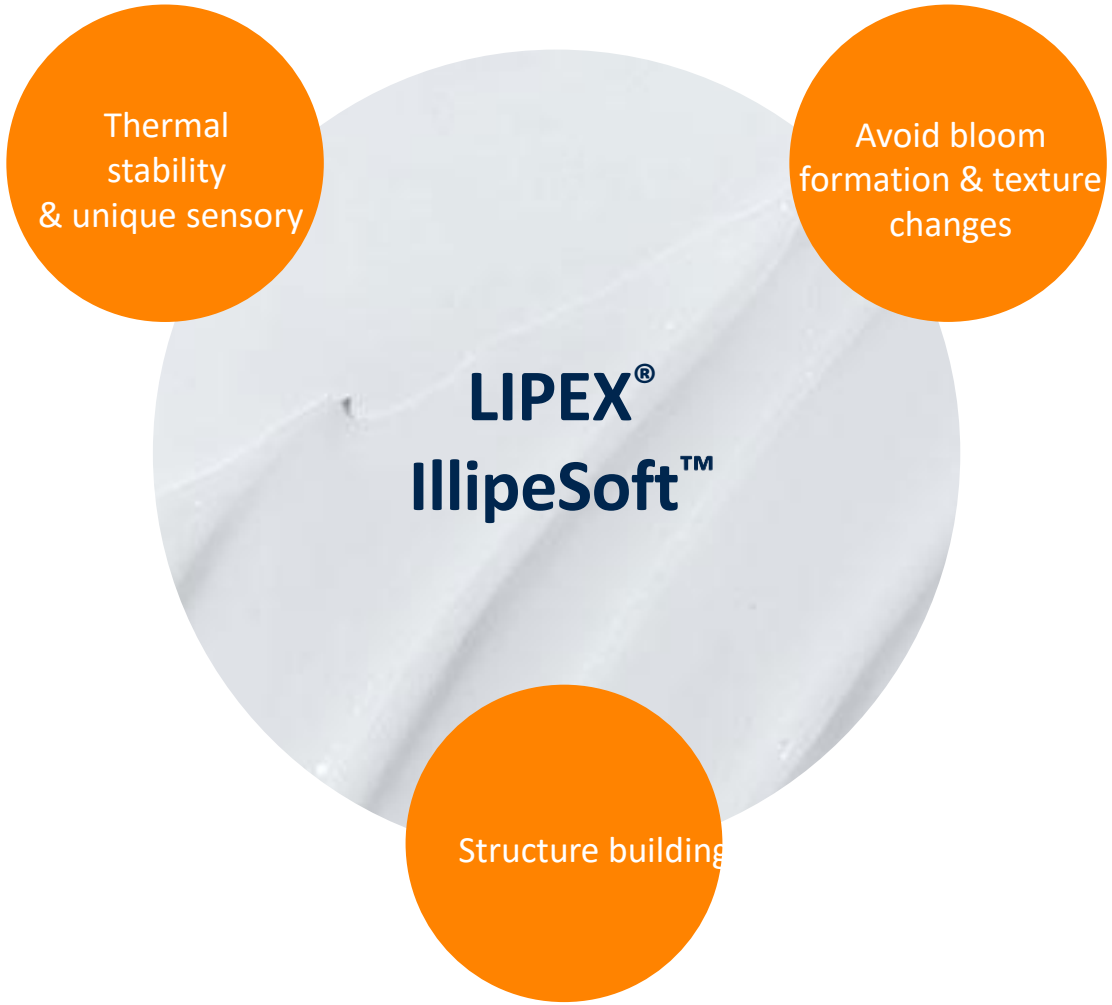
Interesterification leads to a higher content of triglycerides with a faster transition to the stable crystal form

- **Interesterification** is a process where the fatty acids of the triglycerides are cleaved off the glycerol backbone, **shuffled**, and then **reattached** to the glycerol again. This causes a **random rearrangement** of the fatty acids, which in turn creates triglycerides with other properties than that of the standard fat.



- The randomization of the fat molecules in the butter will lead to a reduction in symmetrical triglycerides, which are stable in β. This will improve the melting properties of the butter and contributes to (in this case) a **β' stable** fat. Consequently, it enables the butter to crystallize in its stable crystal form right away and limits the risks of bloom formation in a formulation

