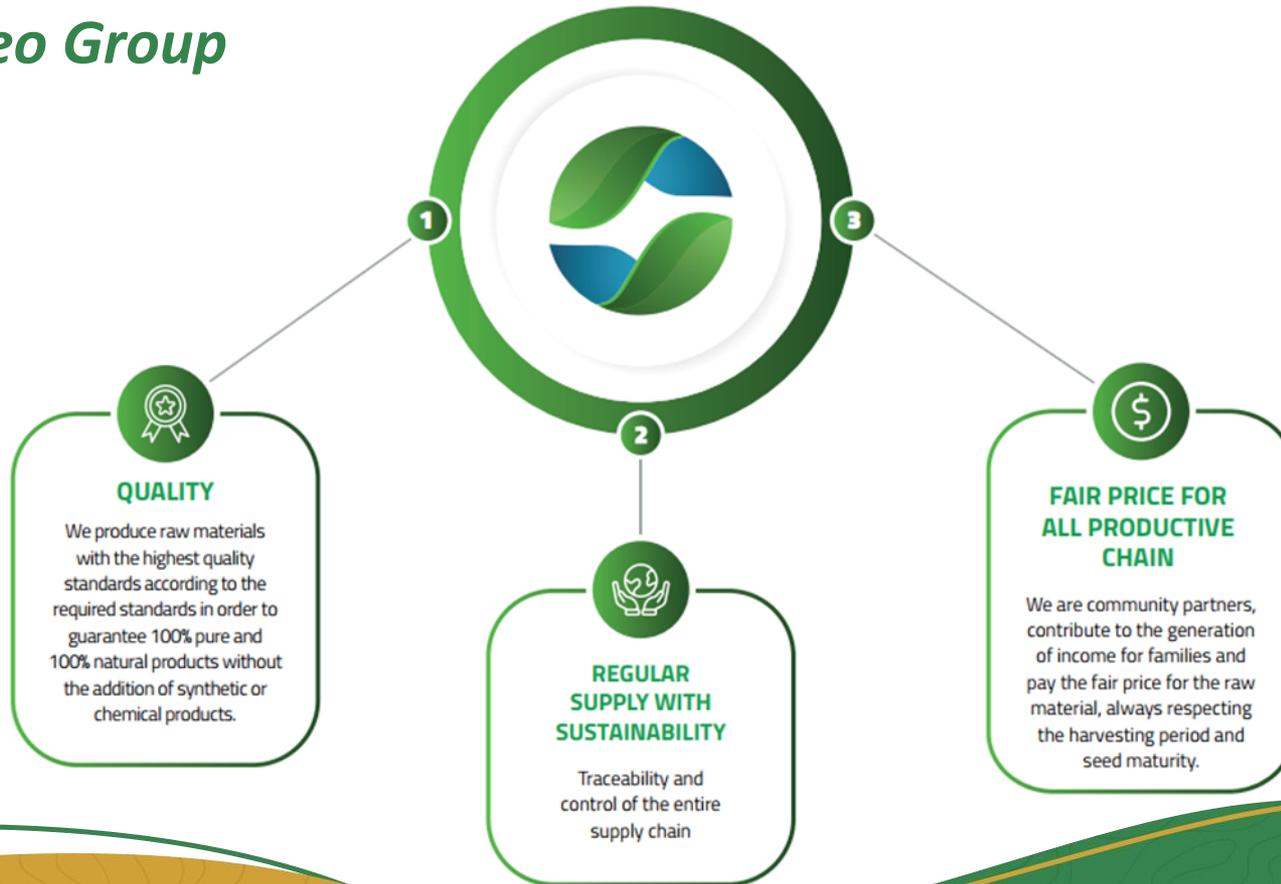


Citróleo Group

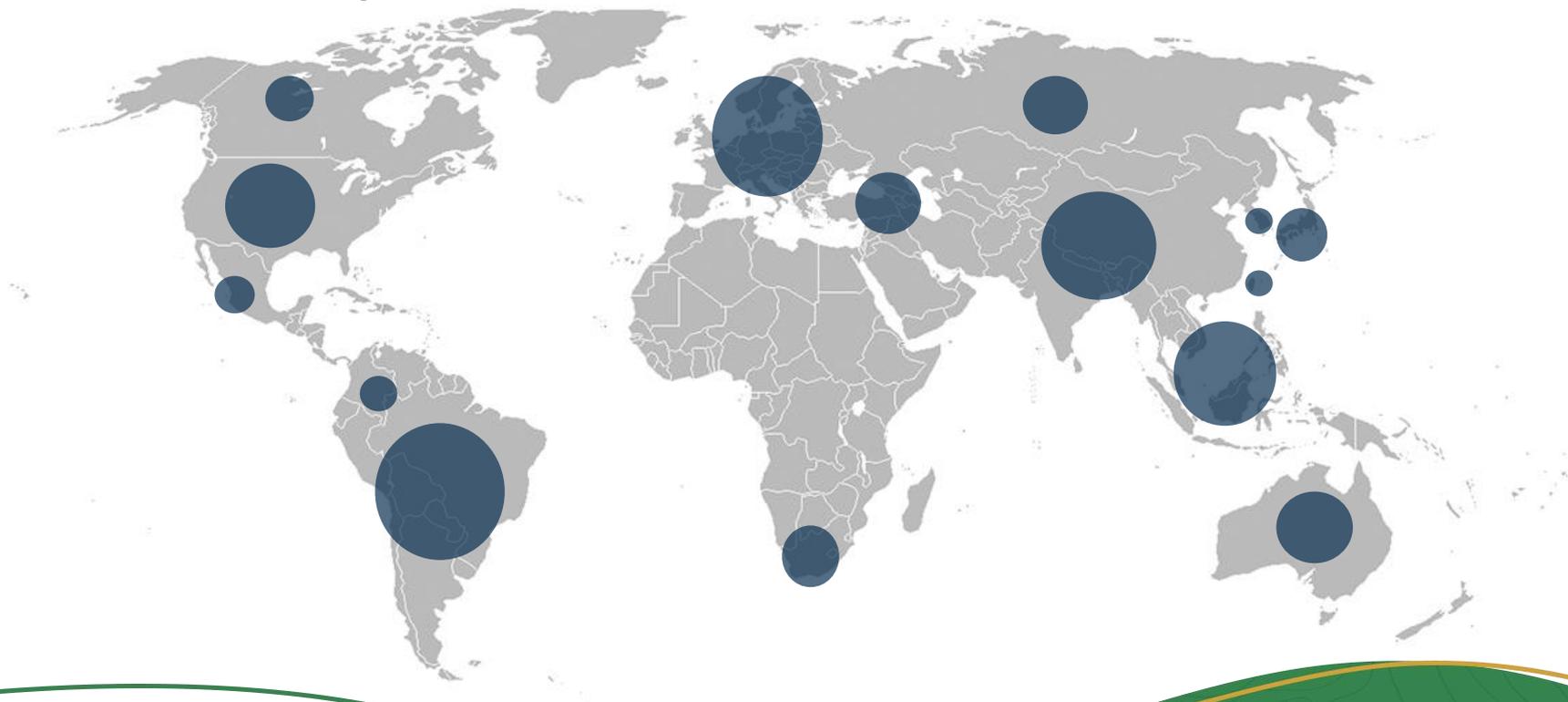
AlphaShield

*The New Antibact Protection
100% Natural and Green Solution*



Citróleo Group

World



CONSUMER MARKET TRENDS 2020

- **Change in consumer behavior**, concern for the label, search for natural, **Boom of Well Being** - Rituals of turning on and off
- Attitudes that are compatible with the **environment and that bring real benefits during use**
- Local ingredients, **exotic/holistic stories** - **escape, travel**
- Globalization through **local solutions** - **support for producers**
- Produce **less**, but **better** products
- **Cleaning, Hygiene and Health** - **Transparency** is the most important (Clean Beauty)
- **Immunity Boosters** - Focus on **Microbioma and Exposome**
- Products that act as a **shield, safety mask**



Cuidado com a
Natureza e as Pessoas



Fonte: BeautyStreams



CitroGreen Actives line counts with 6 actives ingredients 100% natural and sustainable with proven efficacy through in-human tests (non-animal tests) by renowned laboratories.