Introducing the key features of LIPEX® IllipeSoft™



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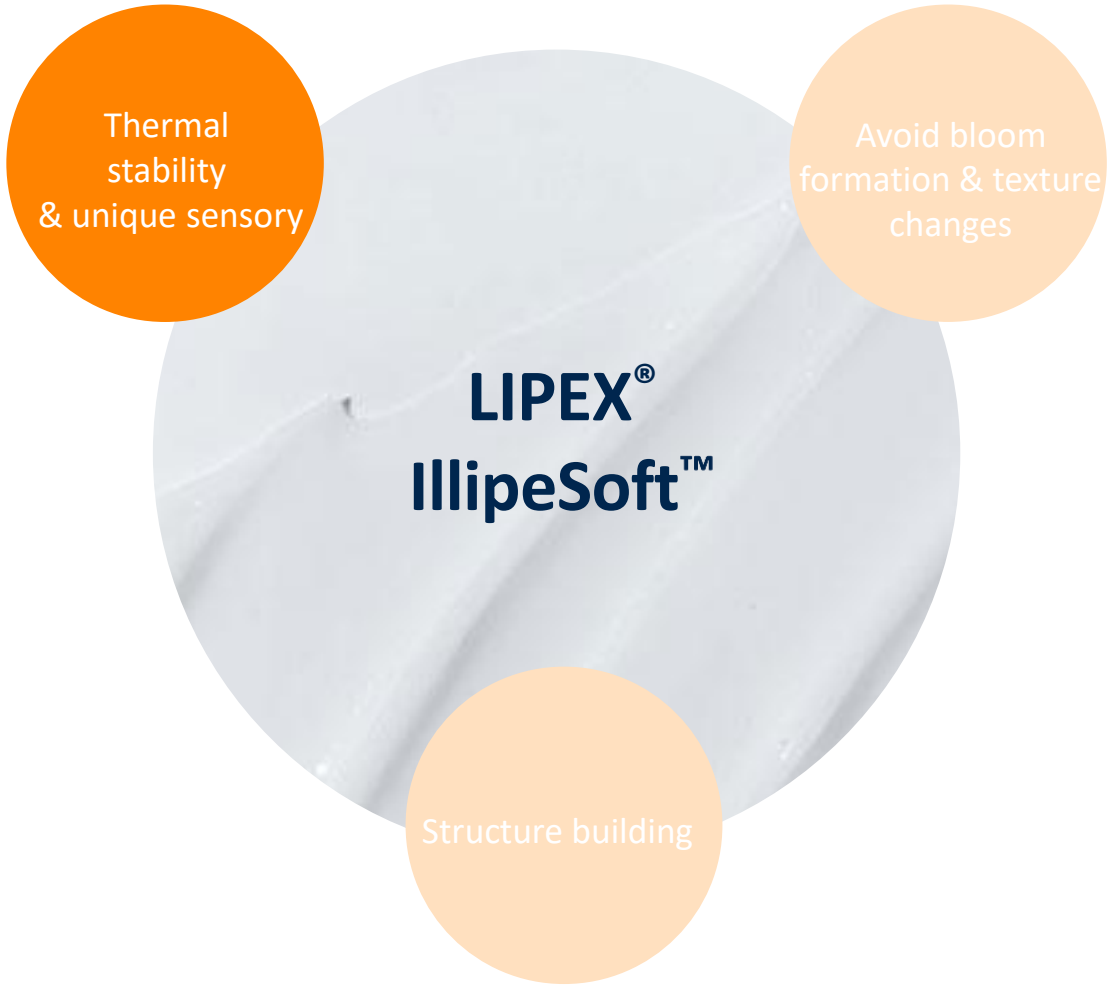
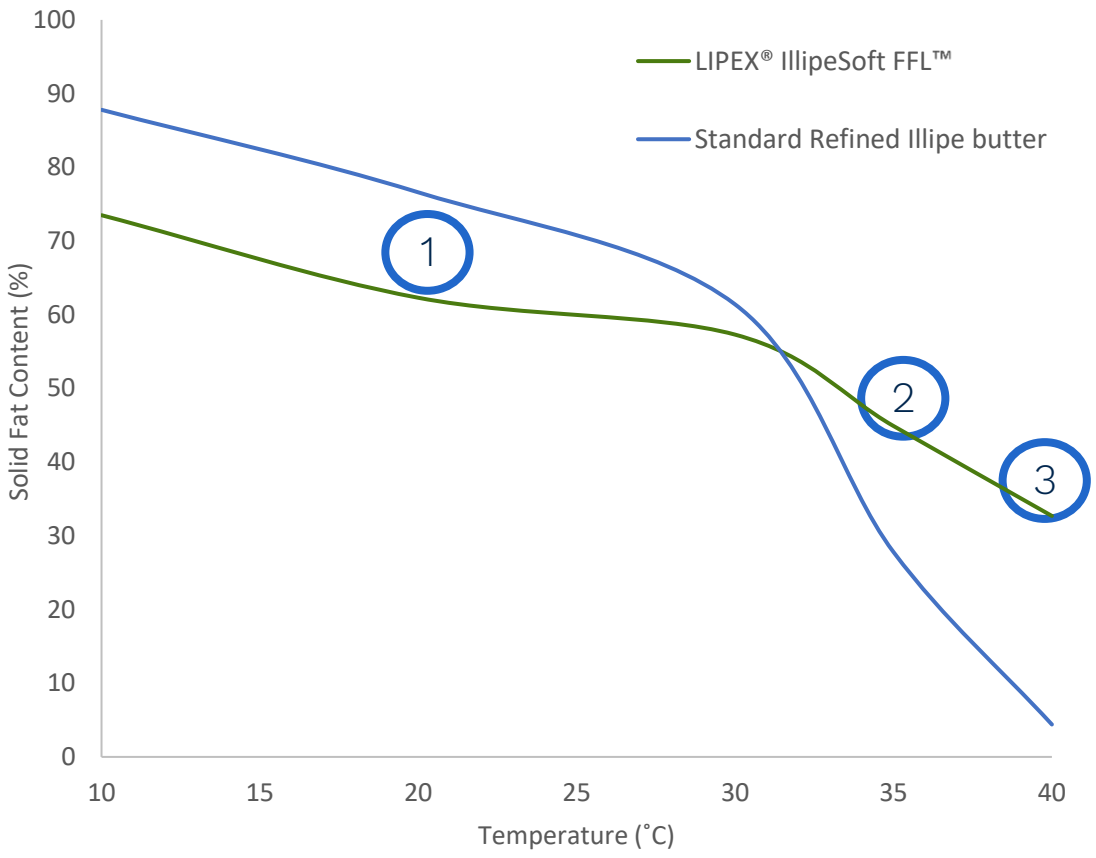


The modified melting profile delivers a flatter curve

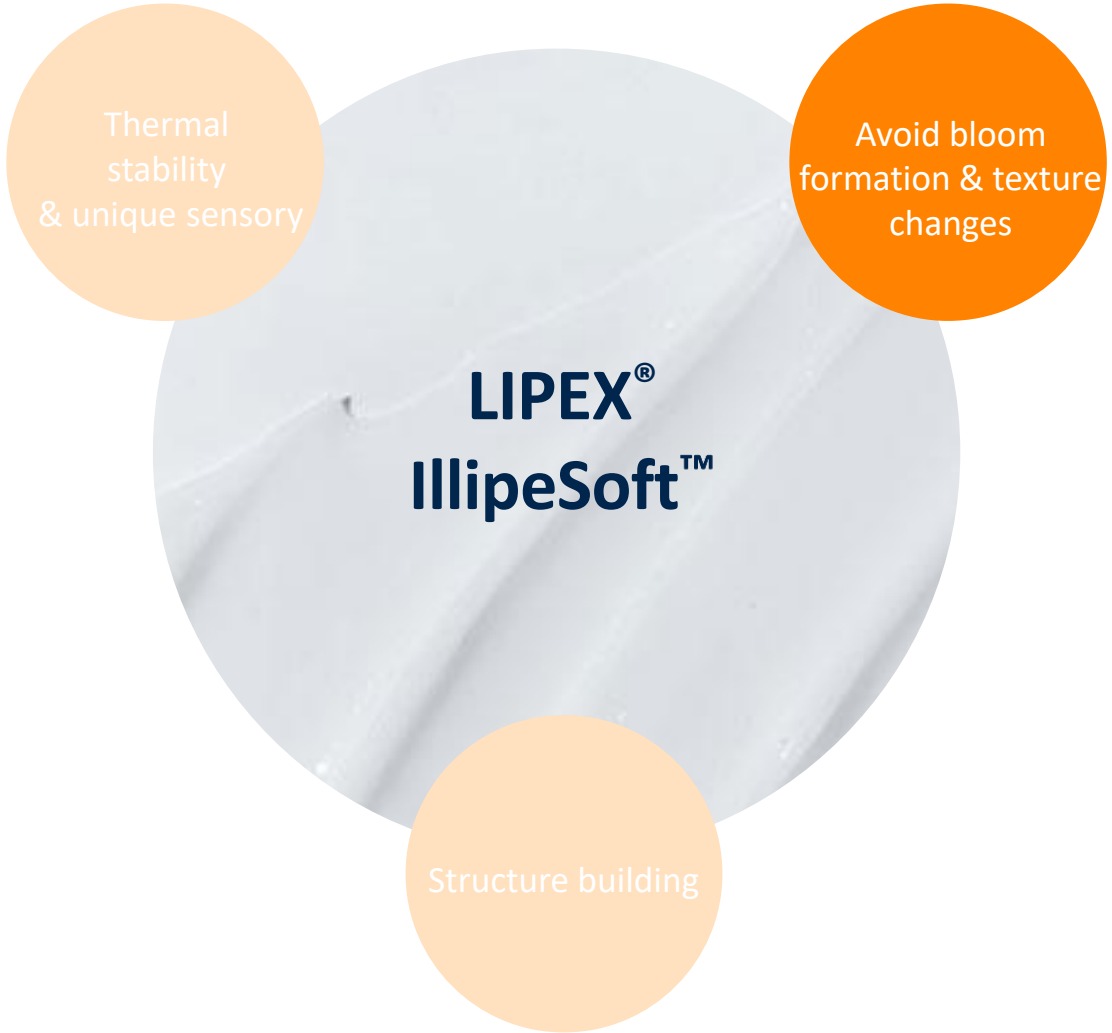
This indicates a temperature stable ingredient with optimized sensory and functional properties



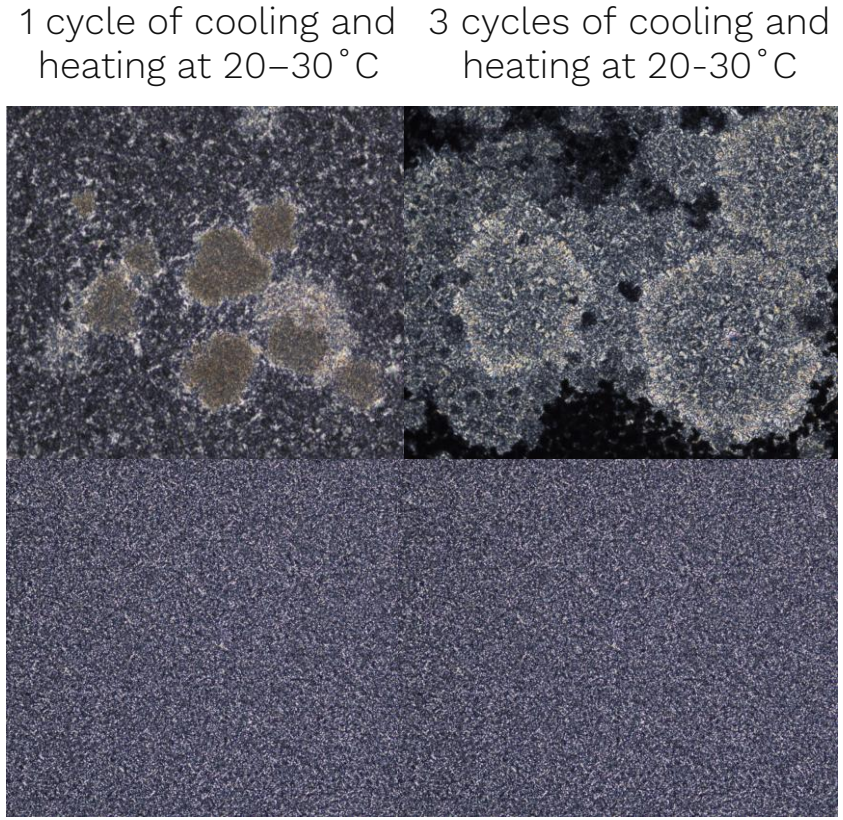
- Flatter melting profile indicates that the ingredient is less sensitive to temperature fluctuations. The **Δ** of SFC is smaller when looking at equidistant changes in temperature.