AlphaShield **AlphaVelvety** **AlphaAging** **AlphaComplete®** **AlphaImprove** **AlphaWhiteness®**



AlphaShield

INCI Name: *Melaleuca alternifolia* leaf oil, Bisabolol

New ingredient for a New era

Protecting the skin, the greatest shield for human health has never been more important!

- ✓ **EXCLUSIVE TECHNOLOGY:** *synergy* between components obtained from candeia oil, exclusively, with α -bisabolol
- ✓ **BOTANICAL COMPLEX:** selected essential oils, certified and unique from Citróleo, from *sustainable & fair-trade* sources
- ✓ **HEALTHIER PLANET:** 100% Natural & Safe *super concentrated antibact*



AlphaShield

Performance Benefits for Clean & Care

<i>Features</i>	<i>Benefits</i>
Germicidal Agent	Act quickly eliminating 99.99% of germs (harmful gram positive and negative bacteria and fungi) on hand/body. Some compounds exhibit antiviral activity.
Antiseptic Potential	Degrades or inhibits the proliferation of microorganisms for unrestricted indication.
Calming Effect	Hypoallergenic and less irritating to skin compared to conventional antimicrobial actives.
Prevents Dryness & Sensitization	Biobased active, provides a hydration feeling. It is anti-irritant and blocks inflammatory processes.
Protects against Microbial Contamination	Regulates and controls the bacterial flora of the skin and from external agents.
Dermopurifying	Rescues skin health, promoting moisturizing and controlling moisture loss.

AlphaShield

Performance Benefits for Clean & Care/Skin Friendly Hand Sanitizer

Dermopurifying
Rescues skin health, promoting moisturizing
and controlling moisture loss.



Hand Care Sanitizer &
Moisturizer



AlphaShield

A new antibact for frontier protection Dermo-Skin Care

Halal Compliant

Listed: EUA (TSCA), Canada (DSL),

UE (CosIng), Austrália (AICS),

China (IECSC), Filipinas (PICCS),

Nova Zelândia (NZIOC), Taiwan (NECI)



Safe, even in products **without rinsing**



New proposal to conventional bactericides, such as **triclosan (banned - USA)**, for a safe, **effective and ecological approach**



Stable over a wide pH and temperature range, including **systems with alcohol**



When **solubilized in aqueous systems**, the active also acts as a **natural preservative**



Lipophilic nature **inhibits itching**, **decreases adverse reactions** caused by disinfection and excessive hand sanitization

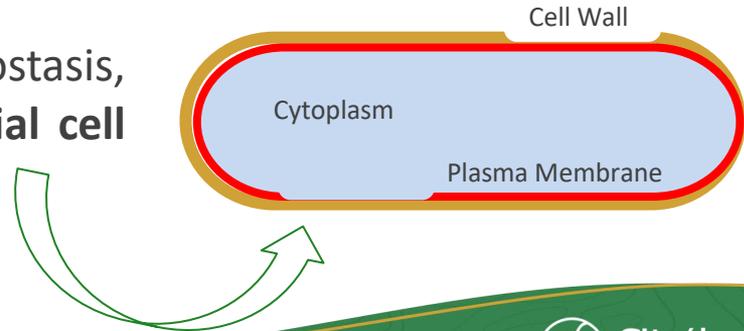
AlphaShield

Mechanisms of Action

Control of viruses, fungi and bacteria through its exclusive action related to the **chemical complexity** of its oils

- ✓ Among other natural products: **α , β , γ -bisabolene**, with anti-inflammatory, antiviral, analgesic and antiproliferative action.
- ✓ **Potentiated** by **Tea Tree Oil** and **Citrus Bisabolol**, which due to the wide spectrum of properties, is used from skin care products to hospital products.
- ✓ It has non-cytotoxic antimicrobial activity, preserving the balance of the beneficial microbiome of natural skin protection.