1. Lower SFC @ RT than refined Illipe butter (65%) indicates a softer, more pliable product
2. Higher SFC @ 35°C/skin temperature (45%) indicates the ”soft” technology will have a longer play time and a more luxurious after feel. It will help protect and restore the lipid barrier.
3. Higher SFC @ 40°C (35%) indicates that the soft technologies will help stabilize emulsions at high temperature, helping avoid temperature-induced phase separation.

Introducing the key features of LIPEX® IllipeSoft™



LIPEX® IllipeSoft™ crystalizes faster in smaller homogenous crystals that remain more stable with fluctuations of temperature



Refined illipe butter

- It takes longer for the first crystals to be created
- Crystals grow to different sizes and when subject to thermal fluctuations will melt and recrystalize

LIPEX® IllipeSoft™

- Small crystals are formed faster, which remain small with temperature fluctuations
- A homogeneous crystal network is created, which provides thermal stability and structure to the formulation.

One of the key benefits of the improved crystal structure is resistance to bloom formation

[Illipe crystallization comparison | overcoming bloom | AAK Personal Care]

Refined Illipe butter | LIPEX® IllipeSoft™

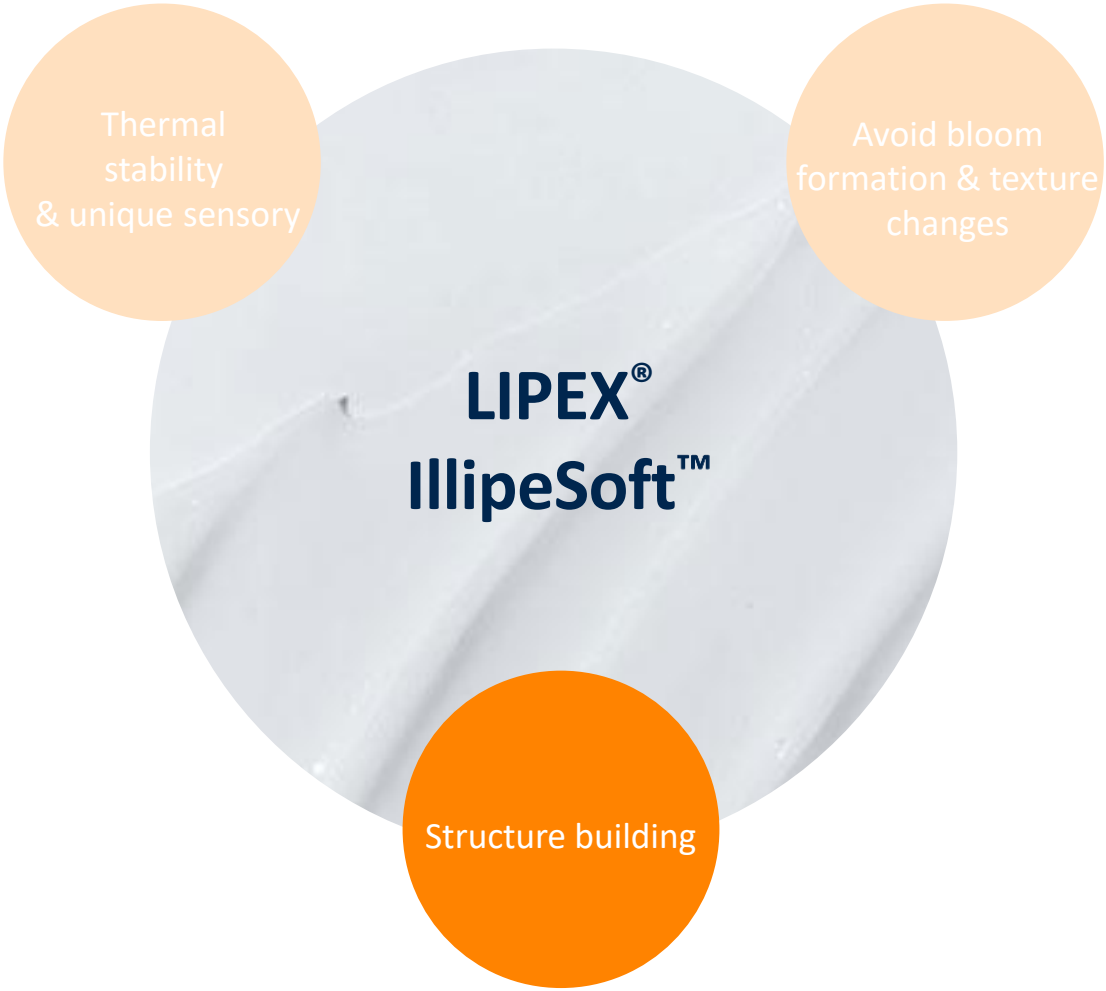
The video shows the superior crystallization properties of LIPEX® IllipeSoft™ compared to standard refined illipe butter Samples were stained with red dye and filmed over three cycles of cooling and heating at 20-30˚C for three days.