Deactivation of bacterial homeostasis, through the **compromise of microbial cell barrier**, preventing the survival of it:



AlphaShield

TIME KILL - Reductional Assessment of Microbial Population

Test results obtained for the microorganism Staphylococcus aureus - ATCC 6538

Contact time (minutes)	Counting survivors	Decimal reduction	Reduction Percentage
TI	1,6x10 ⁴	2,49	99%
1	4,0x10 ²	4,09	99,99%
2	5,1x10 ⁴	1,99	99%
3	1,1x10 ⁵	1,65	99%
5	5,1x10 ³	2,99	99,9%
30	3,0x10 ²	4,22	99,99%
60	4,1x10 ⁴	2,08	99%
90	5,3x10 ³	2,97	99,9%

Test result obtained for the microorganism Trichophyton mentagrophytes – ATCC 9533

Contact time (minutes)	Counting survivors	Decimal reduction	Reduction Percentage
TI	5,69	99,9999%	<10
1	5,69	99,9999%	<10
2	5,69	99,9999%	<10
3	5,69	99,9999%	<10
5	5,69	99,9999%	<10
30	5,69	99,9999%	<10
60	5,69	99,9999%	<10
90	5,69	99,9999%	<10

T1: immediate contact time, collected about 30 seconds of the microorganism contact with the sample. Initial count (UFC/ml): 5x10⁵

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Challenge Test

- ✓ **NATURAL PRESERVATIVE:** allowing the cosmetic product to use the “preservative free” claim
- ✓ Based on data from the **Brazilian Pharmacopeia (2019)**: reductions in the growth of viable bacteria, molds and yeasts used; reduction in growth from the 14th day, followed by continuous reduction until the end of the test with 28 days. **ALPHASHIELD** as a preservative system is effective for these microorganisms.



- ✓ **Formulation Test:** Polysorbate 20, PEG-40 Hydrogenated Castor Oil, **AlphaShield (0,5%)**, Aqua

SULFATE-FREE CLEANING FOAM – First Step

A protected and clean skin must be hydrated. The foam is enriched with **ALPHASHIELD**, a biodegradable and sustainable active. It 100% natural, hypoallergenic, with anti-irritant activity and without contraindications. It doesn't induce dryness and is suitable to replace Triclosan. This sulfate-free cleaning foam has the synergy of **GREEN CAPB-B** and **GREEN COCOAMPHOACETATE B**, able to deep cleaning without leaving the skin dry and preventing the rebound effect. Made with 100% natural Amazonian ingredients, these cleaning agents remove residues, transform into a creamy foam for the pleasure of gentle cleaning. The natural **BABAÇU OIL**, whose almond is obtained by coconut breakers in Northeast Brazil, leaves the skin extra soft, without irritation or dryness.

PHASE	INGREDIENT	% w/w
A	Aqua	q.s.p
A	Edta Na ₂	0.05
A	Glycerin	2
B	GREEN CAPB-B <i>(Cocamidopropyl betaine)</i>	25
B	GREEN COCOAMPHOACETATE – B <i>(Sodium babassuamphoacetate)</i>	3
C	ALPHASHIELD <i>(Melaleuca alternifolia leaf oil, Bisabolol)</i>	1
C	BABAÇU OIL <i>(Orbignya oleifera seed oil)</i>	2
D	Citric Acid	q.s

Procedure:

Homogenize the ingredients of phase A;
Homogenize the ingredients of phase B;
Homogenize the ingredients of phase C;
Pour the ingredients of phase C under phase B;
Gradually pour phase A under the mixture of phase B+C;
Adjust the pH.