- In the refined exotic butters, some of the triglycerides recrystallizes on the surface, creating bloom. This can be perceived as the material being “grainy”
- The surface of Lipex® IllipeSoft™ remains homogeneous and smooth through the process
- The stable crystal structure of Lipex® IllipeSoft™ means
  - Formulations maintain their texture and consistency during storage and use, even under fluctuating temperatures
  - Anhydrous products are resistant to recrystallization and the resulting grainy texture.

The improved crystallization results in easier formulating and upscaling

- No need for specialized equipment and a highly temperature- controlled manufacturing process – reducing complexity in product development and production process
- It goes faster into the stable form- easing manipulation during formulation and upscaling

Introducing the key features of LIPEX® IllipeSoft™



LIPEX® IllipeSoft™ as a key structuring agent

- The fast crystallization of LIPEX® IllipeSoft™ generates a homogeneous network of small crystals that provides structure to the formulation and avoids bloom formation.
- In our Matte shield lip balm stick we have put LIPEX LIPEX® IllipeSoft™ to the test, by creating a minimalistic stick formulation where LIPEX® IllipeSoft™ is the main structuring agent
- In more complex formulations, LIPEX® IllipeSoft™ can be the perfect partner for your wax of choice to obtain sticks with the different hardness and payoffs – check our Skin Longevity Foundation Stick for inspiration!

Matte Shield Lip Balm Stick

This wax-free, vegan formula is created with just three plant-based ingredients to provide instant comfort and hydration without shine. It acts as an invisible, weightless lip protector suitable for all ages and genders while also creating a smooth, matte base for lip color. Infused with a bioactive shea emollient, it strengthens the protective lipid barrier, helping to lock in moisture and shield against environmental stressors that cause dryness and cracking.

Natural Origin Index: 100%

Product	Manufacturer	INCI NAME	% w/w
Phase A			
LIPEX® IllipeSoft™	AAK Sweden	Shorea Stenoptera Seed Butter	74
LIPEX® SheaLiquid TR™	AAK Sweden	Butyrospermum parkii Butter	25.5
LIPEX® SheaTris™	AAK Sweden	Butyrospermum parkii Butter Extract	0.5

Squeeze Me Jelly Lip Balm

Easy-to-squeeze tube, this vegan-friendly lip balm is formulated with a trio of plant-based ingredients to hydrate, nourish, and soothe. But that's not all! Upon application, its gel-like texture melts effortlessly, leaving lips with a soft, healthy, and naturally enhanced sheen - simple effectiveness at its best.

Natural Origin Index: 100%

Product	Manufacturer	INCI NAME	% w/w
Phase A			
LIPEX® IllipeSoft™	AAK Sweden	Shorea Stenoptera Seed Butter	30,0
LIPEX® SheaLiquid TR™	AAK Sweden	Butyrospermum parkii Butter	68,35
Akofine R	AAK Sweden	Hydrogenated Vegetable Oil	1,15
Phase B			
PEACH 20302-C/31	Vioryl	Flavor	0,5

- Using very similar ingredient than in AAK's Matte Shield lip balm stick, but changing the ratio, you can obtain an anhydrous formulation with a completely different consistency. Here LIPEX IllipeSoft is responsible for the structure also – but instead of a stick, a squeezable jelly balm, is obtained.

Skin Longevity Foundation Stick

A foundation stick with lightweight buildable coverage, powered by multifunctional plant-based emollients such as LIPEX® SheaSolve™ and LIPEX® L'Sens™. This formulation also highlights two thermally stable butters with complementary melting profiles, that also provide rich emolliency and build a structure to the stick.

PRODUCT	Manufacturer	INCI NAME	% w/w
Phase A			
Sunflower Seed wax	Koster Keunen	Helianthus Annuus (Sunflower) Seed Wax	5
LIPEX® IllipeSoft™	AAK Sweden	Shorea Stenoptera Seed Butter	40
LIPEX® SheaSoft TR™	AAK Sweden	Butyrospermum Parkii (Shea) Butter	22,5
LIPEX® SheaSolve™	AAK Sweden	Shea Butter Ethyl Esters	10
LIPEX® L'Sens™	AAK Sweden	Soybean Glycerides (and) Butyrospermum Parkii Butter Unsaponifiables	2
Phase B			
LIPEX® SheaSolve™	AAK Sweden	Shea Butter Ethyl Esters	11,25
Unipure White LC987 BA	Sensient Beauty	CI 77891 (and) Persea gratissima (Avocado) oil (and) Hydrogenated Avocado oil	12,84
Unipure Yellow LC182 BA	Sensient Beauty	CI 77492 (and) Persea gratissima (Avocado) oil (and) Hydrogenated Avocado oil	1,68
Unipure Red LC381 BA	Sensient Beauty	CI 77491 (and) Persea gratissima (Avocado) oil (and) Hydrogenated Avocado oil	0,36
Unipure Black LC989 BA	Sensient Beauty	CI 77499 (and) Persea gratissima (Avocado) oil (and) Hydrogenated Avocado oil	0,12
Phase C			
Sensibead SI175	Sensient Beauty	Silica	5
Phase D			
LIPEX® SheaTris™	AAK Sweden	Butyrospermum Parkii Butter Extract	0,5

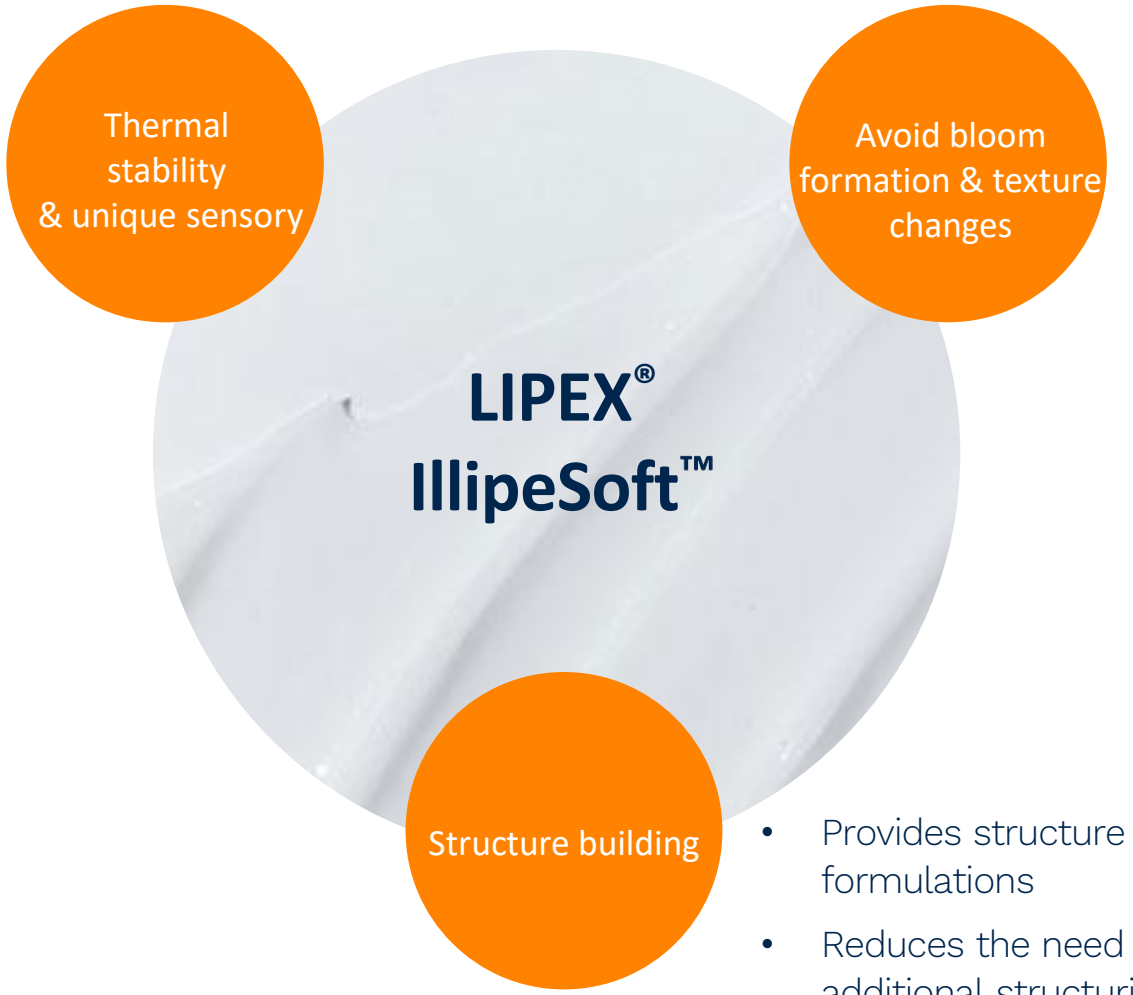
Youth Renewal Hand Care

Hands are one of the first areas to show signs of aging, but they're often overlooked in daily skincare routines. This lightweight yet richly textured cream is specially formulated for fast absorption, delivering essential nourishment to hardworking hands. Infused with gentle plant-based emollients that pack a surprisingly powerful punch, it deeply hydrates, strengthens the skin's natural barrier, and locks in moisture. As a regular treatment, it helps protect against environmental stressors and premature aging, leaving hands soft, smooth, and beautifully youthful.

Natural Origin Index: >98 %

PRODUCT	Manufacturer	INCI NAME	% w/w
Phase A			
Akoline SL	AAK Sweden	Sodium Stearoyl Lactylate	0,3
Water		Aqua	70,9
Phase B			
Glycerin 99,5%		Glycerin	3
Solagum AX	Seppic	Acacia Senegal Gum and Xanthan Gum	0,2
Phase C			
Akoline PG7	AAK Sweden	Polyglyceryl-3 Stearate	3,5
Lanette O	BASF	Cetearly Alcohol	0,8
LIPEX® IllipeSoft™	AAK Sweden	Shorea Stenoptera Seed Butter	10
LIPEX® SheaLiquid TR™	AAK Sweden	Butyrospermum Parkii Butter	5
LIPEX® SheaTris™	AAK Sweden	Butyrospermum Parkii Butter Extract	1
Tegin 4100 Pellets	Evonik	Glyceryl Stearate	1
Phase D			
Farmal MS 6135	Ingredion	Calcium Starch Octenylsuccinate	3
Phase E			
Euxyl PE 9010	Ashland	Phenoxyethanol, Ethylhexylglycerin	1
Mythic Olive 3016/16	Vioryl	Parfum	0,3

- Softer, more pliable product
- Longer play time and a more luxurious after feel
- Helps protect and restore the lipid barrier
- Stabilizes emulsions at high temperature



- Avoids bloom formation and texture changes
- Reduces complexity in product development and upscaling

- Provides structure to formulations
- Reduces the need for additional structuring agents

Other LIPEX® IllipeSoft™ containing formulations

Producing natural, vegan sticks

Be inspired by the formulation below on how you can produce a natural, vegan deodorant stick!