Properties:

Colorless Liquid
pH: 7

HAND CARE SANITIZER & MOISTURIZER – Second Step

This plant-based formulation helps to combat contact contamination, with dosed-alcohol 70%. The formulation still counts with **ALPHASHIELD**, a complex with natural essential oils that eliminates 99.99% bacteria in 60 seconds. With antiseptic action, the multifunctional active keeps hands clean, sanitized, away from microorganisms with a soft and moisturizing barrier. With also the power of **MACADAMIA OIL** perfumes, restores and balances the necessary mechanisms for hand protection. It keeps the luxury touch without residue or tack.

PHASE	INGREDIENT	% w/w
A	Alcohol 75°GL	q.s.p
A	Glycerin	5
A	Acrylates/C10-30 Alkyl Acrylate Crosspolymer	0.2
A	NaOH @0.1%	q.s
B	ALPHASHIELD (<i>Melaleuca alternifolia leaf oil, Bisabolol</i>)	2
B	MACADAMIA OIL (<i>Macadamia integrifolia seed oil</i>)	1
B	Caprylic/Capric Triglyceride	1
C	Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer	1

Procedure:

- Homogenize the ingredients of Phase A.
- Wait hydrate the polymer and neutralize before proceeding with the next step.
- Homogenize the ingredients of phase B.
- Stir the phase B under phase A high shear until a homogeneous emulsion forms.
- Add the phase C and stir until the gel forms.
- If necessary, adjust the pH.

Properties:

- Viscous Gel
- pH: 7

DEFENSE & LIPID REPLACEMENT CREAM – Third Step

Keeping the skin safe and delivering the replacement of the lipid barrier after successive washes and application of alcohol. The extra defense comes with **ALPHASHIELD**, vegetable complex specially added to act against pathogenic microorganisms, regulating the skin microbiome in a pathway 100% natural and non-irritating. With the natural and pure **CUPUAÇU BUTTER**, the hands gain extra nutrition and protection against water loss. The Amazonian **BABAÇU OIL** guarantees fast absorption for a soft and delicate skin, with prolonged action. Together this Eco Ingredients hydrate and soothe the skin, smoothing external aggressions. They balance skin natural defense mechanisms and prevent dermatitis and irritation.

PHASE	INGREDIENT	% w/w
A	Aqua	q.s.p.
A	Glycerin	5
A	Edta Na ₂	0.05
B	Cetearyl Olivatate (and) Sorbitan Olivatate	5
B	ALPHASHIELD <i>(Melaleuca alternifolia leaf oil, Bisabolol)</i>	0.5
B	CUPUAÇU BUTTER <i>(Theobroma grandiflorum seed butter)</i>	0.5
B	BABAÇU OIL <i>(Orbignya oleifera seed oil)</i>	2
C	Dibutyl Adipate (and) Pentaerythrityl Tetra-di-t-butyl Hydroxyhydrocinnamate	0.5
C	Preservative	q.s

Procedure:

Heat the phase A (75-80°C);

Heat the phase B (75-80°C);

Pour phase B under phase A under high stirring.

Wait for the emulsion to reach 40 ° C before adding phase C

Adjust the pH

Properties:

White Creamy Emulsion

pH: 7

AlphaShield

Recomendations

Recommended concentration: 0.5 to 5.0%.

Benefit-Cost

The synergy between the **EXCLUSIVE** ingredients of this raw material guarantees a **lower concentration** of actives in the final formulation, **with the same effectiveness!**

- Phytomedicine, phytosanitizing
- Gel alcohol, hand sanitizer and surfaces booster
- Topical antiseptics
- Body lotions, wet wipes
- Make up
- Soaps and liquid foams, bar soaps
- Daily use shampoos
- Body deodorants
- Oral Hygiene Products (mouthwash, gels and mouth creams)
- Preservative systems: 0.5 to 1.0% pre-dispersed in solubilizers and applied to the aqueous phase



***DON'T SPREAD GERMES,
WASH YOUR HANDS!***



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Evergreen 
In flow with nature