Nature Kind Deodorant Stick

A natural deodorant that highlights oxidative stability and thermal stability from plant-based ingredients. LIPEX® Bassol C™ has high oxidative stability that supports longer shelf life, while LIPEX® IllipeSoft™ provides thermal stability to prevent blooming. This natural deodorant also contains LIPEX® SheaSolve™, a naturally-derived ester from shea butter, that improves spreadability and wetting of powders in the formulation.

PRODUCT	Manufacturer	INCI NAME	% w/w
Phase A			
Sunflower Seed wax	Koster Keunen	Helianthus Annuus (Sunflower) Seed Wax	5
Akofine R	AAK Sweden	Hydrogenated Vegetable Oil	10
LIPEX® IllipeSoft™	AAK Sweden	Shorea Stenoptera Seed Butter	10
LIPEX® SheaSolve™	AAK Sweden	Shea Butter Ethyl Esters	10
LIPEX® Bassol C™	AAK Sweden	Brassica Campestris Seed Oil	25
Phase B			
ZANO D (40% Dispension with LIPEX® SheaSolve™)	Evercare	CI 77499 (and) Persea gratissima (Avocado) oil (and) Hydrogenated Avocado oil	12
Phase C			
TAPIOCA™ PURE Starch	Nouryon	Maranta Arudinacea	27
Phase D			
GreenSens TEC	Alfa Chemicals	Triethyl Citrate	1

Back up

An introduction to the illipe tree – *Shorea Stenoptera*

Facts:

- Native to the rainforests of Borneo.
- Large tropical tree with a dense, conical crown, reaching heights of up 50 metres.
- Produces small white flower and large winged fruits/nuts containing the kernel used for producing illipe butter, known locally as Tengkawang.
- Large crops of nuts are only produced in a ‘mast season, which typically occurs every 2–3 years. So, the harvest happens sporadically.
- Each illipe tree can produce up to 800 kilograms of nuts per harvest season and live more than 100 years.

Cultural importance:

- Illipe is integral to spiritual, cultural, economic, and environmental life of the Dayak indigenous people
- Trees grow wild and in communal and privately owned agroforestry systems.
- Fallen nuts have been traded for generations and processed into butter traditionally used for cooking and medicinal purposes.
- Both men and women are involved in the value chain.

Illipe nut harvesting

Fallen nuts are hand collected

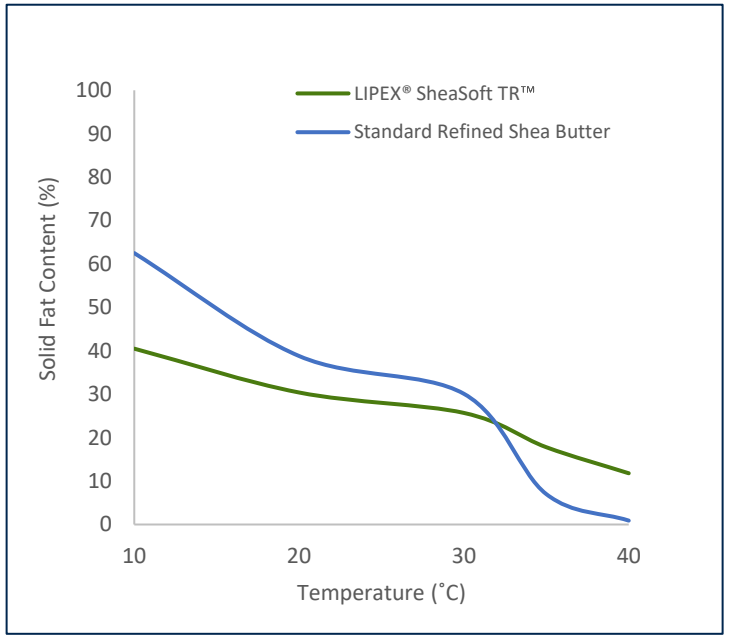
River soaked until softened

Peeled to extract the kernel

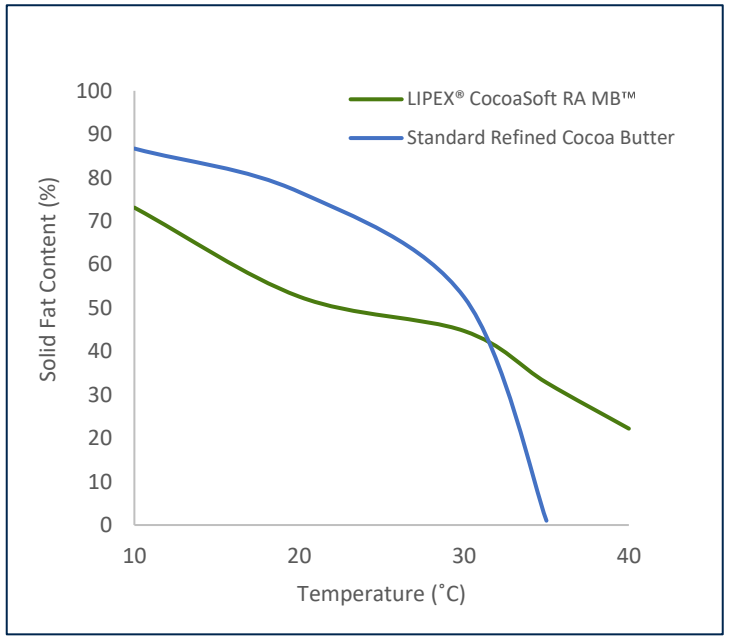
Dried to reduce water content

The flatter melting profile indicates a less temperature sensitive ingredient and provides improved sensorial & functional properties

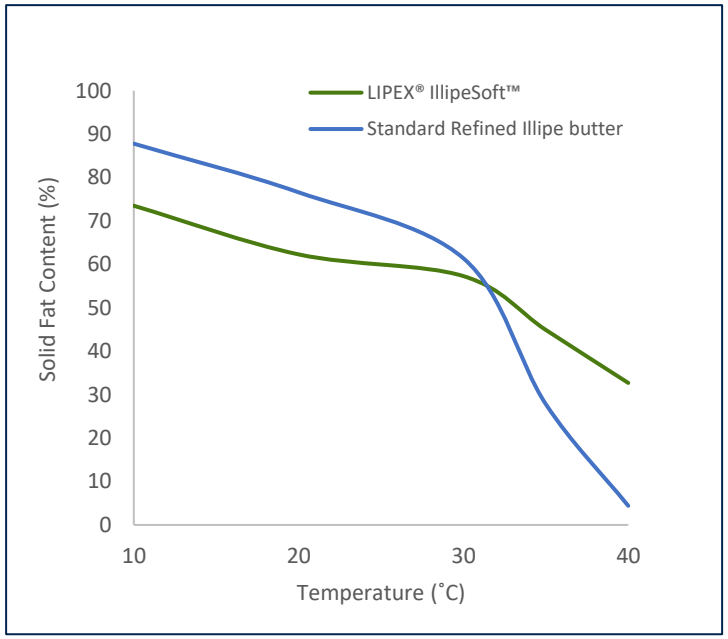
LIPEX® SheaSoft TR™ vs refined Shea butter



LIPEX® CocoaSoft RA MB™ vs refined Cocoa butter



LIPEX® IllipeSoft™ vs refined Illipe butter



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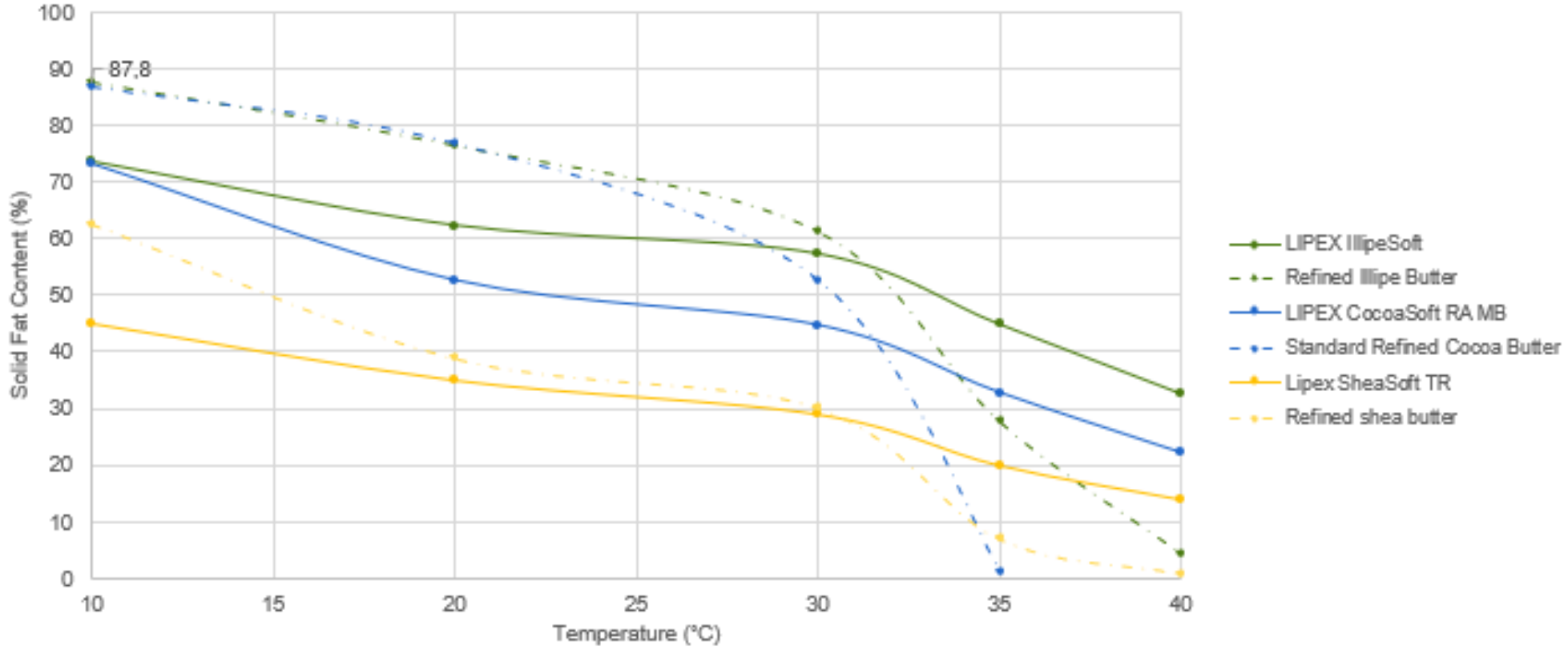


Thank you!